

SUPPORTED BY



Ministry of Coal | Ministry of Steel
Government of India



Coal India Limited
(A Maharatna Company)



Defence Research and
Development Organisation

NEWS & UPDATES

Issue : April 2023



10TH
EDITION



International Mining, Equipment & Minerals Exhibition

Mon. 6th - Thu. 9th November 2023

EcoPark, Rajarhat, Kolkata, India

— CONCURRENT WITH —



10th Asian Mining Congress

Mon. 6th - Wed. 8th November 2023

Taj Taal Kutir Convention Centre, Kolkata, India

Theme: Roadmap for Best Mining Practices vis-à-vis Global Transformation

Large Participation from:



AUSTRALIA



CANADA



CHINA



CZECH REPUBLIC



GERMANY



POLAND



RUSSIA



TURKEY

SCAN QR CODE
TO ENQUIRE FOR EXHIBITING



Platinum Sponsor



Gold Sponsor



China Pavilion by



German Pavilion by



For more information, visit us at:
www.miningexpoindia.com

MUST ATTEND

India's Largest Mining Business Platform

Exhibition Overview

- 10th in the Series - IME 2023 is a leading institutionalized biennial international exhibition of the Mining, Minerals and Machinery industries in India.
- Concurrent "Buyer Seller Meet" during Exhibition having presentations from Major Industry Players from the Industry.
- An Ideal Platform for display and launches of new initiatives, machinery products and technologies, establishing joint ventures, developing and renewing international and regional contacts.
- High Level Trade Delegations and Country Level Group Participation expected from Australia, Canada, China, Czech Republic, Germany, Iran, Poland, Russia, Turkey, UK and USA.
- Large participation of leading Mining Equipment & Machinery Manufacturers expected from Asia, Africa, America and Europe.
- Participation of Minerals Rich India States and PSU's, Large Corporates and Small and Medium Organisations.

Concurrent Congress

- The 10th Asian Mining Congress (AMC) will be organised by The Mining, Geological & Metallurgical Institute of India (MGMI). The Congress will provide a forum to promote and advance technoscientific cooperation towards national and international progress in the areas of mineral production, in addition to the development of new opportunities of sustainable business that will benefit both Asian and global communities.
- The Congress aims at global participation of practicing engineers, managers, planners, policy makers, equipment manufacturers, technology consultants, engineering companies, regulators, scientists, academicians and other mining professionals to interact on various issues of the mining, mineral & allied industries. All major mineral producing countries are expected to present country status papers.
- Eminent Speakers from India and abroad will debate, deliberate and exchange views on the key issues Over 600 delegates are expected to participate from over 20 countries (full details in separate brochure of MGMI).

PATRON



Amrit Lal Meena, IAS
Secretary, Ministry of Coal
Government of India

PATRON



Dr. Samir V. Kamat
Secretary, Department of Defence
R&D & Chairman, DRDO
Government of India

Chairman Advisory Committee



Pramod Agrawal, IAS
Chairman, Coal India Ltd.

President, MGMI



Dr. B Veera Reddy
Director (T), Coal India Ltd.

Chairman, IME 2023



Bhola Singh
CMD, Northern Coalfields Ltd.

Chairman, AMC 2023



Manoj Kumar
CMD, CMPDI

Congress Lead Topics / Sub-Themes:

- Cutting Edge Exploration and Drilling Technologies.
- Challenges in deep Opencast, Highwall, Offshore and Placer Mining.
- Transition from Opencast to Underground mining.
- Mass Production Technologies in deep underground mines.
- Application of Artificial Intelligence, Machine Learning, Data Analytics in Mine Automation.
- Advancement in Explosives and Blasting Techniques.
- Extraction and utilisation of Critical Minerals and Rare Earth Elements.
- Application of Information and Communication Technology (ICT) in Smart Mining.
- Innovations in Oil and Gas Industry.
- Advancement in Mineral, Coal Processing and Extractive Metallurgy towards zero waste mining.
- Prospects of CBM/CMM, Shale gas and Gas Hydrate.
- Prospect of Coal Gasification and Coal to Liquid.
- Changes in Mining Legislations and policies.
- The Pathways for Coal Transition and Net Zero Emission.
- Environmental and Safety aspects in Mining, Oil & Gas industries.
- Strategies and Opportunities for Investments, Merger and Acquisition in Mineral Sector.
- Changes in Mining Legislations and policies.
- The Pathways for Coal Transition and Net Zero Emission.
- Environmental and Safety aspects in Mining, Oil & Gas industries.
- Strategies and Opportunities for Investments, Merger and Acquisition in Mineral Sector.

Partial List of Confirmed Participants

 CAS A Division of the American Chemical Society	 ULUSLARARASI FUARCIKLIK ORGANIZASYON DANIŞMANLIK Amiral	 ADVANTECH Enabling an Intelligent Planet	 aereo	 KANTHAL®	 ANDRITZ
ACS INTERNATIONAL	ADMIRAL INTERNATIONAL FAIR ORGANIZATION & CONSULTANCY	ADVANTECH INDUSTRIAL COMPUTING	AEREO	ALLIEMA INDIA	ANDRITZ SEPARATION
 APEX KNIVES	 AQUA MACHINERIES	 aquatech PUMPING SOLUTIONS	 ARUL POLYMERS® Est. 1997 Private Limited	 AUTOMATION CONTROLS	 BKT GROWING TOGETHER
BEARING BUSINESS CO.	BEIJING SCREEN TECHNOLOGY	BEML	BEUMER	BLUEBANYAN TECHNOLOGIES	CBS TECHNOLOGIES
 BEARING BUSINESS CO.	 landsky 陆凯科技	 बी ई एम एल beml NEW RECHESSE, NEW DREAM	 BEUMERGROUP	 BLUE BANYAN enriching technology	 CBS Technologies
CHANDERPUR WORKS	CHINA COAL TECHNOLOGY & ENGINEERING GROUP	CMEC INTERNATIONAL EXHIBITION	COAL INDIA	CONTROL PRINT	CORESONANT SYSTEMS
 CPG CHANDERPUR GROUP	 CCTEG	 西麦克展览 CMECEXPO	 Coal India (A Maharashtra Company)	 CONTROL PRINT	 Coresonant®
CRC INDIA MANUFACTURING	CTC IMPEX	DANDONG DONGFANG MEASUREMENT & CONTROL TECHNOLOGY	DCS TECHNO SERVICES	DERRICK SOLUTIONS	DHANBAD INDUSTRIAL CORPORATION
 CRC	 CTC IMPEX (INDIA) PVT. LTD.	 DFMC	 TECHNO DCS SERVICES	 DERRICK®	 DHANBAD INDUSTRIAL CORPORATION
DIGICON	DMT CONSULTING	DULEVO	EASTERN WELDMESH	EASTMAN CRUSHER	ELECTRO ZAVOD
 digicon ISO 9001 Certified Company	 DMT	 DULEVO FAYAT GROUP	 EASTERN WELDMESH	 EASTMAN CRUSHER	 ELECTRO ZAVOD
EMG AUTOMATION	ENTVENT TOOLS & SERVICES	ESENPRO POWER TRANSMISSION	EUROSENSE ANALYTICALS	EVO BEARINGS & MACHINERIES	FALCON SCREENS
 EMG	 entvent	 Esenpro Customised Gearing Solutions	 EUROSENSE MEASURE ANALYZE CONTROL	 EVO BEARINGS & MACHINERIES	 FALCON SCREENS™ SCREENING MEDIA EXPORT
FUEL INSTRUMENTS & ENGINEERS	GORNY INSTRUMENT	GROUP R MINING & EXPLORATION	HAMTEK TECHNOLOGIES INDIA	HYDRO PNEUMATIC ACCESSORIES	IMAGEGRAFIX SOFTWARE SOLUTIONS
 FIE	 GORNY INSTRUMENT	 GROUP R MINING & EXPLORATION	 HAMTEK	 HYDRO PNEUMATIC ACCESSORIES	 ImageGrafix Computer Solutions for Engineers
IMCO ALLOYS	INDRONES SOLUTIONS	INNTECH ENGINEERING	ION EXCHANGE INDIA	JAGANNATH COMPANY	JHA BABA PROJECTS
 imco	 indrones	 INNTECH ENGINEERING	 ION EXCHANGE Refreshing the Planet	 JAGANNATH COMPANY	 JHA BABA PROJECTS
JM FRICTECH	JMS MINING	JOY GLOBAL	KATEEL ENGINEERING INDUSTRY	KAVERI ULTRA POLYMERS	KHODIYAR INDUSTRIAL
 JMI	 JMS	 KOMATSU JOY	 KATEEL	 KAVERI ULTRA POLYMERS	 KIC A Mark of Quality
LCS CONTROLS	LEOTRONIC SCALES	LIEBHERR	MACO CORPORATION	MAHESHWARI MINING	MANAV ENGINEERING
 LCS Partner in weighing & automation	 LEOTRONIC SCALES	 LIEBHERR	 MACO Building Relationships	 Maheshwari Global Technologies, Ecological Mining	 MANAV ENGINEERING Consultancy An ISO 9001: 2015 Certified
MARATHON HEATER	MARINE ELECTRICALS	MASYC PROJECTS	MBH PUMPS	MECVEL TECHNOLOGIES	MESTA INC
 Marathon TempSens	 Marine Electricals	 MASYC	 MBH PUMPS	 MecVel TECHNOLOGIES PVT. LTD.	 MESTA INC ISO 9001:2015

Partial List of Confirmed Participants

 Minception	 MINEMATICS SOLUTIONS	 Minocular	 Locate365	 NBC BEARINGS - CK BIRLA GROUP	 NETZSCH Proven Excellence.
MINCEPTION	MINEMATICS SOLUTIONS	MINOCULAR	MY VALUE PACK RETAIL	NBC BEARINGS - CK BIRLA GROUP	NETZSCH PUMPS & SYSTEMS
 Newton Generations ahead in technology	 ORBINOX WASTE SOLUTIONS IN MORE THAN 70 COUNTRIES	 ORIONE HYDRAULICS PVT. LTD.	 P&G GEOHAZARD SOLUTIONS	 PERFECT ENGINEERING COMPONENTS	 Prabhu
NEWTON WEIGHING SYSTEM	ORBINOX INDIA	ORIONE HYDRAULICS	P&G GEOHAZARD SOLUTIONS	PERFECT ENGINEERING COMPONENTS	PRABHU INDUSTRIAL UDYOG
 Prabhu Switchgear	 PREMIUM Your addition in transmission	 REACTORE	 REINFORCED EARTH	 REPOS FUELLED BY YES >>	 RINGFEDER POWER TRANSMISSION
PRABHU SWITCHGEAR	PREMIUM TRANSMISSION	REACTORE	REINFORCED EARTH	REPOS ENERGY	RINGFEDER POWER TRANSMISSION
 RINGSPANN®	 rocscience	 ROYAL ELASTOMERS	 ROYALEO FUTURISTICS	 SACHIN INDUSTRIES LTD. Mfr. of Glass Lined Reactors & Filter Presses	 SAKAR Rub-Tech Pvt. Ltd.
RINGSPANN POWER TRANSMISSION	ROCSCIENCE INC.	ROYAL ELASTOMERS	ROYALEO FUTURISTICS	SACHIN INDUSTRIES	SAKAR RUB-TECH
 SANY	 ssa For Metallurgy & Metrology Solutions	 Shanthi Gears	 Shiva INFRA BUSINESS PVT. LTD.	 HANS ALLOYS	 Slon®
SANY HEAVY INDUSTRY	SASTHA SCIENTIFIC AGENCIES	SHANTHI GEARS	SHIVA INFRA SOLUTIONS	SHREE HANS ALLOYS	SLON MAGNETIC SEPARATOR
 snwel® Enhancing Engineering	 ССПБ Түнгүс	 STM® Construction Equipment	 TATA STEEL INDUSTRIAL CONSULTING YOUR ASPIRATIONS, OUR ENDEAVOUR	 外貿邦 一分钟搜索, 用数据打开世界	 tfi TECHFAB INDIA
SNWEL ENGINEERING	SSPB	STM CONSTRUCTION EQUIPMENT	TATA STEEL INDUSTRIAL CONSULTING	TECERA INTERNATIONAL TRADE	TECHFAB INDIA INDUSTRIES
 TE TECHFLOW® Healthy Air-viroment Always.....Anywhere!	 TERRE ARMEE	 TH	 THEJO	 ThermoFisher SCIENTIFIC	 thyssenkrupp
TECHFLOW ENTERPRISES	TERRE ARMEE INDIA	THCO. INDIA	THEJO ENGINEERING	THERMO FISHER SCIENTIFIC	THYSSENKRUPP INDUSTRIES
 Veedol	 UNITECH PROJECT	 UNIVERSAL ELECTRICALS & ELECTRONICS An ISO 9001:2015 Certified	 V. M. Salgaocar and Brother Pvt. Ltd.	 VDMA Mining	 VEV VENTURES BREAKTHROUGH CONSTRUCTION EQUIPMENT SOLUTIONS
TIDE WATER OIL CO. (INDIA) LTD.	UNITECH PROJECT	UNIVERSAL ELECTRICALS & ELECTRONICS	V. M. SALGAOCAR & BROTHER	VDMA	VEV VENTURES
 COOLS • CLEANS • PROTECTS GREEN TREE™ RADIATOR COOLANT Vinni Chemicals Pvt. Ltd.	 VP SYNERGIC Weld Solutions	 CHISUN®	 WUXI GEOLOGICAL DRILLING EQUIPMENT	 ZKL	and many more...
VINNI CHEMICALS	VP SYNERGIC WELD SOLUTIONS	WENZHOUS CHISUN IMPORT & EXPORT	WUXI GEOLOGICAL DRILLING EQUIPMENT	ZKL BEARINGS	

Stall Options

Built-Up Stall

Includes: Octonorm Wall Panels, Synthetic Carpet, Fascia in English, 1 Spotlight per 3 sqm., One 5 amp socket per 12 sqm., 1 Counter, 3 Chairs, 1 Glass Top Round Table, Basic Single Phase Electricity for stand lighting and basic daily usages.

Bare Space

Electricity Load to be ordered and Paid Extra

Outdoor Area

Electricity Load to be ordered and Paid Extra

Exhibiting Profile

- Coal Producers
- Coal Beneficiation & Mineral Dressing Equipments
- Mining and Construction Machinery Manufactures
- Pumps, Gears, Valves and Compressors
- Power Generation and Transmission
- Material Handling, Logistics and Communication
- Tyres Manufacturers
- Mineral Processing Plants and Equipments
- Lubricants, Greases and Oils
- Automation and Instrumentation
- Diesel Engines & Electrical Engines
- Motors and Generators
- Weighing and Monitoring Solutions
- Mineral Rich State Governments
- Robotics, AI & Unmanned Systems
- Other Minerals and Metals Producers
- Water Treatment Solutions
- Chemicals and Explosives
- Health, Safety & Security
- Components and Spare Parts
- Cement Manufacturers
- IT in Mine Planning & Surveying
- R&D Institutions, Consultants
- Importers and Exporter

Visitors Profile

- Coal Consumers / Producers
- Mining, Logistics, Shipping and Freight Companies
- Policy Makers
- Central and State Government's Senior Officials
- Equipment Buyers & Suppliers
- Fuel Suppliers
- Project Developers
- Entrepreneurs
- Investors, MNC's, Industrialist and Traders
- Importers and Exporters
- Engineers and Professional
- Trade Delegations
- Research Scholars
- Bankers and Financial Institutions
- Legal and Management Consultants
- Chief Executives / Decision Makers
- Consultants
- R&D Professionals
- Academicians
- Foreign Missions
- Industry Associations
- Infrastructure Development Organizations
- IT Companies and Solutions Providers

Expected Participation

400+ Stalls

600+ Delegates

7+ Country Pavilions

Buyer Seller Meet

7+ State Pavilions

25+ Countries

25,000+ Footfalls

100+ Technical Papers

Reasons to Invest in India

- Coal Ministry Aims to Enhance Coal Production to 1. 23 BT by 2024-25.
- Coal production from captive mines is expected to touch 140 MT in 2022.
- India has large reserves of Iron ore, Bauxite, Chromium, Manganese ore, Baryte, Rare earth and Mineral salts.
- India has vast mineral potential with mining leases granted for the longer and stable tenure of 50 years.
- Consumption of steel has increased in the rural India from 19 Kg in 2019-20 to 21.5 kg per capita for the year 2020-21. Government of India (GOI) aims to increase the awareness and consumption of steel in rural areas.
- The vision of National Steel Policy 2017 is to increase steel production capacity in India to 300 MT by 2030-31, per capita steel consumption to 160 KG, reduce greenhouse gas emissions, many targets have been set.
- GOI has set a target outlay of more than 111 Lakh Crores in National Infrastructure Pipeline (NIP) by 2024-25, which will increase the demand for steel as well as reduce the cost of production of steel. The slurry pipeline will have an outlay of more than 25,000 crores. The process involved in installation of slurry pipeline has been simplified.
- First Mile Connectivity (FMC) is a major initiative by coal companies to minimise environmental pollution, where coal is being transported through conveyor belt from Coal Handling Plants to Silo for loading. The process eliminates movement of coal through road. 39 such projects have been planned to be commissioned by 2023-24 with an investment of over INR 13000 crores.
- Coal India Ltd. (CIL) is constructing 21 additional railway sidings at an estimated investment of INR 3,370 crores across four of its subsidiaries which include both greenfield and brownfield ones to be commissioned by FY24. CIL aims to move about 555 MT of coal per year through mechanised means by FY24.
- GOI aims to achieve a target of 300 MT of Steel capacity by the year 2030.
- GOI has launched Coking Coal Mission to meet the demand of domestic coking coal as projected by the Ministry of Steel and has set target of 140 MT for raw coking Coal production by 2030.
- GOI has launched coal gasification mission with a target to gasify 100 MT by 2030. Under this mission, Surface Coal/Lignite Gasification projects are being constructed.



An ISO 9001 - 2015 and 45001 - 2018 Certified Company



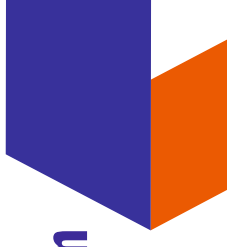
WELDING & CUTTING INNOVATIVE SOLUTIONS

VP SYNERGIC WELD SOLUTIONS PRIVATE LIMITED.,

Mobile: +91-9384000132 / +91-7305027080

E : kpn@synergicweldsolutions.com | info@synergicweldsolutions.com

Website: www.synergicweldsolutions.com



➤ ADVANTECH

ADVANTECH

Enabling an Intelligent Planet

ADVANTECH's corporate vision is to enable an intelligent planet. The company is a global leader in the fields of IoT intelligent systems and embedded platforms. To embrace the trends of IoT, big data, and artificial intelligence, Advantech promotes IoT hardware and software solutions with the Edge Intelligence WISE-PaaS core to assist business partners and clients in connecting their industrial chains. Advantech is also working with business partners to co-create business ecosystems that accelerate the goal of industrial intelligence. Advantech's Digital Logistics solutions help companies optimize their supply chain operations and achieve greater efficiency and cost-effectiveness. With a comprehensive portfolio of hardware and software solutions, including IoT-enabled devices, edge computing platforms, and cloud-based applications, Advantech offers end-to-end solutions for logistics management, warehouse automation, fleet management, mining, ports and cold chain solutions. These solutions provide real-time data insights, predictive analytics, and automated workflows to streamline operations, improve inventory management, enhance visibility and traceability, and reduce overall costs. Advantech's Digital Logistics solutions are designed to meet the evolving needs of the logistics industry and empower companies to adapt to new challenges and opportunities in the digital age.

TREK-773 is a next-generation, all-in-one 7" mobile data terminal. Equipped with an Intel® Atom™ E3827 SOC, TREK-773 offers high-performance computing with wired connections such as Gigabit Ethernet, CAN2.0B (J1939, OBD-II/ISO 15765), and J1708 (J1587). The integrated LTE (backwards compatible with CDMA/HSDPA), GPS, WLAN, and Bluetooth communication interfaces ensure connectivity and real-time data transmissions. Aimed at the automotive market, TREK-773 is compatible with 12/24 V vehicle power and compliant with ISO7637-2 & SAE J1113, ensuring system operation during engine starts.



The DLT-V83 series are rugged vehicle-mounted terminals designed to increase productivity and maximize system uptime for logistics applications. Powered by an Intel® Core™ i5/ Celeron® processor, DLT-V83 terminals support a wide operating temperature range (-30 ~ 50 °C/-22 ~ 122 °F) to withstand operation in extreme industrial environments (from hot and humid, to dry freezer environments). Deployment of this series ensures data integrity and integration across all logistics operations. Furthermore, the high system configurability, connectivity, and interface diversity allows the terminals to be easily customized to support specification application requirements.



Trek 60 modular AI Platform for Scalable Surveillance and Fleet Management. Equipped with DeviceOn/iService software for remote device management. Scalable computing performance via CPU boards for specific application requirements. Rugged platform with automotive-grade shock and vibration tolerance, wide operating temperature, and wide power input range for harsh environments



PWS-872 is an industrial-grade tablet equipped with an Intel® Core™ i3/i5/i7/Celeron® processor, 10.1" WUXGA LED display with multi-touch PCAP control, mSATA SATA III SSD storage, multiple I/O, and Wi-Fi (802.11 a/b/g/n/ac), NFC, 3G/4G LTE, and Bluetooth 4.1 communication technologies. The built-in front (2M) and rear (8M) cameras, 1D/2D barcode scanner, and NFC reader provide convenient data collection tools, and the high-brightness sunlight-readable display supports outdoor applications. For mobile field-service applications, PWS-872 can be integrated with a hot-swappable external battery that supports up to 11 hours operation to enable long-duration use. Designed for harsh environments.



AIM-75S 8" Industrial-Grade Tablet with Qualcomm® Snapdragon™ 660 Processor, Android 10 with GMS. Certified for Google Mobile Services for downloading apps and APIs. 8" LCD with 400-nit brightness, 1920 x 1200 resolution. Corning® Gorilla® Glass 3 touchscreen supports gloved and stylus operation. IP65-rated protection from water and dust and 4-ft drop tolerance. LTE, WLAN, Bluetooth, NFC, and GIS capabilities. Optional peripherals include 1D/2D barcode scanner, LAN+COM, UHF RFID, and MSR



modules. Multi-bay charging and docking stations ensure easy installation in diverse environments

UTC-500 tough series features an all-in-one computing system equipped with wide format, touch based LCD panel. It is easy to integrate key peripherals and display systems for diversified self-service and interactive signage deploy in different application areas.



www.advantech.com

➤ AEREO (FORMERLY AARAV UNMANNED SYSTEMS PVT. LTD.)

Founded in 2013 in IIT Kanpur, Aereo (formerly Aarav Unmanned Systems) has grown into India's leading drone technology company for commercial drone applications. Aereo is the only Indian company that provides end-to-end drone solutions to B2B sectors. Our fundamental vision has always been to impact productivity of organizations, improve the quality of lives of people, and ensure sustainability to help our planet.



Our solutions comprise survey-grade drones flown by highly skilled drone pilots, precise and customizable surveying techniques, robust data processing capabilities, and a proprietary MIETY-compliant cloud platform for viewing and sharing analytics. Being one of the only companies to provide end-to-end drone solutions, we have surveyed over 500 mines, 350+ stockyards, and generated critical business intelligence for 10+ mining projects. Aereo is the only drone company that is part of India's first and largest mine digitization project.

Aereo's end-to-end solutions help mines achieve unparalleled efficiency, through volumetric analysis, faster mine planning, environmental compliances, and in-depth safety assessments. Our subject matter experts analyze each project and requirement, and provide comprehensive analytics directly on Aereo Cloud. Our vision is to build the most impactful aerial intelligence platform that leverages aerial data to address critical challenges across the industry.

END-TO-END DRONE SOLUTIONS

Aereo provides end-to-end drone based solutions for mining, construction, rural & urban development, etc. Our solutions comprise survey-grade PPK drones flown by highly skilled drone pilots, precise and customizable surveying techniques, robust data processing capabilities, and a proprietary MIETY compliant cloud platform for viewing and sharing analytics. Through our end-to-end solutions and business intelligence, we help safeguard assets, drive critical decision making, accurate planning, and daily progress monitoring.



MCDR GUIDELINE SUPPORT

Aereo provides assistance in helping mines fulfill the MCDR guidelines. According to the latest MCDR amendment, all mines must use drone surveys and submit data for compliance purposes. Aereo's cutting-edge drone survey and analytics platform enables this and more.



AEREO CLOUD

Aereo Cloud is a robust drone data processing and advanced analytics platform built on a MIETY-compliant cloud server. It is highly scalable and integrable into the existing IT infrastructure of our clients. Aereo Cloud has industry-standard tools and features to create orthomosaics, DEMs, point clouds, 3D textured models, etc. Additionally, users can derive advanced business intelligence and view and share them on Aereo Cloud without any hardware or software limitation.



www.aus.co.in

➤ ANDRITZ SEPARATION AND PUMP TECHNOLOGIES INDIA PVT. LTD.



ANDRITZ Separation provides mechanical and thermal technologies as well as services and the related automation solutions for solid/liquid separation, serving the mining and minerals industry, as well as the chemical, environmental, and food industries. The customized, innovative solutions focus on minimizing the use of resources and achieving the highest process efficiency, thus making a substantial contribution towards sustainable environmental protection.

ANDRITZ systems are designed for the most demanding applications in mining and minerals processing and include some of the highest capacity technologies in the industry today. Our current portfolio covers the full process from sedimentation and dewatering to drying and ensures excellent throughput of high-quality products. With innovative separation solutions and services, ANDRITZ helps mining and minerals operations globally to reduce their carbon footprint and costs, while improving product quality, capacity, and efficiency.

SIDEBAR FILTER PRESS ME FOR TAILINGS AND CONCENTRATES

The ANDRITZ sidebar filter press ME is specifically designed for heavy-duty challenges in the mining and minerals industry. Its modular design allows for easy and quick maintenance. ANDRITZ filter press ME is ideal for fast processing of tailings and concentrate, with a maximum throughput of up to 450 kg/m²h, depending on the application.



OVERHEAD FILTER PRESS A4F FOR TAILINGS

The ANDRITZ overhead filter presses A4F 1500 and A4F 2500 are designed for heavy-duty applications with maximum discharge speed. Based on a reliable design, these filter presses are equipped with an additional plate package divider to guarantee the highest possible throughput in combination with four-cylinder technology. It fits particularly for treating tailings, coal, copper, iron, and aluminum.



SIDEBAR FILTER PRESS SE FOR TAILINGS

ANDRITZ sidebar filter press SE is designed for standard and medium duty applications with a fast filter cake discharge system. It fits particularly well for sand and gravel, kaolin, calcium carbonate, and clay applications, and can also handle smaller throughputs. The filter press SE features a well-proven design with all the important modules, such as washing device, drip plates, and additional options depending on your requirements.



THICKENERS FOR ORE CONCENTRATES AND TAILINGS

ANDRITZ thickening and clarification solutions are designed to achieve the highest production rate without compromising efficiency. The innovative paste-thickener design facilitates highly clarified liquid recovery, as well as maximum underflow densities. ANDRITZ thickeners use state-of-the-art sedimentation technology to offer an efficient and reliable solid-liquid separation unit for a variety of applications, mainly for ore concentrates and tailings treatment in the mining industry.



HORIZONTAL VACUUM BELT FILTER (HVPF) FOR IRON ORE CONCENTRATE / COAL CONCENTRATE

Achieve high-throughput dewatering and cake washing with ANDRITZ horizontal vacuum belt filter (HVPF). It uses state-of-the-art vacuum filtration technology to offer an efficient and reliable solid/liquid separation unit that is fully CE certified for dewatering and washing of slurries. The modular design of ANDRITZ HVPF offers effective filtration areas from 6m² to 138m². It's also able to attain the highest cake washing efficiencies thanks to the plug flow displacement of the wash liquor, resulting in maximized product recovery. ANDRITZ HVPF are commonly used for iron ore and coal concentrates treatment, and many other applications in the mining industry.



BELT PRESS CPF-Q FOR COAL TAILINGS

ANDRITZ belt press CPF-Q is a continuously operating, heavy-duty belt press manufactured in a modular design with unique flexibility. It delivers lower residual moisture, higher throughput, and is more flexible to changing feed conditions than any other belt presses on the market. Despite its small footprint, the robust design of ANDRITZ CPF-Q contains an



impressive array of features, including a reliable belt tension system and a flexible drive, highly suitable for coal tailings treatment for the mining industry. Furthermore, with the Metris addIQ RheoScan optical measurement system, flocculant consumption can be optimized.

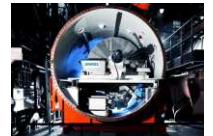
DECANTER CENTRIFUGE A FOR COAL CONCENTRATE / MIDDLING

ANDRITZ decanter centrifuges A are commonly used in some mining applications for clarification of liquids, thickening of sludges, and separation of solids. These reliable and robust decanter centrifuges offer continuous and fully automatic operating system with flexibility to handle varying process parameters with double variable-speed drive. For tailings, an efficient dewatering of slurries with fine PSD can be achieved thanks to high-speed decanters such as A10-4. Due to its big diameter-length ratio, it allows you to handle high volumes and increased recovery rates.



HYPERBARIC DISC FILTER (HBF) FOR COAL AND IRON ORE CONCENTRATES

ANDRITZ hyperbaric disc filter (HBF) is the right choice for continuous filtration with the highest solids throughput, lowest residual moisture, and clear filtrate. The heating value of fine coal can be achieved thanks to the lower moisture content. Furthermore, its closed system design contributes to less emissions for the environment. ANDRITZ HBF is highly ideal for coal and iron ore concentrates management in the mining industry.



www.andritz.com

➤ AQUA MACHINERIES PVT. LTD.



Ahmedabad based ISO 9001 accredited, "AQUA" is a Pioneer & Market-leading Company providing Energy Efficient & Reliable, Dry Motor; Submerged Pump sets for Water Intake, Transfer, and Distribution; Storm Water Disposal, Sewage & Efficient Management; Drainage, Cooling Water Circulation & Fire Fighting Power Stations, Mines, Tunnels; Handling Slurries & Dredging, etc.

With thousands of pumps working all over India, Southeast Asia & Africa not only pump sets - we offer Total Engineered Solutions out to out for surface water handling.

Our Vast design experience to develop a New Generation, AMS Pumpsets With its robust design, flexible to use & smart capabilities, the Submerged Mine Dewatering pumpsets ensures reliable, low maintenance & highly productive mine dewatering.

The present Aqua manufacturing range covers Submerged Mine Dewatering Pumpsets up to 450 kW in 380/550/440 V & 1500 kW in 3.3 / 6.6 kV motor rating, Head upto 450 m, Flow upto 10000 iGPM. These Pumps are suitable for bottom resting and floating pontoon installation in open cast mines.

SCCL : 1000 iGPM x 300 m x 3.3 kV x 550 HP Pump at Ramagundem OCP since 2021

WCL : 1850 iGPM x 150 m x 3.3 kV x 475 HP pump at Chhinda OCP

SECL : 2350 iGPM x 200 m x 6.6 kV x 800 HP pump at Dipka OCP

HORIZONTAL MONOSHAFTE SUBMERGED MINE DEWATERING PUMPSET

- Head : upto 450 m
- Flow : upto 10000 iGPM
- kW: upto 1000 kW
- Voltage : 415V/550 V/ 3.3 kV/6.6 kV



www.aquapumps.com

➤ AQUATECH PUMPING SOLUTIONS



Aquatech Pumping Solutions is a leading supplier of high-quality & engineered Mine Dewatering pumps. Range of pumps include Grindex submersible dewatering pumps, Grindex submersible slurry pump, Sykes Auto Prime Diesel Engine Dewatering Pumps for a large range of flows & head. Our pumps are available for hire and sale. Pumps are reliable as well as cost effective for tough mine dewatering application.

We provide dewatering solutions for a number of dewatering applications in mining, tunnelling, hydro dam construction & power projects construction. We provide the complete specialized service from preliminary design, supply and installation of dewatering pumps with accessories along with site manpower management throughout. The organization has established a credibility for dealing with even the most challenging Dewatering assignments effectively, both financially and even within time frame.

GRINDEX SUBMERSIBLE DEWATERING PUMPS

Grindex brand is a world leader in electrical submersible pump technology for demanding applications such as construction, mining and heavy industry. The pumps are known for their high reliability, durability and dependability. Thanks to the built-in motor protection and the air valve, the pumps can run unsupervised for longer periods, and even run dry for a length of time.



SYKES AUTO PRIME DIESEL DRIVEN DEWATERING PUMPS

Sykes is a brand that is recognised globally. Our pumps operate everywhere from the Middle East to North America, often in some of the harshest environments. Our ongoing investment in research and innovation has helped our customers to resolve a variety of water management issues.



MINE DEWATERING CONTRACT

We provide dewatering solutions for a number of dewatering applications in coal mining, metal and minerals mining. We design and supply dewatering pumps with accessories which is best suitable to your mine.



PUMP RENTAL

We provide the complete specialized dewatering service from preliminary design, supply and installation of dewatering pumps with accessories along with site manpower management throughout. The organization has established a credibility for dealing with even the most challenging Dewatering assignments effectively, both financially and even within time frame



Crusader Hose Australia manufacture the Waterlord® hose which has the ability to remove large volumes of water from a mine quickly and safely. Waterlord® is a heavy-duty and reliable layflat mine dewatering hose constructed by weaving a tight polyester fabric and using TPU (thermoplastic polyurethane) thru-the-weave extrusion. Waterlord® mine dewatering hose is reliable, compact, easy to handle and easy to deploy. Short lengths can be unrolled with little manpower. However, for long runs up mine walls and across pits, hose reel systems are required. These systems are used to rapidly deploy hose so that the water can be pumped out of the pit soon after the rains hit.

www.dewatering.in

➤ ARUL POLYMERS PVT. LTD.



Arul Polymers Pvt Ltd and Arul Rubbers Pvt Ltd the core companies within the group, offer Specialized Rubber Products and solutions for a spectrum of industries since 1997 and 1978 respectively.

An ISO 9001:2015 & IATF 16949 Certified, Arul Polymers Private Limited has established its presence in the Aerospace & Defence, Automobile and all Industrial sectors for general rubber products through its DG Sheets, Roller

with Diamond Groove, Herringbone Groove and plain Groove, Ceramic sheets, Ceramic hoses, Dredging Hoses, Chute & Mill Linings, Cold Bond Adhesive, Rubber to metal bonded parts, O-rings, Seals, & All Tailor-made Industrial required rubber products.

Our customized Compound range includes Chloroprene Rubber for Sewage application, stands the specification of ASTM C1277-18 & CSA, EPDM for Moulding & FDA, Silicone for Printing Rollers & the Food Processing Industry.

Arul Polymers also offers Specialty elastomers like HNBR, ACM, AEM / VAMAC, XNBR & FKM FOR Tier 2 Automotive component manufacturers. FFKM for ultra-low and High Temperature applications like deep oil-well drilling and its pumps with State of art in-house testing lab facilities.

We have also been approved by WRAS – UK for our Ebonite Rubber Compounds in drinking water applications withstanding up to 60°Celsius temperature.

Our unflinching technical and design capabilities has enabled us to find acceptance in the Aerospace and Military Industries. We have gained the acceptance of CEMILAC (Centre for Military Airworthiness and Certification) & DGAQA (Directorate General of Aeronautical Quality Assurance)

CERAMIC LAGGING

1. One of the most commonly used types of lagging applied to conveyor pulleys.
2. It is often used in harsh conditions where abrasive material is conveyed because the ceramic is harder and more durable than rubber lagging.



DISCHARGE DREDGING HOSE

1. It is part of dredge pipe line for dredger connected with pipe floater
2. In the working environment with high wind & waves, the discharge rubberised hoses can rely base on its low hardness. So it will ensure the safety of the whole pipeline assembly.
3. High Abrasion and Bending resistant
4. Very flexible, hence easy to install



Working Temperature: -20 to 50 deg. C

HERRINGBONE GROOVE LAGGING (HBG)

1. The style of lagging required is usually influenced by operating conditions.

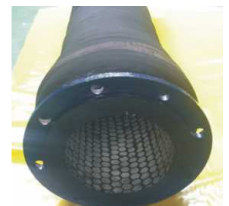
With this style grooving, the points do not meet in the middle.

This is normally used in drive pulleys, as water is channelled away from the centre of the pulley/belt by the grooves (3/8" minimum thickness)



CERAMIC DISCHARGE HOSES

1. Have ceramic tiles in the internal structure that make hoses have good wear resistance.
2. It is suitable for the harshest sea or mining conditions.
3. Compared with armoured discharge hoses, it's have better wear resistance and give long life too.



DIAMOND GROOVE RUBBER ROLLER

1. It is used in steel, chemical, salt, coal, power, cement and other sectors.
2. It is used under the loading points where material impact may damage the belt.
3. The impact idler is designed with durable rubber rings that are developed using synthetic, natural and neoprene rubber material.
4. It comes with heavy-duty fixing arrangement of rings that are properly designed for easy replacement.



MILL CIRCUIT TANKS

Mill Circuit Tanks rubber lined with Chlorobutyl/Bromobutyl rubber which will be used in FGD plants for handling lime stone slurry working temperature up to 100 deg C.



CARBON STEEL RUBBER LINED PIPES

Carbon steel Rubber Lined Pipes & Fittings lined with wear resistant natural rubber for transferring high abrasion slurry media with water in Iron Ore Minerals Industries

TANKS, PRESSURE VESSELS

Tanks, Pressure Vessels, Pipes, Fittings, Ducts & Chutes and Rubber Sheets for Chemical, Fertilizer, Power, Stable Fibre, Water and Food Industries.



www.arulpolymers.com



» AUTOMATION CONTROLS, NAGPUR

Automation Controls develops and manufactures mining safety monitoring equipments for wide range of mining applications. Inherent in these applications is a paramount need to protect personnel, facilities, and production and to comply with safety requirements. Automation controls targets this need and strive to offer cost effective solutions.

We are an ISO 9001:2015 certified organization manufacturing safety equipments for mines.

Due to our Automatic Fire Detection and Suppression System (AFDSS), till date lots of vehicles are saved from fire. We are having appreciation certificate from the users for this.

We would like to take an opportunity to introduce our self as a manufacturer of DGMS recommended safety equipments / quality products as per their safety norms and specifications.

We are feeling proud to inform you that we are a pioneer of this segment and involved in this business since 1990.

Our Automatic Fire Detection & Suppression System (AFDSS) meets all requirements as per DGMS (Tech) Circular No. 06 of 2020, Dhanbad, dated 27/02/2020. We are happy to introduce "Multi Zone Automatic Fire Detection and Suppression system" which we have developed indigenously.

As per DGMS guidelines, records warning provided with time stamp to enable easy retrieval and analysis of the immediate past 96 deployment operating hours.

- Flasher Light is provided outside of the cabin to alert surrounding workmen and machine operators.
- Some specially coated corrective lens (inc. much thicker ones) and/or sunglasses can reduce the recognition rate.
- When hair blots out the eye, the device may make the Alarming as fatigue function.
- Due to strong sunlight straight on the device (from side windows) or on driver's face (from front windshield), the device may reduce the recognition rate.

While reversing HEMM like dumpers and tippers used in mining are not free of the possibility of hazardous accidents at the rear end. Several accidents have occurred in opencast mines while reversing equipment.

Though Audio- visual alarm and rear-view mirrors are safety items available to control this kind of accidents, but they do not give clear view of the rear side of the vehicle. Which may lead to fatal accidents. The Rear Vision System with Recording Facility developed by Automation Controls not only enhance the vision of operator by providing rear view, also provides the added advantage to re-visit the incidence, to eliminate the cause of Accident.



The System provided with provisions for recording the images captured with time stamp to enable easy retrieval and analysis of the immediate past more than 24 deployment operating hours.

While driving many drivers do not dip the head lamps of their vehicles in night while approaching. To dip the head light repeatedly may distract the concentration. To overcome this type of problem, Automation Controls have developed an electronic gadget called "Auto Dipper". DGMS vide Circular No. 5 of 2010 has instructed to install Auto Dipper System in every vehicle. Automatically Performs its function of dipping of the head light beam and restoring of the same.

Withstands shocks & vibrations of HEMM. Only Fire-retardant conduit pipes are used for the safety of Harness. Restores the head light beam within 2 seconds when vehicle from opposite direction passes. Operates ideally on 24 Volt DC (12Volt DC optional)



The radar sensor should have Equipment Type Approval (ETA) from Wireless Planning Coordination Wing (WPC), which is under the Ministry of Communications and IT, (Government of India)." DGMS vide Circular No.5 of 2010 has instructed to install Proximity Warning System in every vehicle. Our "Safe Alert" Proximity Warning System (PWS) works on the radio frequency at 2.4 GHz to 2.4835 GHz, which is license free band frequency as per GSR 45(E). This Radar sensor works on technology which detects stationary as well as moving objects. We are having a range of 0-10 Mtr, 0-15 Mtr, 0-20 Mtr, 0-30 Mtr. available with 1, 2 and 3 sensors.



DGMS has observed that the maximum number of fatal accidents occur during reversing of Surface Transport Machineries in open cast mines and to reduce accidents vide their circulars, made it compulsory to install Audio Visual Alarm in every H.E.M.M. & Surface Transportation Machineries used in Mines. We are pioneer manufacturer of AVA and our AVA is used by almost all the OEMs. Our AVA fulfils all DGMS technical specifications with testing parameters issued vide DGMS.. Our AVA is 100% Water Proof. It even works after totally immersed in water. Manufactured as per IP 67 (Tested by Govt. Lab) Two synchronized speakers (110dB sound from 1.2 Meters) 400 LUX Bright focus type Red LED Operates ideally on 24 Volt DC (12 Volt DC optional)



We have developed equipment named as "Seat Belt with Reminder. Seat Belt is a safety device used to secure the operator of a vehicle against a collision or a sudden stop. Seat Belt functions to reduce causality or serious injury. It is provided with Inertial Locking mechanism It is protected from dust and mud of the polluted environment of mines. If Operator forgets or does not fasten it, "Seat Belt Reminder" alert him with Visual Indicator and also remind him in Hindi, Operates ideally on 24 Volt DC (12Volt DC optional)



Our TPMS is designed to handle the Rigors of the harsh environments at mines (Open Cast & Underground), quarries, construction sites, terminals/ports to provide accurate and reliable monitoring of tire pressure and temperature This system is consisting of one displayer and 6 sensors. Sensors collect the tyre data and send to the monitor in wireless transmission, the monitor displays the data and alarms according to the user's. Actual setting for the pressure and temperature to avoid an accident. This system improves driving comfort, fuel economy, prolong tyre life and most importantly it avoids costly downtime on commercial projects due to tyre failures. Warnings / Alerts: It gives High pressure alert, Low pressure alert, High temperature alert, Fast leakage alert and Sensor low battery alert.



We have developed an ABS System, comprising three different functions in one control Unit. Auto Dipper Body Lifting Indicator Seat Belt with Inertial Locking Mechanism and Switch for Alert. ABS System decreases manual operations and increases operators working efficiency. This system covers three different in one as per to fulfil instructions by DGMS vide circular.



As per DGMS, while reversing the vehicle Fatal accident can be avoided and safety can be achieved for the person standing behind the moving vehicle. Automation Controls have developed Smart Rear View Alarm (SRVA) as per DGMS Circular, by compiling two different systems (Audio Visual Alarm and Rear Vision System) 1.Gives Audio-Visual Alarm to alert the person standing behind to move to a safe place 2.While reversing vehicle operator can see the clear Rear-View so that he can



control the vehicle and apply the break immediately when required..

Operators of HEMM, while operation, doesn't know the position of the dump body, whether it is in high or low position. If dumper moves in body lift position, overhead HT Lines may break or hydraulic system may collide and cause a fatal accident. To avoid an accident, we have developed an electronic safety device BODY LIFT INDICATOR which gives an indication to the operator and also alerts in HUMAN VOICE. DGMS vide Circular No.5 of 2010 has instructed to install Body Lift Indicator in every vehicle.



www.automationcontrol.in

➤ BEUMER INDIA PVT. LTD.



At BEUMER we know that being different is of no use unless it translates into visible benefits for our customers. That's why our technology offers a difference you can see, feel and even measure.

Our engineering design blueprints are developed and tailored to meet your specific requirements. This dedication to detail and customisation is also carried through into the manufacturing of every solution. Our production teams ensure that systems are built to the highest specifications using only the best materials and techniques. Finally, our dedication to research and development ensures that our solutions not only cover customer needs today, but secure them well into the future.

With many years of experience, we have strong industry insight and each project begins by understanding your unique organisational and supply chain needs. System designs reflect this insight and integrate into your existing infrastructure. Finally, rigorous commissioning and testing ensure that systems are only handed off once everyone is happy that they are robust, reliable and ready for live operation.

TODAY, BEUMER FOCUSES ON

- CONVEYING AND LOADING TECHNOLOGY
- PALLETISING TECHNOLOGY
- PACKAGING TECHNOLOGY
- SORTATION AND DISTRIBUTION SYSTEMS

OVERLAND BELT CONVEYORS

Open troughed belt conveyors are suitable for conveying material quickly across vast distances through rough terrain. With extremely tight curve radii and large centre distances

Features:

- Reliable and efficient – designed for decades
- Ecological with energy regeneration
- Curved single flight conveying systems of 20 km and longer
- Conveying capacity up to 10,000 t/h
- Conveying speeds up to 6.5 m/s
- Small horizontal radii up to 400 m
- Conveying speed: up to 6.5 m/s
- Angles of inclination: up to 20° depending on the material to be conveyed
- Depending on the topographical conditions, conveyors of 20 km and longer are possible



PIPE CONVEYORS

Pipe conveyor prevents losses of bulk material during transport – It permits tight curve radii and steep angles of inclination, while doing away with transfer towers.

Features:

- Ideal for long distances
- Great flexibility



- Highly economical with low investment costs
- Low-wear construction with a lengthy service life even with highly abrasive materials
- Energy recovery from downhill conveyors
- Centre distance: up to 10 km
- Performance: up to 10,000 t/h
- Angles of inclination: up to 30° depending on the material to be conveyed
- Conveying different materials in upper and lower strands.

BUCKET ELEVATORS

UP AND UP! BUCKET ELEVATORS FOR VERTICAL MATERIAL FLOW

Whether hot or cold, our bucket elevators are the economical solution when it comes to vertical transport of bulk material. As the market leader, we have developed special technical designs for this type of conveying system for several decades now. Therefore, we can offer the perfect configuration for many different applications.

Key Features:

- Vertical transport of fine bulk material and coarse bulk material
- Grain size up to 100 mm
- Product properties ranging from sticky to highly abrasive
- Conveying capacity up to 2,000 m³/h and more
- Conveying capacities up to 1,540 m³/h
- Reduced investment costs
- Long service life of the traction element (chain / belt)
- Low noise emission
- Explosion-proof version possible, e.g. in compliance with ATEX
- Retrofit of existing bucket elevators is possible



BLENDING BEDS FOR BULK MATERIALS

Whether in the open or in covered halls, raw materials in stockpiles with blending bed equipment must be properly mixed and consolidated. This is why the BEUMER spreader reliably builds up the pile so that its cross-section has the largest possible number of layers of identical material. A BEUMER bridge scraper then helps to achieve the maximum homogenisation effect when reclaiming material from the front of the pile.

- designed for extreme operating temperatures
- Continuously adjustable discharge rate
- Very high feed-in performance
- Sturdy, wear-resistant fittings
- Most appropriate use of space (longitudinal or circular stockpile)
- Maximum possible homogenisation in blending bed



SHIP LOADER

We offer two different systems for ship loading. Coarse bulk materials, such as clinker or lumpy ores, are loaded into bulk carriers via belt conveyor systems and a closed, vertical telescopic tube - for dust free and efficient transport. The loading of powdered goods is handled by fully enclosed loading machines – a remarkably eco-friendly solution.

- Ship loaders with luffing, slewing, telescopic boom and/or shuttle conveyor
- Suitable for open and closed quay galleries or with tripper cars only
- Fixed or rail-mounted
- Types and sizes for each customer-specific quay and loading situations
- Dust-free and environmentally friendly operation
- High compatibility and flexibility
- Automatic dispatch control
- Comprehensive support
- High throughput rates



OPEN CAST MINING SYSTEMS

In the area of opencast mining technology, FAM offers an impressive selection of various machines and systems, such as bucket wheel excavators for extraction of mineral deposits like lignite, hard coal, overburden, marl. Opencast mining is a mining technique of extracting minerals from the near-surface layer of earth, these raw materials can be then used for further processing, for example, in production of metals or building materials.

Our product portfolio range includes:

- Bucket Wheel Excavator
- Bucket Chain Excavator
- Belt Wagon
- Mass Distributor
- Crawler-Mounted Conveyor Bridge
- Crawler-Mounted Spreader
- In-Pit Crushing System
- Cable Reel Car
- Transport Crawler



STOCKYARD SYSTEMS

Storage and homogenization of various bulk materials is a significant part of the handling processes within the overall logistic networks of the bulk material processing industry. Dynamic and efficient handling requires the stockyards to be equipped with appropriate technology (e.g., stackers, reclaimers, conveyor systems, etc.).

Our product line of stockyard technology includes:

- Stacker
- Bucket Wheel Stacker-Reclaimer
- Bucket Wheel Reclaimer
- Semi-Portal Scraper
- Portal Scraper
- Side Scraper
- Slewing Scraper
- Scraper Bridge Reclaimer
- Bucket Wheel Bridge Reclaimer
- Circular Stacker-Reclaimer



PORT TECHNOLOGY

The optimization process of the port logistics requires efficient loading systems which belong to the FAM competency.

Our product range encompasses:

- Ship Loader
- Grab Ship Unloader
- Continuous Ship Unloader



MINERAL PROCESSING

Our size reduction equipment includes diverse crushers and mills for extensive material processing in a variety of industries. Sand and gravel, clay and limestone, gypsum, building site rubble – the reference list of the BEUMER Group's materials is extensive. From a technical standpoint, the systems are always at the heart of production.

Our processing technology encompasses a wide variety of crushing and screening machines, such as:

- Roller Mills
- Reversible Hammer Mills
- Special Hammer Mills
- Single Roller Crushers
- Double Roller Crushers
- Double Roller Sizer
- Double Rotor Hammer Crusher
- Impact Hammer Crushers
- Roller Screens
- Apron Feeders
- Feed Hoppers
- In-Pit Crushing Systems



- Mobile and Semimobile Crushing System

LOADING & UNLOADING SYSTEMS

FAM loading systems increase the volume of handled goods and reduce loading times. The product range includes:

- Wagon Unloading
- Train Loading
- Truck Loading & Unloading



www.beumergroup.com

➤ CBS TECHNOLOGIES PVT. LTD.

CbS is a 2 decade old manufacturing company based out of New Delhi, India. CbS is a pioneer in the field of industrial oil filtration and waste management technologies with customer base spread across the globe. CbS manufactures oil filtration/Dehydration and separation machines for oils like Hydraulic/transformer/coolant/diesel/ turbine/ quenching etc. A QCI and ZED certified company which provides engineered solutions for customer needs in the field of oil and waste management. CbS is also the first company to have researched designed and developed the first stack disc separator under Make In India.



HYDRAULIC OIL FILTRATION MACHINE

Model: HOFN-NANO-1, Capacity:1000LPH Compact designed & Handy type best suitable machine to achieve NAS Level filtration results on Hydraulic oil



PORTABLE GEAR OIL CENTRIFUGAL FILTRATION

Machine that works on the basic principle of Centrifugal force. This centrifuge is driven by oil pressure. The Sludge holding capacity of this centrifuge is up to 5 kg up to 5kg. This Consumable free as well as maintenance expenses free machine.



ONLINE TRANSFORMER DRY OUT SYSTEM

It is a system that provides continuous maintenance of transformers to avoid premature equipment failure due to leakage of moisture and consequent damage to paper insulation. Available in static as well as in Portable models.



Trolley/Skid/Vehicle mounted Offline Transformer Oil Filtration Plant, Capacity:1000-24000LPH, These oil filtration plants are suitable for treating used transformer oil by first heating it and then passing it through specially designed filters and then subjecting it to vacuum treatment which dehydrates and degasifies the oil to achieve the desired improvements after filtration. It has single/ double stage degasification as applicable.



TURBINE OIL PURIFICATION SYSTEM

- Trolley / Castor wheel mounted.
- Moisture PPM improvement will be from more than 15000 to 50 PPM.
- Sludge holding capacity from 1 to 10 kg.
- Purifies upto sub micron level.
- Moisture & Solid removal centrifuge – No Consumables.
- Based on high vacuum dehydration system.



www.cbsenergy.com

➤ CHANDERPUR WORKS PVT. LTD.



Manufacturers & Exporters of Cement Plants, Mineral Processing Equipments, Fertilizers Plants (SSP & NPK), FGD Projects, Biomass Gasifiers, Coal Gasifiers, Paper Plants, Lime Plants & Material Handling Equipments.

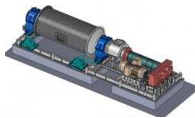
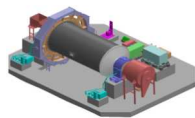
Our Equipment's are Well Renowned and our Prowess to Provide the Explicit, Process Associated, Robust and Cost-effective Grinding Solutions give us the Competitive Edge Over Others. Some of our other Key Products Consist of Hammer Mills, Roller Crushers, Rotary Kilns, Dryers, Drum Scrubbers, Rotary Lump Breaker, Air Classifiers, Separators, Pressure Vessels, Heat Exchangers, Conveyors, Screw Conveyors and Bucket Elevators Along with Heavy & Complicated Fabrication for the Plants.

With Complete In-house Design Manufacturing and Inspection & Testing Facilities and Innovation, We Provide Timely Completion of the Projects. We Use All The Latest Software Like Oracle ERP System for Smooth Management Workflow and Solid Works, Drive Works, Auto Cad, Stada for the Design Department.

BALL MILLS

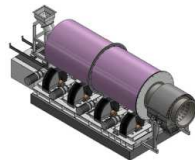
Our Ball Mill is highly advanced and specifically engineered for both wet and dry grinding applications.

- 450+ installations
- Robust & Reliable Design
- Easy Maintenance & Operation
- Fully automated system with PLC control & Instrumentation



CENTRE DRIVE BALL MILL

Very easy to maintain as it requires no Grease Spray system. The gearbox is 'flanged', meaning it has no direct contact with the mill foundation. So, mill movements have no effect on the gearbox teeth.



DRUM SCRUBBERS

Rubber Tyre Drive drum scrubbers are a reliable solution for washing contaminated bulk material and industrial materials, and for preparing ores for beneficiation plant in wet process.



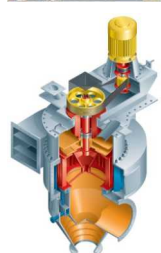
ROTARY LUMP BREAKER

Rotary lump breaker with pneumatic rubber tyre drive are used in technologically advanced "Metal Recovery Plant" in Steel Industry.



ROTARY DRYER

It is a continuously operated, direct contact Dryer. It consists of a slowly revolving cylindrical shell that is typically inclined to the horizontal a few degrees. The wet material is dried with the help of hot gases that may be generated in an external furnace.



AIR CLASSIFIER

Classifier is based on the natural laws of centrifugal, gravitational, and flow forces. These principles are used to bring about the classification in elements of different sizes.

www.chanderpur.com

➤ CRC INDIA MANUFACTURING AND DISTRIBUTORS PVT. LTD.



CRC Industries is a worldwide supplier of chemical products for the industry, automotive and electro segments. The company consists of five operating groups headquartered in the United States, Belgium, the United Kingdom, Australia and South Africa. CRC Industries Europe is ISO 9001 certified. We manufacture and supply cleaners, lubricants, anti-corrosion products, adhesives, welding products, additives, moulding products and other specialty products...all for the European, African and Middle East areas.

We guarantee high quality products by following strict guidelines in all facets of research, development and production. We try to meet today's most stringent

environmental and safety standards. Furthermore CRC develops new products and continues to adapt existing products to meet the needs of our customers.

5-56

Multi-Purpose Service Spray used for penetration, displacing moisture, loosens rusted parts, lubrication & protects metal parts against rust & corrosion

INDUSTRIAL DEGREASER

Fast drying cleaner & degreaser for mechanical equipment. For use in Food processing & Non-Food processing areas. NSF class K1 registered. Non-Corrosive.

BELT GRIP

Prevents slippage on Flat, Round and V-belts. Adhere strongly & reduces squeaking noise. NSF class H1 registered.

URETHANE ISOLATION

Air drying conformal urethane insulation coating for electrical/electronic equipment, motor windings, battery terminals, solenoids etc. It seals out water and moisture and acts as a barrier for contaminants.

CHAIN LUBE

Foaming lubricant, containing PTFE works as an excellent lubricant for driving and transport chains. Highly resistant to splash water and prevents corrosion to occur. For use in Food processing equipment. NSF H1 registered.

SP-400

A Long-term, outdoor and indoor corrosion inhibitor for machined surfaces and assemblies subjected to long period of storage or corrosion protection during overseas transport.



www.crcind.com

➤ CTC IMPEX (INDIA) PVT. LTD.



CTC IMPEX (INDIA) PVT. LTD.

CTC IMPEX (INDIA) PVT. LTD. is a Mumbai, Ahmedabad - Morbi (Gujarat) and Savakis (Tamilnadu), Meerut (UP), Kashipur (UK), Ludhiana (Punjab) and Jaipur (Rajasthan) based company as Worlds' Largest Heavy Bearing Importer, Exporter and Distributor. We offer widest range of steel plant, rolling mill & mining equipment bearing We are also keeping huge stocks of JUMBO SIZE of Bearings, Sleeves and Plummer blocks especially for cold and hot rolling mills, steel plant with some application, Back up roller for levellers/straighteners roll neck bearings for Rolling mill & Steel industries.

CTC IMPEX (INDIA) PVT. LTD. is Exclusive certified Importers of KOYO & KYK (Japan), Kinex (Slovakia), & LYC - ZWZ (China), KDM (India) brand bearings. We also importing SKF, FAG, Timken, RHP, NACHI, NTN, NSK, & many popular brands of bearings in bulk quantities from our Duty free DUBAI office. At present we are on approved list of many private Ltd., Public Ltd. and govt. organisation in state of Rajasthan, Gujarat, and Karnataka etc.

DEEP GROOVE BALL BEARING

Deep groove ball bearings are the most widely used bearing type and are particularly versatile. They have low friction and are optimized for low noise and low vibration which enables high rotational speeds.



SPHERICAL ROLLER BEARING

Spherical roller bearings are used in extremely tough running conditions in highly demanding environments. The bearings are used in applications prone to misalignment or shaft deflection (bending of the shaft under specific circumstances, such as an axial load)



TAPERED ROLLER BEARING

Pairs of tapered roller bearings are used in car and vehicle wheel bearings where they must cope simultaneously with large vertical (radial) and horizontal (axial) forces. Tapered roller bearings are commonly used for moderate speed, heavy duty applications where durability is required.

SPHERICAL THRUST ROLLER BEARING

A spherical roller thrust bearing is a rolling-element bearing of thrust type that permits rotation with low friction, and permits angular misalignment. The bearing is designed to take radial loads, and heavy axial loads in one direction.

CYLINDRICAL ROLLER BEARING

Cylindrical roller bearings (CRBs) have a simple structure with their cylindrical rollers in linear contact with the raceways. They offer high load capacity under primarily radial loads. Low friction between the rollers and ring ribs makes these bearings suited for high speed rotation.

PILLOW BLOCK BEARING

A Pillow block bearing, or a bearing housing or plummer block, is a pedestal that is used to provide support for a rotating shaft with compatible bearings. Pillow block bearings are actually housings that have a bearing fitted into them

FOUR TAPERED ROLLER BEARING

Four-row tapered roller bearings can accommodate combined (radial and axial) loads at low to moderate speeds. They are used almost exclusively in work roll applications such as rolling mills.

DOUBLE ROW TAPERED ROLLER BEARING

Double-row tapered roller bearings can accommodate heavy radial loads, axial loads in both directions and have a high degree of stiffness. Double row tapered roller bearings are typically used in gearboxes, hoisting equipment, rolling mills and machines in the mining industry, e.g. tunnelling machines.



www.ctcborg.com

» DERRICK SOLUTIONS INDIA PVT. LTD.

Derrick® has manufactured an array of innovative wet and dry, fine screening technology for the Mining & Industrial marketplace for 70 years. Derrick offers its clients leading-edge solutions to maximize separation efficiency. Using this patented equipment and innovative screen surface technology, offers unmatched performance – increased product recovery and reduced power consumption. Derrick's latest patented products are the SuperStack® 8-Deck, the highest capacity fine wet screening machine in the world today.



SUPERSTACK - PRODUCT DESCRIPTION

Derrick Corporation has once again redefined high capacity, high efficiency, fine particle wet screening with the introduction of the SuperStack®. With 8 decks operating in parallel and innovative Front-to-Back (FTB) tensioning system, the SuperStack has a demonstrated capacity up to 3 times that of the best fine screens currently available. All of this added capacity comes with only a slight increase in the space required per machine, significantly reducing the total capital and installation cost as well as OPEX for any screening installation.



Short Option #2

Derrick Corporation redefined high capacity, high efficiency, fine particle wet screening with the introduction of the SuperStack®. With 8 decks operating in parallel and innovative Front-to-Back (FTB) tensioning system, the SuperStack has a demonstrated capacity up to 3 times that of the best fine screens currently available.

REPULP SCREEN – PRODUCT DESCRIPTION

The Derrick Repulp Wet Sizing Screen is the solution for difficult to screen materials that require the Oversize product fraction to meet tight quality specifications. The Repulp machine's high speed, low amplitude motion coupled with its countercurrent spray wash water system effectively removes fine particles. It has a long history of producing high value products for numerous industrial mineral and precious metal industries. Numerous machines can be found worldwide screening silica sand, feldspar, coal, iron ore, gold ore and many other materials.



Short Option #2

The Derrick Repulp Wet Sizing Screen is the solution for difficult to screen materials that require the Oversize product fraction to meet tight quality specifications. The Repulp machine's high speed, low amplitude motion coupled with its countercurrent spray wash water system effectively removes fine particles while screening silica sand, feldspar, coal, iron ore, gold ore and many other materials worldwide.

LINEAR MOTION MACHINES – PRODUCT DESCRIPTION

Derrick Linear Motion machines have a long history of performing in trash screening and wet scalping applications. When fitted with high g-force Derrick vibrators and fed thickened slurry, typically from hydrocyclone underflow, the Linear Motion machines perform a dewatering function that enhances the removal of free liquid from the oversize solids. Derrick Fines Recovery Systems utilize this combination of small diameter hydrocyclones and Linear Motion machines to recover and dewater solids as fine as 325 mesh (45 microns). Numerous systems can be found operating in sand, aggregate, coal, concrete, graphite dewatering applications worldwide.



Short Option #2

Derrick Linear Motion machines have a long history of performing in trash screening and wet scalping applications. Derrick Fines Recovery Systems utilize small diameter hydrocyclones and Linear Motion machines to recover and dewater solids as fine as 325 mesh (45 microns). Numerous systems can be found operating in sand, aggregate, coal, concrete, graphite dewatering applications worldwide.

www.derrick.com

» DULEVO INDIA PVT. LTD.

Dulevo India Pvt. Ltd. is a Joint Venture of Dulevo International SpA, Italy (part of Fayat Group) in India. Dulevo International is a leader in the field of Industrial and Road Sweeping Machines with presence in over 60 countries.



Dulevo machines have been working in India since 2002 in various tough environments like M/s Tata Steel, M/s Tata Steel BSL, M/s JSW Steel, M/s Vedanta, M/s Infosys, M/s Larsen & Toubro, M/s Nestle India, M/s Hindalco, M/s Dr. Reddy's Laboratories, M/s Jindal Steel & Power Ltd., M/s Dalmia Cement, M/s Ultratech etc.

The Dulevo machines have been designed for tough conditions and have proved themselves on the ground in India. Dulevo machines work on the Mechanical Suction Technology with high capacity filtration using Gore Filtration products. The sweeping results of Dulevo sweeping machines in heavy dust environments are exceptional.

Some key characteristics of Dulevo machines are as follows:

- Single engine machines with low emissions.
- Machines duly approved by CIRT and homologated on Vahan portal.
- Low turning radius and facility of high dump.
- Filtration of 95% of PM10 dust particles.
- Low fuel consumption.
- High sweeping speed.
- Sweeping without the use of water.

DULEVO 6000

- Road Sweeping Machine specially designed for sweeping in high dust environments without the use of water.

- Dulevo 6000 is a 6.2 cbm Self-Propelled Mechanical Suction Sweeping Machine. The machine is incorporated with a PM2.5 & PM10 filtration system. The machine has dumping height of 2.4 mtrs. along with low turning radius of 4.8 mtrs.
- Specially designed for Mines, Steel Plants, Power Plants, Cement Plants, Bulk Material Handling Ports.
- Existing customers include: Tata Steel, JSW Steel, JSPL, Vedanta Ltd., Vishakhapatnam Port Trust, Ultratech Cement, Hindalco Industries and many more.



DULEVO D3

- Road Sweeping Machine specially designed for sweeping in high dust environments without the use of water.
- Dulevo D3 is a 3.3 cbm Self-Propelled Mechanical Suction Sweeping Machine. The machine is incorporated with a PM2.5 & PM10 filtration system. The machine has dumping height of 1.5 mtrs with a low turning radius.
- Existing customers include: Tata Steel, JSW Steel, JSPL, Vedanta Ltd., Vishakhapatnam Port Trust, Ultratech Cement, Hindalco Industries and many more.



DULEVO 120

- Road Sweeping Machine specially designed for sweeping in high dust environments without the use of water.
- Dulevo 120 is a very compact and powerful sweeping machine designed to work in heavy industrial environments. The machine is highly manoeuvrable and can work in narrow spaces. The machine is incorporated with a PM2.5 & PM10 filtration system.
- Existing customers include: Tata Steel, JSW Steel, JSPL, Vedanta Ltd., Vishakhapatnam Port Trust, Ultratech Cement, Hindalco Industries and many more.



www.dulevoindia.com

➤ EASTMAN CRUSHER COMPANY PVT. LTD.

M/s Eastman Crusher Company Pvt Ltd is a diversified engineering company with core business activity in bulk material handling and online analysis solution. M/s Eastman is involved in design, engineering, manufacturing, supply, service and consulting of various types of Auto Sampling System, Lab equipment, Crushers, Process control equipment, Online analyser, Automation catering several sectors like Mines, Thermal Power Plants, Cement Plants, Mineral process plant, Integrated Steel Plant etc in India since more than 40 years. M/s Eastman has also reached to emerging markets across the Globe, e.g; Malaysia, Indonesia, Vietnam, Senegal etc. We successfully executed and became trustworthy supplier to our overseas clients like Hyundai, GE Power, FLsmdith, Tenova, Thyssenkrupp etc apart from almost all the domestic clients like Coal India, NTPC, Tata Steel, BHEL, SAIL, HINDALCO, MOIL, Reliance, Adani etc. Our factories with state of art facility is based in West Bengal are capable to manufacture different ranges of material handling equipment to meet growing demand. By the continuous design support and collaboration with reputed institutes/global technology providers, M/s Eastman developed innovative solutions to serve various sectors. It's wide distributor/associates network in domestic and international market serve the client at any location. Apart from it's own products, M/s Eastman also represent Global OEM for particular products for respective territory in Asia.



CRUSHER

Crushers are the machines used to reduce the size of Minerals, rocks, stones, and ore. They are often utilized in aggregates production, construction material recycling and in mining operations. We are designer manufacturer of Crushing Equipments (e.g., Jaw Crusher, Roll Crusher, Hammer Crusher, Ring Granulator, etc.) which are used in Production purposes as well as in Mineral testing Laboratories



&

ONLINE COAL ASH MOISTURE & GCV ANALYSER

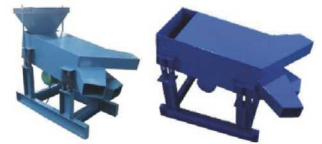
Online Coal Ash Moisture & GCV Analyser: We proudly present first ever green technology based Online Coal Ash Moisture & GCV analyser. To make systems more reliable and safer, we have introduced latest Dual Energy X-Ray Transmission Technology which is a safe, accurate and highly flexible system for fast and accurate Coal Quality analysis.



This AERB approved system comes with no radioactive waste or debris and also with Zero / NIL radiation leakage at "OFF" condition. Vibrating Screens

VIBRATING SCREENS

A vibrating screen is formed by a vibrant chassis that supports its surfaces or elements of screening. The screens/sieves serve to classify the different particles by size, starting from



a bulk product in a continuous process.

The inlet material advances from the part where the screen is fed to the opposite end in which the particles come out separately according to their size, shape or density. We have a variety of Vibrating Screens as required by clients, e.g., Single-Deck, Double-Deck, Multi-Deck etc.

AUTOMATIC CROSS BELT SAMPLER

Automatic Cross Belt Sampler collects the materials from the running conveyors with specified time interval without damaging the belt or without losing any characteristic of the materials. Then the sample is discharged through outlet chute for further processing or for sample testing in Lab. Our Sampler is conforming all the National & International Sample Collection standards.



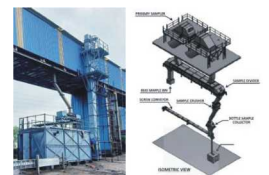
MATERIAL HANDLING EQUIPMENTS

Material Handling Equipments are everywhere to convey the bulk materials from one side to another side in industries or raw material production plants. For conveying/elevating materials vertically upward we have Bucket Elevators, for conveying fine particles with multiple discharging points we have Screw Conveyors and we also have most commonly used Belt Feeder/Conveyors to move materials in an inclined position.



ONLINE AUTOMATIC SAMPLING SYSTEM WITH COLLECTING, CRUSHING & REJECTION

Online Automatic Sampling System starts with belt top scooper then the materials will feed to a/more crusher through a/more belt feeder and then the crushed materials will go through a sample division system then one of those divisions is collected as final sample & the rest is rejected or fed back to main conveyor through Bucket Elevator & Screw Conveyor. Eastman also designed & installed Modular/Console type sampling systems at many Coal & Power Generations Plants



AUGER SAMPLING SYSTEM

The Auger Sampling system model UNI-Sampler (Patented in USA) was developed by JOHNSON Industry to sample from trucks, wagon/railcars and barges in an easier, faster and less expensive way. This revolutionary technology UNI-Sampler has already gained worldwide acceptance, successfully operating in the United States, China, India, Russia, Ukraine etc. with more than 80 nos. in installations Worldwide. In India, JOHNSON Auger sampling systems are being operated in leading two companies, e.g.; Balco (Korba plant) and KPCL Raichur plant. As a sampling system expert, M/s Eastman has become the license manufacturer of M/s Johnson, USA to produce their Sampling system for supply in Indian customer and export to other countries which is a perfect example of "Atmanirbhar Bharat". (A brief about Uni-sampler is enclosed at Annexure).



- Simple & Rugged Design with quick and easy Installation &
- Ability to sample till the bottom of the Truck

- The Primary splitting, crushing and secondary sampling are done within the Auger assembly (patented design)
- Worldwide acceptance

ONLINE ELEMENTAL ANALYSER- SMASH

The Scanmin SMASH analyser/ analyzer is online elemental analyzer has been developed using the latest cutting-edge digital technology. Important Coal constituents to the thermal power and coal industries, are measured directly by using the Scanmin signature neutron inelastic scatter and thermal neutron capture analysis. The analyser / analyzer uses an Am241Be radionuclide neutron source to excite the material directly on a conveyor belt and produce real-time analysis results. The SMASH analyser / analyzer is unique in that it can measure both organic and inorganic matter in Coal i.e., Carbon, Hydrogen, Oxygen etc.



www.eastmancrusher.com

➤ ELECTRO ZAVOD (INDIA) PVT. LTD.

Founded in 1973, Electro Zavod is a specialized manufacturer of equipment for the Bulk Material Handling industry manufactured indigenously at our state of the art factory in Kolkata.



Our product portfolio includes :

1. Vibrating Screens (Technology - Jost GMBH Co KG, Germany).
2. Vibrating Feeders (Technology - Erka OY, Finland).
3. Magnetic Separators (Technology - Älmhults El Mek AB, Sweden).
4. Lifting Magnets (Collaboration- Rotary Engineering, UK).
5. Cable Reeling Drums, Hose Reeling Drum & Slip Ring Assemblies (Technology - Bischoff & Hensel, Germany).
6. Industrial Metal Detectors.

Unique design and engineering expertise ensures that our products are customised to meet the stringent requirements of each application in the core engineering sector viz; Steel , Sponge,Cement ,Power Generation, Mining & Metals,Ports & Docks,Mineral Ore Handling Plants,Ceramic Fertiliser, Food, Paper & Chemical Industries.

With CE , ATEX, BIS & CIMFR certifications, our robust equipment have outshone competition in terms of their sheer performance.

We are approved by most Consultants, Power generation & Electricity authorities, Ports, Cement plants, Steel Plant, Fertilizer plants, Defence units and so on.

Our clientele list includes names like ABB, ACC, Adani, Aditya Birla Group, Alstom, Areva India, Atlas Copco, Avantha, BGR Energy, BEML,BHEL, Danieli, FL Smidth,Gebr Pfeiffer, Humboldt Wedag, ISGEC, ITC, JSPL, JSW, JSL, Larsen & Toubro, Metso Minerals, Mukand, McNally Bharat, NLC, NMDC, NTPC, Reliance, SAIL, Sandvik, Shapoorji Pallonji, Siemens, SMS, State Power Utilities, Takraf, Thyssenkrupp, Tata Power, Tata Projects, Tata Steel, Thermax, TRF, Vedanta and many more.

MAGNETIC SEPARATORS

Electro Zavod has been providing magnetic separators to segregate the magnetic materials from non-metal fractions for a variety of applications – in Steel, Sponge, mining Cement, Power, Ports etc.

Types: Electro-magnet or Permanent magnet type

Variants:

- Electromagnetic separators: Suspended, Overband (inline or cross-belt), boosting type.
- Permanent separators: Belt type, Magnetic pulley, Magnetic drum
- Cooling options: Oil cooled or air cooled



Advantages:

- Easy to highly efficient, install and maintain & weather-proof

CABLE AND HOSE REELING DRUMS

We offer a comprehensive range of motorised cable and hose reeling drums with stall torque motor drive, VVFD drives with squirrel cage motor & spring types for safe & efficient transmission of power, data, and fluids from stationary to mobile equipment.

Applications:

- Mining, Steel, Cement, Power, Ports and many other industries.

Variants :

- Semi-parallel drums: Used for short cable lengths and for voltage up to 415 V; winding cable not guided.
- Monospiral drums: Used for any cable length and voltage up to 11 KV; overall diameter determined based on available clearance
- Parallel or barrel-type drums: Used for any cable length; voltage up to 35 KV; winding cable uniformly guided



Advantages:

- Rugged, Low in maintenance & high on performance.

VIBRATING FEEDERS

Precision-engineered Electro Zavod Vibrating Feeders use controlled mechanical vibrations to feed a variety of bulk materials (solids, powder, or granules) to a specific process or machine.

Applications:

- Feeding crushers, mixers, furnaces & scales, loading & sorting plants, and discharging materials from hoppers for Mining & Metals, Steel, Power, Cement, Ports and many other industries.

Variants:

- Vibrating Feeder with Unbalanced Motor is designed with an electro-mechanical drive and produces linear vibrations; enclosed, dirt and dust-proof, IP-65 protected, and require minimal maintenance.
- Vibrating Feeders with dual force exciters consist of two counter-rotating shafts with centrifugal weights that create linear vibrations.
- Vibrating Feeders with direct force exciters consist of dual shafts counter rotating via a toothed gear. These are suitable for heavy material handling in massive quantities.



Advantages:

- Guaranteed operational reliability, efficient flow rates, low power consumption, low noise levels (less than 80 DBA), long equipment life

VIBRATING SCREENS

Electro Zavod Vibrating Screens are economical, customisable & designed for maximum screening efficiency with the smallest possible screening area. Special attention is given to G-forces, vertical acceleration, single particle ballistic and stratification of the product to ensure maximum performance.

Applications:

- Mines and Quarries, Cement and Steel industries, Fertilizer plants, Chemical and Pharmaceuticals plants, Food industries, Glass factories and other industries.



Variants:

- Vibrating grizzly screens are used for extracting small, coarse materials from storage hoppers for a wide range of materials from 2500tph iron ore to 200tph of quarry stone for the most arduous operating conditions.
- Circular motion screens are highly effective at
- handling high volumes of difficult-to-detect products such as angular, fibrous, and wedge- shaped shredded parts.
- Linear motion screens provide maximum performance and capacity using 'thin bed' screening technology. Operated either by two unbalance motors or by a mechanical exciter, these screens work best at low inclination with slope angles.
- Multi-slope vibrating screens are designed for fine particle separation requiring high level of precision. With varying deck slopes, the screens achieve greater screening efficiencies at higher capacities than conventional horizontal-type screens.
- Dewatering screens are suitable for separating solids from liquids in the wet ore and mineral processing industry.

Advantages:

- Guaranteed operational reliability, efficient flow rates, low power consumption, low noise levels (less than 80 DBA), long equipment life

SLIP RING ASSEMBLIES

Electro Zavod Slip Ring Assemblies are designed for power and data transmissions from stationary to rotating or oscillating equipment.



Applications:

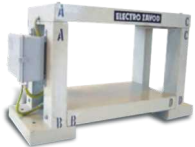
- Rotary kilns for Sponge Iron & others, Excavators, and rotary cranes Reclaimers / Stackers, Circular Blenders, Cable Reeling Drums, etc.

Advantages:

- Compact, easy to install, weather-proof, vermin-proof, and long equipment life

INDUSTRIAL METAL DETECTORS

- Electro Zavod Pulse Metal Detectors can easily identify and reject magnetic as well as non-magnetic metal contaminations to avoid any machinery hazards, and save production downtime.
- Our industrial metal detectors have a 30-year record of high detection sensitivity and reliability under tough conditions.



Applications:

- Coal Handling Plants, Cement Plants, Mining (Coal, Lignite, Ores), Thermal Power Plants, Chemical Plants, Glass Manufacturing Units, Plastics, Paper Mills, Plywood Manufacturing Units, and Rubber Processing Units.

Advantages:

- Easy installation, easily adjustable sensitivity, low power consumption, and trouble-free operations

LIFTING MAGNETS

Electro Zavod provides low dead weight circular Lifting Magnets for handling a variety of bulk materials such as heavy melting scrap, broken scrap, steeling turnings, cast iron boring, and others. Designed for rugged dependability, these magnets can pick up large weights faster and more conveniently than mechanical devices.



Applications:

- Steel plants, Scrap processing yards, Foundries, Material handling like steel plates, coils billets, shredding, etc.

Advantages:

- Massive lifting capacity, low power consumption, weather-proof design, easy to maintain, and low cost of ownership

www.electrozavod.com

» ENTVENT TOOLS & SERVICES

We take pride in introducing ourselves as one of the leading manufacturers of Belt Conveyor Idlers & Idlers Sets in India. Entvent's dedicated service to the Conveyor industry started in the year 1971. For over 4 decades now, Entvent has been manufacturing and supplying Belt Conveyor Idlers & Idlers Sets to various industries to provide efficient & economic operation. The company is managed by highly qualified and trained team of engineers, who strive hard to maintain a high level of quality and with a vision to constantly improve the same. Our manufacturing facility is equipped with sophisticated machinery to ensure high quality finished products. Our manufacturing facility has an installed capacity, to produce 5000 Idlers / month. Entvent Idlers are in regular service in various Mines, Thermal power plants, ports, Cement plants and various other places that require conveyance of bulk material.

Belt Conveyor Idler Set – Idlers are in Regular Service in Various Mines, Thermal Power Plants, Ports, Cement Plants and Various other Places.

Belt Conveyor Idler Piece - Idlers are in Regular



Service in Various Mines, Thermal Power Plants, Ports, Cement Plants and Various other Places.

Track Link Pin – Pins are used in Equipment Bucket Wheel Excavator at Mines.

Link Bolt and Nut – Link Bolt Nut are used in Idlers Sets and General Purpose.

Mill Housing Armouring Part – Parts are used in Thermal Power Stations Operation and Maintenance Department.

EN8 Bright Bar – Bars are used in Idler Shaft and General Machined items.



www.entvent.in

» EVO BEARINGS AND MACHINERIES PVT. LTD.

We are manufacturers and importers of bearings since 3 generations, more than 50 years, having 32 outlets across India. Apart from bearings we are manufacturing in transmission chains and conveyor chains, V belts and conveyor belts, oil seal and rubber related items and crusher spares.



Our Brand: EVO bearings, belts, chains, crushers (German Technology) (customised in India)

Distributor: EVO, KYK Japan bearings, Renold Chains and sprockets, JK Fenner ECO-drive Plus, Maxspares, Toyopower, JK Fenner - Pioneer Oil seals and belts and spares.

Stockists: EVO, SKF, FAG, INA, SCHAEFFLER, NBC, NACHI, NTN, KOYO, RHP, EVO, KHK, FDK, RHB.

EVO Bearings is a technology adapted by German. It matches and qualifies with all the factors of specification that smoothen the life of the machine.

Quality of EVO is the first priority. We believe in quality and services.

Fulfilling all the ranges of Bearings - Ball Bearings, Taper Roller Bearings, Cylindrical Roller Bearings, Spherical Roller Bearings, Thrust Roller Bearings, Linear Motion Bearings. Apart from Bearings we are also into V Belts, Transmission Chain, Conveyor Belts, and crusher spares.

We have fulfilled certain non standard ranges of our bearing for forgings, cement, crusher based industry customers.

We have served wide in Cement, Automotive, Steel, Wind Mill Energy, Oil and Gas, Refineries, Aeronautic, All Crusher Based, FMCG, Food, Pharmaceuticals, Sugar, OEM's industries.

Serving across globe majorly in Pan Asia .

Our technology and innovations in increasing day by day and will get more roots through generations. Our major assembling is done in India with imports of all the parts. Our bearing is made up of 52100 grade steel. And even we develop stainless steel bearings with SS304 and SS302 grade.

We also develop heavy duty and Kevlar Cords V Belts for more durability and life of the belts associated with Japanese and Singapore company for belts.

KYK BEARINGS KYK Japan Bearings originated in 1950 in Osaka Japan, serving across globe. We are distributors of KYK Japan bearings.



Renold chains and sprockets is a U.K. Based company, specialised in transmission chains and sprockets including conveyor chains.

We are authorised distributor of Renolds.

EVO bearings and sleeves



JK Group was originated in 19th century, we are distributor of JK Fenner Ecodrive V Belts and Oil Seals and also stockist of other JK Fenner products.



Maxspare seals and Toyopower V Belts and rubber related products, we are distributor of this brands too.



www.evomachinery.com

➤ FALCON SCREENS

With an experience & expertise of almost 20 years in offering the best screening media solutions across Quarry, Aggregates, Coal washeries, Iron ore & Mineral Beneficiation plants.

Falcon Screens are always one step ahead in offering highly reliable screening media solutions & in developing technological innovations that can satisfy an unlimited number of screening application needs even in the most demanding screening conditions.

Falcon Screens gets the standard for excellence through product innovation, quality manufacturing and responsive customer care.

Falcon Screens's success would not be possible without the contribution of our customers and employees who, with their skills and their passion, give voice, shape & quality to the future.

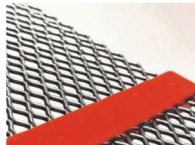
WOVEN WIRE MESH

- Woven wire mesh is the most widely used screens in the aggregate and mining industries, due to their high screening area, precision and price ratio.
- Falcon screens meshes are manufactured under latest technology along with in hand expertise of 20 years.



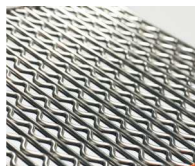
POLY RIPPLE SCREEN (ANTI CLOGGING SCREEN)

- Poly ripple screen cloth is light but durable with higher open area than woven wire.
- Very active & increases throughput when compared with conventional woven wire screen cloth.
- Reduced Pegging or blinding – increased efficiency & capacity.



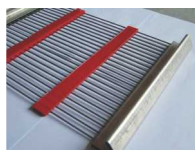
POLY VENO HARP SCREEN (ANTI CLOGGING SCREEN)

- Poly Veno harp screen cloth is light but durable with higher open area than woven wire.
- Known to last up to 3 times longer than other standard screen cloth.
- Overcome the wear problem caused by using the finer aperture screen cloth due to high T.P.H. or the lump size.
- Reduced Pegging or blinding – increased efficiency & capacity.



POLY PIANO SCREEN (ANTI CLOGGING SCREEN)

- Extremely effective in screening dry-manufactured sand.
- Can increase production in screening fine, sticky materials or other lightweight but difficult-to-screen materials.
- Ideal for screening RAP asphalt and other, similar aggregates, as well as for removal of super-fine material.



POLYURETHANE SCREEN

- Polyurethane, due to its high anti-abrasiveness and great elastic properties, is advisable for screening abrasive material and performs at its utmost under dry or humid conditions.
- PU can be formulated in various hardnesses, formats, according to the application it is used for.
- Maximum duration compared with other screening materials.
- Minimum maintenance cost.
- Easy to install Low obstruction (conic perforations and elasticity).



POLYURETHANE FLIP FLOP SCREEN MAT



www.falconscreening.com



➤ GORNY INSTRUMENT LTD.

GORNY INSTRUMENT LTD. was founded in November 1992 and it is the one of the leading manufacturers of mining-cutting and drilling tools. With the portfolio over 200 types of serial and exclusive tools, including more than 20 patented developments that do not have counterparts in the world. Additionally, the production of longwall shearers drums, cutter drums for continuous miners, roadheader cutterheads of all types, drilling and crushing equipment has been mastered.

The high productivity of modern mining equipment is the guarantee of the efficiency of the mining industry. Timely replacement of tools and its production on an individual basis allow mining companies to significantly save money and time on the mining works.

The basis of the long-term customer relations is the use of the steel and the hard alloys of the world's leading manufacturers, phased quality control and compliance with all world standards.

An individual approach to the needs of the client consists in studying the specific needs and geological conditions of the work and the specifics of the equipment used. This allows to select the optimal tool for each specific case.

One of the distinguishing features of the work of GORNY INSTRUMENT LTD. is testing at customer enterprises, mandatory certification of all products. Customer technical support is provided during the entire period of using the tool.

www.gornygroup.com



➤ IMAGEGRAFIX SOFTWARE SOLUTIONS PVT. LTD.

ImageGrafix has been a solution provider for Oil and Gas customers since 1996, primarily focusing on engineering design and CAD/CAM systems providing presales and post-sales support on leading engineering and CAD/CAM software.



In 2016 we identified the service opportunities available to support other downstream departments other than engineering design within our existing client base. These opportunities include project & portfolio management, enterprise document management, Enterprise asset management, Augmented reality and virtual reality training simulations, Plant data management integrated with IIOT technologies etc.

ImageGrafix established a dedicated team focusing on addressing the specific needs of EPS and Owner Operators in the region to help them attain their digitalization and achieve their digital twin implementation with a prime focus on services like Plant Digitalization, Digital twin goals and Project and portfolio management.

CAESAR

A complete solution that enables quick and accurate analysis of piping systems subjected to a wide variety of loads, taking into account weight, pressure, thermal, seismic and other static and dynamic conditions, based on user-defined variables and accepted industry guidelines.

CADWORX® PLANT PROFESSIONAL

CADWorx® Plant Professional runs on AutoCAD® or BricsCAD® platform and includes BricsCAD® Pro, providing a complete package with powerful and adaptive tools that enable quick and easy creation of fully intelligent 3D plant models.

PV ELITE®

PV Elite® is a complete solution for vessel and heat exchanger design, analysis and evaluation which performs calculations as per ASME Section VIII Div.1 & 2, PD 5500, EN 13445 and API 579 (FFS) and generate retirement limits for ASME and Division 1.

GT STRUDL

GT Strudl is a renowned high quality, fully integrated, database-driven software system for FEA based structural analysis offering both linear & non-linear, static & dynamic analysis, steel & reinforced concrete design.

AFT

Whether it is modeling gas or liquid piping systems, perfecting the system

design, studying the system's transient behaviour, or the need for fluid property data, AFT has the engineering software tools to meet your needs.

DIMENSIONAL SOLUTIONS

Dimensional Solutions suite of software solutions offer complete structural foundation designs from concept to construction for an array of industries.

DETAILED ENGINEERING SERVICES

ImageGrafix with its strong engineering fundamentals and partnering with Hexagon to adopt the latest technological innovations in digital engineering offers end to end engineering solutions to customers across the Middle East and India.

DIGITAL TWIN SERVICES

A digital twin is a digital representation of an existing or future physical asset, continually updated throughout the planning, building, and operating lifecycle.

MANAGED SERVICES

ImageGrafix Managed Services provides a robust functional and technical support service for company their Primavera Applications Such as Primavera P6 EPPM, P6 PPM, Unifier, Risk analysis, Analytics and Oracle database.

IMPLEMENTATION SERVICES

ImageGrafix is an Oracle gold partner specialized in Oracle Primavera solutions that utilizes a proven Primavera implementation methodology, provides a carefully crafted team of experienced consultants tailored to specific business needs, and delivers world-class implementation, training and integration services.

INTEGRATION SERVICES

ImageGrafix Integration services can integrate Primavera applications with your other business systems to meet the high level of functionality demanded by all users

ENTERPRISE SOLUTIONS

ImageGrafix has established itself as a leader in project management and project cost control management solutions. Our Oracle certified professionals have implemented and supported Primavera applications in organizations from various sectors.

www.imagegrafix.in

➤ IMCO ALLOYS PVT. LTD.

We would like to introduce ourselves as one of the leading manufacturers of custom engineered sintered metal matrix carbide composite products for the most critical wear and tear applications of the Mining, Cement, Steel, Power, and Sugar Industries.

IMCO Alloys Pvt. Ltd. is an advanced material science company exclusively dedicated to innovate ultra-wear resistant materials and committed to manufacture highest quality wear resistant products. We have been providing effective solutions for wear and tear resistance in several industrial applications and have been awarded with several path breaking research patents.

The inherited values of IMCO Alloys drive us in everything we do! Our focus being; Pioneering Technology, Creativity & Integrity, Excellent Customer Satisfaction, Highest Quality Assurance & Social Responsibility

Our Zuper range of wear resistant solutions are innovatively designed and customised for a variety application in Zuper Liners, Bucket Protection Kit, Crusher hammers and diffrent crusher parts & fabrication work of chutes, hoppers are built as per customer needs that help them benefit enormously while lowering their processing and maintenance costs, thereby creating value for our esteemed clients.

We effectively deliver "Exxxtra Life, Exxxtra Efficiency & Exxxtra Profit" and with our advanced production line we minimize the delivery times & ensure timely deliveries.



ZUPER HI LIFE LINER

IMCO make Zuper Hi Life is a solution to various high abrasion wear issues that rise in chutes, hoppers, feeders, bins etc. by increasing the life of mechanical equipment by shielding its surface. Our Revolutionary "Zuper Hi Life" Wear Liner which has High Density and Ultra- abrasion Resisting Carbide composite(60-62 HRC) metallurgically fused to a mild steel backing through our patented process. (Can also be offered without base plate for low impact areas)

Benefits of Zuper Hi-Life:

- Low Co-efficient of friction (39% less than SS in service)
- Reduced hang-ups & carry backs
- Max Wear Resistance irrespective of direction of flow of abrasive particles
- Negligible Dilution - unmatched wear resistance
- Consistent Hardness & Micro-structure resulting in consistent & unmatched wear rates
- Laminar flow ensuring reduced wear.
- Low Residual Stress(Sintered Carbide & backing plate)
- Ease in Fabrication as per customer requirements



ZUPER HI-LIFE EX SMOOTH

Fig: A mirror-like finish that gives the liner a smooth texture of up to 0.4 µA value to enhance the performance.



Smooth surface Liner is preferred by our customers facing issues with excessive hang up and carry backs. The polished finish of the liner of IMCO make Zuper Hi Life Ex Smooth makes the sliding motion of the raw material quicker without adhering to the surface of a low impact area having 60-62HRC. Majorly used in the applications of wet plants.

ZUPER HEX CERA

Innovation & agile IMCO make product "Zuper Hex Cera" Wear Liner is made of metal matrix ceramic composites fitted in a specialized alloy steel base body to withstand severe impact and abrasion wear having hardness 1100-1300 HV



Features:

- Zuper Hex Cera is innovatively designed for major impact areas which is 1.5 to 2 metres and more.
- Flexural strength of Zuper Hex Cera 220-240 MPa Compressive strength is around 1800-1950 Mpa

ZUPER HEX CERA SUPREME

The ultimate in impact resistance IMCO make ZUPER Hex Cera Supreme is made of highly compact and dense structured metal matrix ceramic composite fused inside alloy steel base with a hardness of 10-14 Gpa Vicker's that is built to withstand any high impact and abrasion wear.



Features:

- Zuper Hex Cera Supreme is innovatively designed for major impact areas which is 3-5 mtrs and more. Flexural strength of Zuper Hex Cera Supreme 320-350 Mpa
- Compressive strength is around 2000-2200 MP

FABRICATION & REFURBISHMENT CASES

As an R&D-based company, IMCO Alloys takes up new challenges for creating a better solution, we understand the customer's requirement with customized shapes and sizes of the requirement of various material handling chutes. A complete customized Dryer Feed Chute was been manufactured and supplied by IMCO Alloys which was undergoing



a massive abrasion issue along with erosion and impact. The chute undergone sever damage due to heavy impact zones varied and the multiple wear issues arising simultaneously. IMCO manufactured customized Dryer feed chute assembly fused with Zuper sintered carbide liners having 60-62 HRC hardness

duly finished. IMCO Alloys proposed a segmented solution to the chute which made the client save time under maintenance as easy fitment and replaceability as a major advantage along with hardness to resist the wear.

VIBROFEEDER

IMCO make Vibrofeeder implanted in Raw Material DSI oprn department at TATA Steel Jamshedpur where the operating material is iron ore having a temperature of 700 – 900 °C with High Abrasion and Moderate Impact

Understanding the precise work IMCO Alloys manufactures Vibro feeder that withstands extreme abrasional wear working at a constant motion and bulk handling the Zuper Vibrofeeder made with Zuper sintered carbide liners as a protective shield as a complete wear solution to the feeder



ZUPER CHOCOBARS

IMCO make Zuper Choco bars easy to use and install and with great impact resistance, it reduces downtime. The maintenance of the Gyrator with lesser manpower gets extremely convenient with an extended lifespan by the application of Zuper Choco bars.



ZUPER BUTTONS

A modified abrasion-resistant composite consisting of carbides in a metallic matrix, metallurgically bonded to a mild steel disc. These carbides have a minimum hardness of 770 Hv and contain carbides upto 1500 Hv.

Zuper Buttons are used to protect the bucket from all the sides, it minimises the effect of heavy impact, abrasion & erosion.



DUOMETAL HAMMER

- A revolutionary concept of DUOMETAL™ technology for Cement, Steel, Power plant applications like, Clinker Breaker hammer, Coal Crusher Hammer, Beater heads, Blow bar, etc.
- This is homogeneously fused to the component body. These carbides have a minimum hardness of upto 770 HV and can also be refined to have hardness as high as 1500 HV.

Advantage:

- Highly Cost Effective.
- Superior edge Retention with enhanced Sharpness.
- High crushing efficiency.
- Eliminates replacement costs
- Zero maintenance.
- Reduced down time losses.



IMCO MAKE HAMMER CRUSHER ROTOR ASSEMBLY

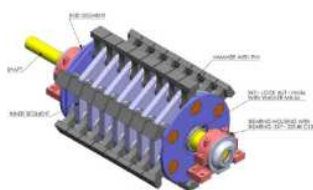
IMCO make hammer crusher rotor assembly is an ultimate crushing solution

Our crusher is equipped with advanced design & weight balancing technology specially for fine crushing

We also undertake refurbishment cases where the solution is customized as per our client's requirements considering all the measures

IMCO make parts for rotor crusher assembly as follows:

- Shaft
- Rotor Disc
- Crusher hammer with pin
- Hub & Axle pin
- Bearing & bearing housing



www.imcoalloys.com

➤ INDRONES SOLUTIONS PVT. LTD.

Indrones is one of the leading drone manufacturers and drone service providers in the country.

indrones

The company specialises in manufacturing drones for a variety of use cases and providing drone-based end-to-end solutions such as mapping, surveillance, 3D remodeling & surveying for verticals like smart cities, government, construction, oil & gas, mining, infrastructure, telecom, disaster management, agriculture, etc. Their signature drone, Sigma 25 is a survey grade drone which is also approved by the SOI, for carrying out survey related work across the country.

The company has also developed technologies that allow for highly efficient and cost-effective data collection, data processing and analytics and has developed indigenous software platforms under the Drones as a Service (DAAS) model

SIGMA 25

Sigma 25 series is an under 2kg drone meant to have a perfect combination of portability and performance. These drones are qualified as 'Survey Grade Drone' by the Survey of India.

Features:

- RTK/PPK: Survey grade accuracy
- Portability: Single backpack
- Toolless assembly: Quick deployment
- Reliable and Secure: Failsafe features and encrypted communication
- Cloud connected: Predictive maintenance



SIGMA 75

Sigma 75 series is a small-category drone built with versatility in mind. With its unique design and payload capacity it makes hot-swappable payloads and multi-mission operations easy for a single person.

Features:

- RTK/PPK: Survey grade accuracy
- Versatility: Single Drone can handle many Payloads
- Toolless assembly: Quick deployment
- Reliable and Secure: Failsafe features and encrypted communication
- Cloud connected: Predictive maintenance



www.indrones.com

➤ INNTECH ENGINEERING

Technova is established in the aim to serve the Engineering sector. Taken forward by a team of experienced engineers, the company has travelled many milestones and achievements from private as well as government organizations. Today we have a team of experienced engineers working for different fields of engineering who are selected from reputed institutions across India, an established factory in Maharashtra, and five offices pan India.

Inntech Engineering is a subsidiary division of the TECHINOVA, who has involved in construction and mining industries. We aim to be the premier global provider of innovative solutions for the engineering sector. We embrace new work cultures and have a comprehensive range, we are the complete solution provider for mining and construction industries, with high focus on quality and performance. We also have proven advantage in performance and versatile applications at optimal costs. Quality is guaranteed by the incorporation of latest technologies and processes. The product line comprises of a comprehensive range of jaw crushers, Vertical Shaft Impactors (VSI), Feeders, Vibrating Screen, Roll crusher, Bucket elevator, Screw conveyor, Chain conveyor, Apron feeder, Ball mills etc. Material handling equipment, Air pollution units, Bucket elevators, Customized equipment like Heat exchangers, Tanks, vessels, Pipe lines, reheat furnaces, Roller S furnaces, Gratings and Hand rails, Centrifugal pump (For Industrial purpose), Tower structures related to Electrical and Telecommunications (Including Civil erection to



complete product erection and Commissioning). Besides that we are taking outsourcing projects from different companies which include Structural parts, customized equipment, pipes and fittings, Maintenance of plant. We focus on providing best latest technology equipment's to our customers which are high productive, lower maintenance, lower cost per ton concept, optimum utilization by following the work procedure like Planning of material, Quality check (Dimensional verification, DP test etc.), fabrication, machining, Assembling with finishing, Painting and Dispatch.

The satisfaction of our customers is our success. We plan our strategies and work approach based on the customer requirements so that we can deliver practical and affordable solutions at optimum quality and within time limits each time. Change is the only constant. And we change for betterment. Our zeal of continuous learning and applying what we learnt, takes us forward and makes us better than our competitors. From the day of our foundation, we are on a constant process of learning and developing by brainstorming about new and innovative ideas, which are customer and problem specific. We actively conduct periodical in-house trainings and appreciate our employees to think about new ideas and innovative solution that stand out in the crowd.

HSI

The HIS is designed in such a way that customer can achieve optimum efficiency of product. Blow bars are used of high Chrome Steel or alloys. With three- or four -bar configuration, large feed opening and high-performance rotor, INNOTECH impact crusher are well- suited for a variety of applications. In an HSI crusher, material is crushed from the impact of fast-moving bars attached to the rotor. This material is continually crushed by the impact of the bars until it becomes fine enough to be shaped into a high-quality end product.



VIBRATING SCREEN

The Innotech screens with steel main body are produced for long years use. Installation and maintenance of the vibrating screens is very simple, thanks to the ladder system next to them can be done easily. Screens that can be produced in any size can also have multi-layer shelf system depending on the characteristics of the product to be screened. Each innovation, as well as contributing to the country's economy, contributes to the development of many sectors. The vibration is generated from an unbalanced flywheel. A very erratic motion is developed when this wheel is rotated. If the rock is small enough it will be removed from the circuit. The large rock will, of course, be taken to the next stage in the process.



IHPC

Innotech developed to crush the feed material into first class products efficiently and economically. Innotech cone crusher offer the highest crushing efficiency and end product quality with lowest cost per production. The extra weight means lower stress on the machine, which result in longer operational life, the structure improves the performance and crushing capability a lot. With the rapid development of mining technology.



JAW CRUSHER

Innotech is a leading manufacturer of jaw crusher. We manufacture larger feeding capability single toggle jaw crusher to meet customer need. Jaw crusher is a crushing machine used for crushing large materials into smaller materials. It is widely used to reduce the size of bulk material into finer particles. Innotech IJC series have different feed size opening jaw crusher. In single-toggle jaw crushers, the moving crusher operates in an elliptical pattern while in double-toggle jaw crushers, a pendulum motion is utilized in order to crush hard materials.



VSI

Autogenously configuration produces more spec material in a single pass. Efficient design decreases horsepower requirements. Reversible, replaceable and adjustable wear parts reduce operating cost. The rock breaks and the potential energy is stored in the rock which falls down due to gravity. The high impact force subjected on the particles breaks its sharp edges and reduces them into cubical form. The VSI's high cubical fracture percentage maximizes first-pass product yield and produces tighter particle size distribution.



CONE CRUSHER

INNOTECH crusher material is crushed between a fixed and a movable plate by reciprocating pressure until the crushed product becomes small enough to pass through the gap between the crushing plates. Capacities and product gradations produced by Cone Crushers are affected by the method of feed-ing, characteristics of the material fed, speed of the machine, power applied, and other factors. Hardness, compressive strength, mineral content, grain structure, plasticity, size and shape of feed particles, moisture content, and other characteristics of the material also affect production capacities and gradations. Gradations and capacities are most often based on a typi-cal, well-graded choke feed to the crusher.



www.techinova.net.in

» ION EXCHANGE (INDIA) LTD.



Ion Exchange is a pioneer of water treatment in India with a legacy spanning over five decades. With sales, production and service footprints across the world, Ion Exchange is a premier company in total water and environment management. We are one of the very few companies worldwide with complete range of solutions for water, waste water management, solid waste management and waste to energy. Our comprehensive technologies, products and services, enable our multidisciplinary teams of experts to cater to industries, municipalities, communities, institutions and homes.

Our 360° environment management adds value across the entire circuit - from influent water through potable and industrial process water to effluent/sewage treatment and water recycle for zero liquid discharge, sea water desalination and waste to energy projects for solid waste management.

Our experience of over 55 years is complemented by a comprehensive range of technologies developed in our ISO 9001 and DSIR certified R&D and Technology centres. We meet the industry's need for quality supply of goods and services through our ISO 9001:2015 (Quality Management System), ISO 14001:2015 (Environmental Management System) and ISO 45001:2018 (Occupational Health and Safety Management System) certified facilities that manufacture world class ion exchange resins for water and non-water specialty applications, membranes, water treatment chemicals and specialty process chemicals.

We serve our markets with a sustained focus on customer satisfaction, technological innovation and dedicated service through our Service Division. Our Zero B range of home water purification solutions deliver products at every price point and category: household, urban and rural as well as institutional segments.

Process Chemicals for Mining Sector

- Flocculant for thickeners for better clarity for Coal Washeries
- Flocculants and Coagulant for Dewatering for Better /enhance cake formation for non-Coking coal Washeries
- Collector & Frother and Collector Cum Frother for Coking Coal Washeries.
- Coal Anti-Oxidant for Spontaneous Combustion at Coal Yard.
- Dust suppressant for Haul Road & unpaved Road



RAW WATER TREATMENT SOLUTIONS FOR MINING SECTOR

- Full range of advanced clarification and filtration equipments along with chemicals including Food Grade flocculants, coagulants, Antiscalant for surface water treatment for Process and Ore Slurry Preparation etc.



DRINKING WATER SOLUTION

- Drinking water purification systems for industry, communities, urban & rural

- Zero B Point-of-use drinking water purifiers
- Full range of processes - membrane / non-membrane / non-electric
- Salinity, fluoride, nitrate, arsenic, iron & manganese removal systems



MINES WATER RECYCLE & DOSING SYSTEMS

- Recycling systems for Mine Water re-use to reduce load on Fresh water intake incorporating clarification, filtration, ultra filtration, reverse osmosis, forward osmosis, multiple-effect evaporator
- Range of polyelectrolytes for colour, COD, TSS removal, etc.
- Auto Preparation & Dosing system for Flocculants & Coagulant for Mine Water Treatment.
- Auto Preparation & Dosing System for Flocculant & Coagulant for Non Coking coal Washeries
- Dosing System for Collector & Frother for Coking coal Washeries



SEWAGE TREATMENT, RECYCLE & SLUDGE MANAGEMENT

- Packaged & customized sewage treatment systems
- Widest range of biological process systems - SBR, MBBR, MBR, advanced anaerobic treatment processes
- Tertiary treatment systems incorporating range of filtration and membrane processes



INTEGRATED WASTE MANAGEMENT

- An advanced process for treating liquid waste (sewage/sullage) and organic kitchen waste (generated in homes and communities), using our state-of-the-art technologies such as the INDION® IPC MBR and INDION Advanced Bio-methanation process.



www.ionexchangeglobal.com

➤ JOY GLOBAL (INDIA) PVT. LTD. (KOMATSU)

Komatsu provides essential equipment, technologies and services for the construction, mining, forest, energy and manufacturing industries. Our global service and distributor network support customer operations using the power of data and technology to help enhance safety, productivity and performance.



To continue meeting society's needs for coal, you need increasingly advanced underground mining equipment and technologies. Today's underground mining operations are using the power of data and technology to enhance safety, productivity and performance — and we are here to help you get there, with the experience and legacy of the Joy mining brand behind you. With our Joy-brand entry drivers, miner bolters, room and pillar equipment, longwall systems and crushing solutions, along with advanced automation and smart technologies, you can rely on Komatsu's factory and global service support to suit your unique operations.

CONTINUOUS MINER

Coal operations looking for reliable and productive room and pillar production, Joy continuous miners are engineered as cost-efficient and productive alternative to drill and blast mining.

Joy introduced the first commercially viable continuous miner in 1948 and since then we have produced more than 7,000 continuous miners for use around the globe. Joy continuous miners from Komatsu promote exceptional productivity and cost-efficiency, through our advanced technology and automation to advance the mining industry and the journey to zero harm for its workers.



SHUTTLE CAR

In harsh underground mining conditions, nothing is more important than reliability. And when it comes to haulage, you can be confident your Joy shuttle car will provide it, because every component is designed for reliability, shift after shift, even in harsh environments. When you choose a Joy shuttle car, you're getting a machine engineered using unsurpassed experience. Joy designed the first shuttle car in 1938 and has manufactured thousands since then. Over the decades, collaboration with our customers and industry experts have led to designs being continuously improved, so you can count on them to provide outstanding reliability, economy and safety.



BATTERY HAULER

Leave the clutter and routing constraints of electric cables behind with Joy battery-powered haulage carts, which offer plenty of power to get the job done without trailing cable.



Your operation can benefit from their manoeuvrability, operational flexibility and excellent uptime. Plus, optional lithium-ion batteries may boost your productivity with 75% shorter charge time, much lower maintenance versus traditional lead acid technology, and almost no limits on routing. Joy battery haulers help maximize productivity by combining agility, flexible routing, hauling capacity, long battery life and reliability.

FEEDER BREAKER

Joy feeder-breakers help mining, haulage and conveying systems to work at extremely efficient rates to maximize production.

Joy feeder-breakers provide highly reliable, productive means for continuous feeding and breaking of most bedded, mined material. The product is designed to cut operating costs and increase production rates by helping your mining, haulage and conveying systems to work efficiently. Joy feeder-breakers provide a reliable means for continuous feeding and breaking of most bedded, mined materials.



BATTER SCOOP

Scoops are true utility players in your mine, handling multiple tasks, such as maintenance, re-supply, clean-up and rock dusting. To help you get the job done with excellent operator comfort, lower maintenance and longer time between charges, consider the redesigned Joy 02ESV scoops — now with OptiDrive technology.



This next-generation Joy Scoop with OptiDrive excels at multiple tasks, including maintenance, re-supply, clean-up, rock dusting and more, while being simpler to maintain and operate.

DIRECT SERVICE SUPPORT WITH FULL MAINTENANCE

Leverage our expertise to solve your toughest challenges. We offer data-driven intelligence, exceptional experience and a close partnership with your operation to help increase productivity to help you achieve your operating and financial goals.



With different service models designed as per your need — LCM, CEP, Parts support, we engage experienced safety focused team to deliver quality service for assembly, commissioning, repairs and rebuilds to support you to maximize productivity by optimizing your equipment performance throughout its life in the mine.

www.mining.komatsu

➤ KATEEL ENGINEERING INDUSTRY PVT. LTD.

KATEEL ENGINEERING INDUSTRIES (P) LTD. was established in the year 1983, manufacturer and supplier of Industrial Disc Brakes, Drum Brakes, (Pneumatic & Hydraulic) Electro Hydraulic Thruster Disc Brakes and Drum Brakes, Electro Magnetic Disc Brakes and Drum Brakes, Rail Clamps, Clutch Buttons & Friction Liners.

The company was floated by Mr. H.V. RAMASWAMY, Mr. C.M. SHASTRY & Mr. K.N. SHANKAR who are technically qualified. They are also Directors since inception.

We are certified by Quest Certification ISO 9001:2015 for Quality Management.

Kateel has highly experienced and dedicated Engineers and timely approaching Service Engineer to make sure customer requirement/complaint if any.

List of products:

1. Pneumatic Active Disc Brakes : Air applied Spring Released
2. Pneumatic Failsafe Disc Brakes : Spring applied Air Released
3. Hydraulic Active Disc Brakes : Hydraulically Applied Spring Released
4. Hydraulic Failsafe Disc Brakes : Spring Applied Hydraulically Released
5. Mechanical Lever or Hand Knob Operated Disc Brakes : Manual
6. Electro Hydraulic Thruster Operated Disc Brakes and Drum Brakes : Fail Safe
7. Electro Magnetic Disc Brakes and Drum Brakes : Fail Safe
8. Hydraulic Rail Clamps (Storm Brakes) : Fail Safe
9. Thruster Operated Rail Clamps : Fail Safe
10. Pneumatic Clutch Brake

The Kateel range of hydraulic Brakes can delivered the Braking force up to 6 lacs N and use specially formulated hydraulic oil (Hydrol 68) to deliver the desired hydraulic pressure. These hydraulic brakes require a hydraulic power unit to operate the brake. Variable braking torque can be achieved by regulating the hydraulic pressure.

APPLICATION AREA

- Mine winder
- Steel Industries.
- Wind Turbine
- Conveyor
- Cranes
- Bulk Material Handling Equipment./stacker&Reclaimer

Features:

- Compact design
- Quick Brake response
- Low maintenance
- Large brake pad area
- lower brake disc temperatures
- Brake pad life is more
- Removable brake pad holders
- Changing the brake pad is easy
- Pad retraction springs are mounted as standard
- Drain ports for hydraulic oil leakage



The Kateel range of pneumatic brakes uses dry and compressed air at pressures up to 7 bar. These pneumatic brakes require a control valve which may be operated manually / by electric signal and Braking force up to 25000 N.

Application Area:

- Steel Industries.
- Cable Industries.
- Paper Industries.

- Wire Drawing Machine.
- Tyre Industries.
- Textile Machineries.
- Sugar Centrifuge
- Special Purpose Machines.

Features:

- Compact design.
- Easy mounting.
- Low maintenance
- Less space consumption.
- Suitable for wet, dusty and corrosion aggressive environments.
- Cost effective.



Electro Hydraulic Thruster operated Drum Brake is used in Cranes, Conveyors and Material Handling Equipment and we are having Size from 100mm to 760mm Drum size and torque capacity up to 9600NM.

Options:

- Automatic liner wear compensator
- Torque scale – for adjusting braking torque from 0 – 100%
- Manual release mechanism



Kateel Electro hydraulic thruster Disc Brake is a fail safe brake. When power supply is given to the motor, hydraulic pressure builds up inside the thruster and the piston moves up to release the brake. When the power is cut off, hydraulic pressure gets released and the piston moves down, thus moving the brake arm forward allowing the pad to clamp the disc with the spring force and apply the brake and torque can be achieved up to 25000NM with Brake disc Ø1200mm.

Options:

- Automatic liner wear compensator
- Torque scale – for adjusting braking torque from 0 – 100%
- Manual release mechanism

Features:

- High efficiency.
- Easy mounting.
- Compact design
- Low maintenance
- Suitable for wet, dusty and corrosion aggressive environments.
- Cost effective



The subject rail clamp is used as a parking brake for the trucks operating at sea shores. Refer to figure 1.1 for general arrangement of the clamp. It consists of two main links whose one end is connected to hydraulic actuator while the other end is fitted with brake pads. Both main links are hinged and supported by internal frame. The main links are also connected to springs through connecting links. The external frame is connected to truck. During the parking condition, the truck is held by clamping of the rails by spring force. To move the truck, rail clamp is release by actuating hydraulic cylinder. The external and internal frames are connected through a floating arrangement to accommodate the misalignment generated during truck movement. During parking condition, the clamp is subjected to a separating force generated due to wind or storm acting on the truck. The objective of the present work was to design a rail clamp of 130 KN capacity.



FRICTION MATERIALS-SINTERED

Metal-ceramic bronze-graphite friction material with high content of ceramic components and graphite, designed for a dry friction use.

Material characteristics :

- High co-efficient of friction
- High wear resistance
- The lining is solidly joint to its steel base pad by the layer of connecting material
- Good thermal stability up to 450°C, for a short term up to 800°C
- Small effect on the opposite surface
- Suitable for grinding, drilling and recess work
- Friction co-efficient stability in a wide range of operating conditions



KATEEL has introduced a high torque spring applied, air-cooled disc brakes for use in Surface Mining, Oilfield and other heavy-duty industrial machinery designs. These Brakes are to stop and hold machinery during emergency and safety critical situations. Standard brakes can be designed with multiple discs to generate max.6,20,000NM of static torque. All the brakes are pneumatic release so there is no need to worry about contaminated brake oil, hydraulic spills, or high pressure lines.

Application:

- Draw works
- Conveyors
- Winches
- Shears



www.kateel.com

➤ KHODIYAR INDUSTRIAL PVT. LTD.

Khodiyar Industrial Private Limited is a leading manufacturer and supplier of conveyor parts based in India. With over 12 years of experience in the industry, they have developed expertise in producing high-quality conveyor components that are durable, efficient, and reliable. Their product range includes conveyor rollers, idlers, drum pulleys, SMSR gearboxes, Plummer blocks, taper lock pulleys, and belt scrapers, among others.



The company uses only high-quality materials such as cast iron, steel, and rubber, and employs state-of-the-art technology and equipment to ensure that their products meet or exceed industry standards. They are committed to delivering exceptional customer service, timely delivery, and customized solutions to meet the specific requirements of their clients.

Khodiyar Industrial Private Limited's conveyor parts are widely used in various industries such as mining, cement, steel, and power generation, among others. They are known for their superior quality, high load capacity, and low maintenance requirements. Their product line is designed to meet the demanding needs of conveyor systems and provide reliable support for the safe and efficient transportation of materials.

In addition to manufacturing conveyor parts, Khodiyar Industrial Private Limited also offers expert installation and maintenance services to ensure that their products operate at optimal performance levels. Their commitment to quality, innovation, and customer satisfaction has earned them a reputation as a trusted and reliable partner for conveyor component needs.

CARRYING IDLERS

A conveyor idler is a mechanical component used in conveyor systems to support and guide conveyor belts. It is typically a cylindrical or trough-shaped roller that is mounted on a frame and supports the belt at regular intervals. The idler helps to maintain the proper tension and alignment of the belt, preventing it from sagging or slipping off the track. It also reduces the friction and wear on the belt, increasing its lifespan. Conveyor idlers come in various sizes, shapes, and materials to suit different types of conveyor systems and applications.



SMSR GEARBOX

KIC Make SMSR Gearbox is a product line of shaft-mounted speed reducers manufactured by Khodiyar Industrial Pvt. Ltd., a leading manufacturer of conveyor components based in India. These gearboxes are designed to transmit power from electric motors to conveyor systems, reducing the speed and increasing the torque. They are made from high-quality materials such as alloy steel and are available in various sizes and ratios to suit different conveyor applications. KIC Make SMSR Gearboxes are known for their compact design, high efficiency, and low maintenance requirements. They are widely used in industries such as mining, cement, steel, and power generation.



CONVEYOR HEAD DRUM PULLEY

KIC Make Conveyor Head Drum Pulley is a product line of conveyor pulleys manufactured by Khodiyar Industrial Pvt. Ltd., a leading manufacturer of conveyor components based in India. These pulleys are designed to provide traction and support to conveyor belts at the head end of the system. They are made from high-quality materials such as steel, rubber, and ceramic lagging, and are available in various sizes and configurations to suit different conveyor applications. KIC Make Conveyor Head Drum Pulleys are known for their robust construction, high efficiency, and low maintenance requirements. They are widely used in industries such as mining, cement, steel, and power generation.



PLUMMER BLOCK

KIC Make Plummer Block is a product line of bearing housings manufactured by Khodiyar Industrial Pvt. Ltd., a leading manufacturer of bearing components based in India. These blocks are designed to hold the bearings in place and provide support for rotating shafts. They are made from high-quality materials such as cast iron and are available in various sizes and configurations to suit different applications. KIC Make Plummer Blocks are known for their robust construction, high load capacity, and low maintenance requirements. They are widely used in industries such as mining, cement, steel, and power generation.



TAPPER LOCK PULLEY

KIC Make Taper Lock Pulley is a product line of conveyor pulleys manufactured by Khodiyar Industrial Pvt. Ltd., a leading manufacturer of conveyor components based in India. These pulleys are designed to transmit power and torque from electric motors to conveyor belts, providing traction and support. They are made from high-quality materials such as steel and are available in various sizes and configurations to suit different conveyor applications. KIC Make Taper Lock Pulleys are known for their easy installation, high efficiency, and low maintenance requirements. They use a taper lock bushing system, which allows for quick and easy pulley replacement without the need for specialized tools.



CAST IRON CASTING

Khodiyar Industrial Pvt. Ltd. is specializing in the manufacturing of cast iron castings. With over 10 years of experience, they have developed expertise in producing high-quality cast iron components for various industries such as automotive, agriculture, construction, and engineering. Their state-of-the-art foundry is equipped with modern machinery and equipment, and they use the latest technology and techniques to ensure consistent and reliable quality in their products. Khodiyar Industrial Pvt. Ltd. is committed to delivering exceptional customer service and meeting the specific requirements of their clients through customized solutions and timely delivery.



INDUSTRIAL COUPLINGS

KIC Make Industrial Couplings is a product line of couplings manufactured by Khodiyar Industrial Pvt. Ltd., a leading manufacturer of mechanical power transmission components based in India. These couplings are designed to connect two shafts together to transmit power and torque, providing a reliable and efficient means of power transmission. They are made from high-quality materials such as



steel and are available in various sizes and configurations to suit different applications. KIC Make Industrial Couplings are known for their high torque capacity, flexibility, and durability. They are widely used in various industries such as mining, construction, agriculture, and manufacturing, among others, and are designed to meet or exceed industry standards for performance and reliability.

www.kic.co.in

➤ LCS CONTROLS PVT. LTD.

LCS controls Pvt Ltd., founded in year 1995, nearing ~27 years of service in the field. We are proud to have served a wide range of customers in a wide range of industries.



Designers, manufacturers and "end-to-end" total solution providers in onboard weighing, industrial weighing, batching, bagging, packing and allied automation with a full-fledged manufacturing facility in industrial hub of Chennai, India

All in one roof "mechatronics" expertise: embedded electronics, mechanical items, electrical drives, material handling equipment's, sensors & pneumatic actuators, real-time software etc. This is LCS's unique strength, since many others lack in multi-discipline engineering skills.

Our R&D Centre accredited by Department of Scientific & Industrial Research (DSIR), Government of India, we consider it as an honor and recognition of our innovation spirit.

ISO 9001:2015 certified company

We are supplying Onboard weighing system for Dumpers (Payload-DT), Tippers (Payload-FBT) & Wheel loaders (Payload-WL). These weighing systems provide great advantage to mining industries to get to know the weight inside the dashboard of the vehicle. In addition, we supply safety related products for tippers known as "TILT SWITCH" which enhances the safety of vehicle and operator.

ONBOARD WEIGHING FOR DUMPER

The load measuring system range of products for dumpers consists of products on monitoring tools designed to maximize the efficiency and productivity of the Dump truck. The LMS is used to collect payload data and the speed of travel to enable safer loading practices and production efficiency Information.

ONBOARD WEIGHING FOR TIPPER

The load monitoring system in tippers measures the load and indicates the operator on the loading, whether it is under-load or over load. The system records the data in its memory and it can be retrieved using a thumb drive.

ONBOARD WEIGHING FOR WHEEL LOADER

Load is calculated in the loader while loading it in the truck. Advanced methodology provides accurate results of the load. Different types of report are stored in the memory and can be connected to a printer/GPRS for monitoring.

TIPPER TILT SWITCH SYSTEM

- The advanced techno product from LCS has made your major safety issue into powders.
- Tilt Switch is a dual-axis, compact and robust industrial grade tilt switch.
- It can be used in static and harsh environments as factories, automotive or construction sites.
- The system provides an output when the vehicle angle is more than the set limit.
- The output is used to stop tipping of the vehicle for safety purpose.
- Visual and audio indication is ON when the vehicle angle is more than set point during tipping to alert the operator.



www.lcscontrols.in

➤ LIEBHERR INDIA PVT. LTD.

LIEBHERR

In India, the Liebherr Group is represented by Liebherr India Private Limited a sales and service company and by three other manufacturing companies. Liebherr India Private Limited was established in 2006, having its Corporate Office in Sanpada, Navi Mumbai, Maharashtra, India and employs a workforce of 203 people, providing sales and service for the product lines of Earthmoving and Mining Equipment, Mobile Cranes, Piling & Drilling Rigs, Crawler Cranes, Maritime Cranes, Aerospace & Transportation and Components to Customers in India and in the neighbouring countries such as Nepal, Bhutan, Bangladesh and Srilanka.

LIEBHERR R9100B HYDRAULIC EXCAVATOR POWERED BY LIEBHERR DIESEL ENGINE.

- Operating Weight:
 - 1) Backhoe Configuration - 113 tonnes(125 US Ton)
 - 2) Face Shovel Configuration - 116 tonnes(128 US Ton)
- Engine 565 kW / 757 HP
- Standard Bucket Capacity(Density 1.8MT/ m³)
 - 1) Backhoe Configuration - 7.5 m³
 - 2) Face Shovel Configuration - 7.5 m³



LIEBHERR R9150B HYDRAULIC EXCAVATOR POWERED BY LIEBHERR DIESEL ENGINE.

- Operating Weight:
 - 1) Backhoe Configuration - 130 tonnes(143 US Ton)
 - 2) Face Shovel Configuration - 130 tonnes(143 US Ton)
- Engine 565 kW / 757 HP
- Standard Bucket Capacity(Density 1.8MT/ m³)
 - 1) Backhoe Configuration - 8.8 – 9.6 m³
 - 2) Face Shovel Configuration - 7.5 m³



*Also available in Electric version

LIEBHERR R9200 HYDRAULIC EXCAVATOR POWERED BY CUMMINS DIESEL ENGINE.

- Operating Weight:
 - 1) Backhoe Configuration - 205 tonnes(225 US Ton)
 - 2) Face Shovel Configuration - 210 tonnes(231 US Ton)
- Engine 810 kW / 1086 HP
- Standard Bucket Capacity(Density 1.8MT/ m³)
 - 1) Backhoe Configuration - 12.5 m³
 - 2) Face Shovel Configuration - 12.5 m³



*Also available in Electric version

LIEBHERR R9300 HYDRAULIC EXCAVATOR POWERED BY LIEBHERR AND CUMMINS DIESEL ENGINE.

- Operating Weight:
 - 1) Backhoe Configuration - 252 tonnes(278 US Ton)
 - 2) Face Shovel Configuration - 253 tonnes(279 US Ton)
- Engine 1007 kW / 1350 HP
- Standard Bucket Capacity(Density 1.8MT/ m³)
 - 1) Backhoe Configuration - 16.5 m³
 - 2) Face Shovel Configuration - 16 m³



*Also available in Electric version

LIEBHERR R9350 HYDRAULIC EXCAVATOR POWERED BY CUMMINS DIESEL ENGINE.

- Operating Weight:
 - 1) Backhoe Configuration - 302 tonnes(333 US Ton)
 - 2) Face Shovel Configuration - 310 tonnes(342 US Ton)
- Engine 1120 kW / 1500 HP
- Standard Bucket Capacity(Density 1.8MT/ m³)
 - 1) Backhoe Configuration - 18 m³
 - 2) Face Shovel Configuration - 18 m³



*Also available in Electric version

LIEBHERR R9400 HYDRAULIC EXCAVATOR POWERED BY CUMMINS DIESEL ENGINE.

- Operating Weight:

- 1) Backhoe Configuration - 345 tonnes(380 US Ton)
- 2) Face Shovel Configuration - 353 tonnes(389 US Ton)
- Engine 1250 kW / 1675 HP
- Standard Bucket Capacity(Density 1.8MT/ m³)
 - 1) Backhoe Configuration – 22 m³
 - 2) Face Shovel Configuration - 22 m³

*Also available in Electric version



LIEBHERR R9600 HYDRAULIC EXCAVATOR POWERED BY CUMMINS DIESEL ENGINE.

- Operating Weight:
 - 1) Backhoe Configuration - 633 tonnes(698 US Ton)
 - 2) Face Shovel Configuration - 645 tonnes(711 US Ton)
- Engine:
 - a) Liebherr engine: 2700 kW / 3620 HP
 - b) Cummins engine: 2500 KW/ 3350 HP
- Standard Bucket Capacity(Density 1.8MT/ m³)
 - 1) Backhoe Configuration – 37.5 m³
 - 2) Face Shovel Configuration - 37 m³



LIEBHERR R9800 HYDRAULIC EXCAVATOR POWERED BY CUMMINS DIESEL ENGINE.

- Operating Weight:
 - 1) Backhoe Configuration - 800 tonnes(882 US Ton)
 - 2) Face Shovel Configuration - 810 tonnes(893 US Ton)
- Engine 2984 kW / 4000 HP
- Standard Bucket Capacity(Density 1.8MT/ m³)
 - 1) Backhoe Configuration – 42 m³
 - 2) Face Shovel Configuration - 42 m³



LIEBHERR PR776 HYDROSTATIC DRIVE TRACK TYPR DOZER POWERED BY LIEBHERR ENGINE.

- Operating weight: 71.8 – 73.2 Tonnes(79.1 – 80.6 US Ton)
- Blade: Semi U-Blade of 18.5 Cum
- Liebherr engine: 440 KW Forward / 565 KW Reserve



LIEBHERR T 264 ELECTRIC DRIVE POWERED BY CUMMINS DIESEL ENGINE.

- Gross Vehicle Weight (GVW): 417 tonnes(460 US ton)
- Nominal Payload: 240 tonnes(264 US ton)
- Engine - 2013 kW / 2700 HP



LIEBHERR T 284 ELECTRIC DRIVE POWERED BY CUMMINS DIESEL ENGINE.

- Gross Vehicle Weight (GVW): 614 tonnes(667 US ton)
- Nominal Payload: 375 tonnes(414 US ton)
- Engine - 3000 kW / 4023 HP



LIEBHERR MINING GET SOLUTION:

- Three Tooth Profiles, in Five Sizes
- Innovative Design
- One Single Locking System
- Truly Hammerless System
- Easy Serviceability

DREDGING EXCAVATOR:

Liebherr provides a full range of maritime excavator equipped with a complete and unique range of attachments adapted to the customer's application. Operating weights from 100 t to 580 t and power ratings from 500 kW to 2,984 kW (701 HP to 4,000 HP). Liebherr dredging excavators are dedicated to move material in any condition, on seas, oceans or fluvial channels.



www.liebherr.com

» LLC «MODERN FIRE SAFETY SYSTEMS» (SSPB)

Company LLC «Modern Fire Safety Systems» is engaged in production, installation, repair and technical maintenance of SSPB-Tungus automatic fire extinguishing system.



LLC «Modern Fire Safety Systems» is the developer and manufacturer of SSPB-Tungus fire extinguishing systems. This system is designed to efficiently protect mining, construction equipment, heavy-duty open-cut transport, mechanized sections of processing plants, various plant equipment having large volumes of fuels and lubricants, high-pressure working fluids used in areas with a risk of ignition.

This system is effectively used in logging, processing machines and mechanisms.



The SSPB control unit is manufactured in accordance with the requirements of GOST-R 53325-2012. In addition to the main parameters such as: automatic start, start in manual mode, start with a delay and indication of the countdown time, stop and return of activation, the function of transferring information about the state of the fire extinguishing system to the information system of equipment via the CAN protocol has been implemented, the state of the system is monitored in real time.

The UAP-2 autonomous starter allows the system to be started in the absence of power.



This activation system allows you to start the fire extinguishing system in any situation, which increases the efficiency of fire extinguishing.

Powder fire extinguishing module: MPP-2.7, MPP-10, MPP-24 - are manufactured in accordance with GOST 30631-99 for severe operating conditions, in the temperature range from -60C to +125C. MPP does not have locking and starting devices, does not require special storage conditions, can be installed on equipment both vertically and horizontally, assembled into modules. Over a long service life does not require routine maintenance (maintenance)



The water mist fire extinguishing module (MUPTV) is manufactured in accordance with GOST 53288-2009 for harsh operating conditions, in the temperature range from -50C to +50C. For a long service life does not require routine maintenance (maintenance)



This system is designed to efficiently protect mining, construction equipment, heavy-duty open-cut transport, mechanized sections of processing plants, various plant equipment having large volumes of fuels and lubricants, high-pressure working fluids used in areas with a risk of ignition.



www.sspb42.ru

» LOCATE365, MYVALUEPACK RETAIL PVT. LTD.

We specialize in Fuel Monitoring and Efficiency Enhancement Solutions that can help provide your company with high accuracy Fuel Monitoring that delivers results with more than 99% accuracy. This in conjunction with Drive365, our driver/operator application gives you complete control of your asset fleet.



Our solutions can monitor all assets which use fuel.

The solutions are designed to give a visibility of:

- 1) Realtime Volume of Fuel In the Fuel Tank of the assets, Storage Tanks [underground or Overhead], Fixed and other fuel consuming assets
- 2) Refueling / Draining volume, Real-Time with location.
- 3) Volume of Pilferage or Drainage, REALTIME alerts with asset identifier.
- 4) Export of Refueling for issuance and AUDIT Report into your ERP or any other backend solution.

- 5) Data to audit the fuel expense on every asset or site as required, the same can be matched with the ERP entry using our Variation Report.
- 6) Engine Working/ Idle Hours for Static Assets [HMR], Consumption report [KMR] available for every asset or group of assets. Power Solutions for fixed and generating assets.
- 7) Standard features like Geo Fencing, Distance Travelled (for moving Assets), Ignition On / Off, etc.
- 8) Assets could be clubbed into specific sub projects, and their performance benchmarked along with trends of usage.
- 9) Our Solution can integrate data from different assets onto one single Interface & with various third party and home grown software.

The Solution helps with monitoring overall Fuel Cost, measures/improves efficiency and helps improve accountability, enhanced visibility, and transparency within the Organization. The Solution can be used on all types of assets [fixed, moving and floating].

Fuel365, powered by Locate365 provides Fuel Monitoring and Efficiency Tracking Services that can help provide your business with high accuracy Fuel Monitoring that delivers results with more than 99% accuracy. This in conjunction with Drive365, our driver/operator application gives complete control of your asset fleet, solutions give you the ability to have an integrated view of the Fuel and Asset sides of the business.

Drive365 is a mobile based application which helps with Realtime Driver Management, Duty management, Trip assignment, Shipment Management, Leave management, creating Customized Route Masters.

Make and manage a Reward Points program for Driver Incentive, Create Trips or let your client Create Trips through the Web Portal or Mobile App and monitor Shipments. Drivers get a mobile app and can seamlessly be on or off duty, start/end the trip, manage trip and expenses.

Set Geofence conditions from where Drivers can start/end the trip, shipment arrival notification Supervisor visibility into every task of the driver, Drivers get tracked through mobile app based tracking for route, driving patterns

Machine365, is an asset/machine service efficiency mapping application powered by Locate365, mobile based extremely nimble and scalable, built to served various business verticals.

Movelocal365, is a B2B2C hyperlocal courier delivery service application powered by Locate365 is mobile based and can be used by various businesses, for tracking deliveries and moving hyperlocal for businesses and personal deliveries.

www.locate365.in

➤ MACO CORPORATION INDIA PVT. LTD.

Maco Corporation is having presence in mining industry for almost 25 years for supplying world class products and service support.



MACO provides ANSUL-USA, Auto fire Detection and suppression system for all kind of off-road mobile HEMM, and other engineering solutions like Clutch & Brakes (Danfoss, USA), Ground Engaging Tools (ESCO USA), Refuge Chambers for UG Mines (Mine ARC Systems, Australia), Fuel/ Lubricant Storage and Handling system (ROCK-TECH, Canada), Mine Ventilation Monitoring System (Maestro, Canada) and other accessories products for mining industry to meet your mining requirements in both open cast and underground Mines on Pan India basis.

We have earned recognition as a critical equipment / product supplier and

service provider in mining sector. Our service support centres are located in West Bengal, Rajasthan, Jharkhand, Odisha, Madhya Pradesh, Chattisgarh, Hyderabad and Bangalore.

MACO has a comprehensive service support system. All service people are trained by our principal / partners as per International Standard.

We have central warehouse in West Bengal and other storage facility at different location, which can fully meet market demand and avoid machines stop caused by parts shortage. We provide solutions within 24 hrs. and arrive at customer's site within 72 hrs.(max) to ensure equipments can be restored on immediate basis.

The ANSUL brand promises a full range of quality fire protection solutions – for Vehicle automatic fire detection and suppression systems.



The Automatic fire Detection and suppression System works in combination of Control Module- CHECKFIRE system and Dry chemical / LVS (Liquid Vehicle system) system / Inergen gas system along with pressurized expellant Gas Cartridge to provide around-the-clock, automatic, fire detection and actuation.



The rugged control module is designed with self-sufficient batteries to run 24X7 withstanding shocks, vibration, and extreme environmental conditions.

Complete Clutch & Braking Solution for Mining Equipment. Eaton AIRFLEX now acquired by Danfoss is, the World leaders of industrial Clutches and Brakes have been the original supplier to all the Global Mining Equipment Manufacturers.

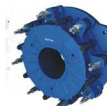
ENGINEERING
TOMORROW



UNIQUE FEATURE OF AIRFLEX BRAKES

Crowd Application | Hoist Application | Drag Application | Swing- Application | Propel Application

Refuge chambers are designed to provide a refuge or 'safe heaven' for miners suddenly trapped in hazardous or toxic environment.



MineARC is the global leader in the manufacture and supply of emergency refuge chamber from Australia. They have supplied refuge chambers in operations to over 40 different countries.



MineARC is the only refuge chambers manufacturer in the world with an ISO: 9001 quality rating.



ESCO products are trusted at mines worldwide for improved productivity and safety for dragline buckets and accessories along with Ground engaging tools.



• ESCO® ProSeries™ Dragline Chain

We offer complete strands of chain for both ESCO and competitor dragline buckets. Available in both hoist and drag configurations, ESCO ProSeries rigging chain is engineered for optimum performance, strength, and wear life.



• ProLink™ Mechanical Chain Link

The ESCO® ProLink™ chain link offers faster, hammerless, and hot work-free installation and removal – reducing downtime and increasing safety.

SatStat® Underground Fuel/Lubricant Storage and Handling Systems have a proven track record for rapid implementation, nominal engineering costs to accommodate, and increased productivity at the face. They provide a rugged, portable solution to safely storing and handling essential consumables like Hydraulic oil, fuel, grease etc. to maximize your equipment up-time in underground and to reduce operational cost.



SatStat® units are customizable to your requirements and its modular design allows for single or multiple unit set-ups for the safe storage and dispensing of fuel, lubricants, grease, flammable and other liquids.



Maestro digital mine manufactures industrial internet of things (IIOT) devices and last mile digital networks for the underground mining sector.



Maestro Digital Mine provides significant CAPEX and OPEX savings to the mines project delivery, technology (IIOT), ventilation on demand, energy occupational health and safety professionals.

More time at the face and higher production rates by allowing safer and quicker re-entry times after blasting. Regulation and compliance monitoring by using modern IIoT devices and software tools for accurate and real-time data capture..

SELF-CLEANING CAMERA

Tough-Eye from EXCELSENSE provides industry leading zero maintenance self-cleaning cameras for any Mining and Industrial application

ANTI COLLISION DEVICE FOR MINING HEMM

SAFEYE from DOTNETIX is an advanced stereoscopic machine vision system that detects and differentiates between pedestrians, industrial machines like dump trucks, excavators, forklifts, cars, and other machines typically found on Mining sites with the most advanced artificial intelligence (AI) built into SAFEYE. The system does not require any RFID tag.

HEMM SAFETY MATERIALS

• Laser Proximity Warning System:

LPWS considers the vehicles / equipment's Blind Zone, Braking Capacity, Operator's, and Brake System Response time for Front & rear detection. Audio-Visual Display Unit inside vehicle cabin. Dynamic detection range adjustment with vehicles speed

• Rear View Camera:

Rear view Camera system is intended to aid the driver while reversing and avoid collision with any obstacle, vehicle, or human being.

OPERATOR FATIGUE MONITORING SYSTEM

Operator Fatigue and Distracted Driving Monitor designed for industrial applications to improve safety.

SEAT BELT REMINDER SYSTEM

Three-point contact type with a securing buckle with quick release, adjusting devices along with Audible alerts.

www.macocorporation.com



➤ MAHESHWARI MINING PVT. LTD.

Maheshwari Mining Pvt. Ltd was founded in the year 1978 with a vision to extend its services for the mining industry of India. The first office was setup at Raniganj which eventually became the Head Office. Subsequently the Corporate office was established at Kolkata and many more regional offices are on Pan India basis. All the regional offices have been set up strategically for ease of monitoring and to have better control.

For almost over three decades, we have been committed to a long-term strategy of investing in World Class, Cost Effective, Customizable and Expandable Operations that reflects diversification across markets and geographic regions. From an early foray into exploration & mining, to staying abreast of the latest technologies, MMPL today has a strong presence across the nation.

The diverse experience of company personnel in resource sector industries — Underground Mining for Metal & Coal, Exploratory Drilling, Geophysical Logging, and Geotechnical Services as well as providing support services for O&M of Mining and Exploration Machineries to large Mine operators and MDOs has been very valuable credential for the company. Our motto – 'People with Experience' comprehensively expresses the values we have generated for our team.

www.maheshwaree.com



➤ MARINE ELECTRICALS INDIA LTD.

Marine Electricals is an integrated technical services provider in the fields of electrical automation and information and communication technology solutions.

We made our beginning as supplier of Electrical switchboards to Indian Navy in 1978. During last 4 decades we grew to become the leading solution provider in the field of Electrical distribution and Automation.

While we continue to offer Marine solutions, our Industry division main focus is on solutions for low voltage, medium voltage distribution and automation solutions for process control and energy management.

Over the years we have developed in house R & D capabilities for product & solutions development and have also partnered with leading global companies.

Our insistence on High quality standards have given us opportunity to serve large and well known Industrial, data centres and Marine segment clientele.

Marine Electricals is a listed company on National Stock Exchange (NSE)

MEpower

Features:

- 11 kV/22kV /33kV Switchboards VCBs, Contactors ,RMUs , Load break switch
- Up to 40 kA withstand
- Type tested as per IEC62271-200
- Indoor /Outdoor Applications

MeCubE

Features:

- Complete range IEC 61439 certified by ASTA.
- PCCs , MCCs , Distribution , APFC
- Flexibility to use switchgears of leading makes Schneider , Siemens ...
- Available IoT connectivity MEconnect

BlokSeT

Features:

- Leading License partner of Schneider Electric
- Range of PCCs and MCCs.
- Intelligent PMCC
- Tested for Internal Arc withstand

MEconnect

Features:

- Energy monitoring & management system
- Maintenance prediction
- Asset management system
- Temperature monitoring
- Augmented Reality for ease of operation

www.marineelectricals.com



➤ MASYC PROJECT PVT. LTD.



"THE COMPANY IS AS GOOD AS IT'S PEOPLE". The dedicated team of key people, with more than 32 years of experience and very rich exposure in the "Bulk Material Handling", is the main asset of "MASYC GROUP" headed by a thorough professional, Mr. Vijay Bikhchandani.

As you know, No single manufacturer can fulfill all the requirements of Bulk Material Handling Systems and Equipments required in different processing Industries like Cement, Pulp & Paper, Steel, Coal, Glass, Fertilizers, Mining, Power, Agriculture etc. But MASYC Group through its experience and wide exposure world-wide have selected the proven technologies for components, equipments and systems to augment its strength to cater to the needs of every day's changing science of Bulk Material Handling.

PRODUCT RANGE

- BELT CONVEYORS
- BUCKET ELEVATORS (BELT TYPE AND CHAIN TYPE)

- SCREW CONVEYORS
- CHAIN CONVEYORS
- APRON FEEDERS
- PIPE CONVEYORS
- SIDE WALL OR HIGH INCLINED BELT CONVEYORS

POLLUTION CONTROL DIVISION

- BAG FILTER
- ROTARY AIR VALVE / ROTARY AIR LOCK
- ROTARY FEEDER
- DUST EXTRACTION SYSTEM
- VENTILATION SYSTEM
- DUST SUPPRESSION SYSTEM

CRUSHER / SCREEN DIVISION

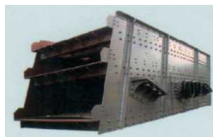
- RING GRANULATOR
- HAMMER CRUSHER
- IMPACTOR CRUSHER
- TOOTHED DOUBLE ROLL CRUSHER
- TURN-KEY MATERIAL HANDLING SYSTEM

SCREEN

- CIRCULAR / LINEAR MOTION
- FLIP FLOP SCREEN
- RESONANCE SCREEN
- HIGH FREQUENCY SCREEN
- VIBRATING FEEDERS

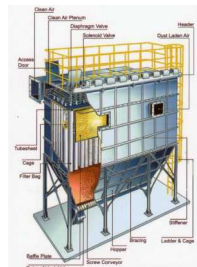
SCREENS – LINEAR MOTION / CIRCULAR MOTION

MASYC an ISO 9001-2008 certified company specialize in the field of Bulk Material Handling System, Conveyor Equipment, Crushers and Screens etc.. The Linear as well as Circular motion screens are single or multi deck structure with a substantial rigid design. The screen body consists of the two side plates with bolted transverse Supports and Screen mounts. The Screen bar is based on an open design concept. For the Linear motion screens, the drive is through direct force exciter with Cardon shaft or through Unbalanced Motors. The angle of throw which depends on the application is usually 35-60 degree and is adjusted by counterweights. Whereas for the .circular motion screens, drive is either direct or through Cardon Shaft and V-belts. Shaft with its eccentric weights runs in heavy duty self-aligning roller bearing and the throw of the Vibrating Screen is varied by adjusting the eccentric weight. Linear as well as circular motion screens are supported above the substructure by helical coil springs and t e angle can be varied to suit the application. These Screens find usage in various application such as Sand, Gravel, Minerals, Ores, Pellets, Sinter, Coal, Coke, ,Pet Coke , Lignite, Limestone, Dolomite, Chemical products, Fertilizer, Compost, refuse and refuse Slags etc. Our major customers include Ultratech, Bhushan Steel and Power, Binani Cement, Nirma, Amrit Cement, Jindal Saw and Orient Cement etc.



BAG HOUSE DUST COLLECTORS

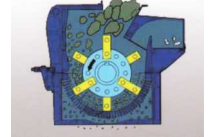
MASYC an ISO 9001-2008 certified company specialize in the field of Bulk Material Handling System, Conveyor Equipment, Crushers, Screens and Bag Filters etc. For sustainable and safer environment, "Masyc Bag House Dust Collectors" are used for various applications in the process plants such as Cement, Coal, Chemicals, Thermal Power Plant, Paper & Pulp, Mining & Minerals, Steel, Sugar & Food Industries etc. Masyc bag filters (Dust Collector) work on the principle of Pulse Jet Technology. A powerful shockwave passes through the filter cartridge during cleaning. The dust is discharged from the filter surface and the downwards flowing air allows it to fall in to the container. The pulse from the valve is distributed into the cartridge via a unique laser out zigzag slot along the length of the blow pipe. The effect of the cleaning is further enhanced by the venturi shaped outlet of the cartridge. The result of the innovative cleaning and cartridge design gives an overall increased efficiency and lower operating costs. Masyc Dust Collectors (Bag Filters) are manufactured under the latest and innovative design aspects and technology. For example, the tube sheets are always laser cut to maintain the utmost



accuracy in maintaining the perfect verticality of each bag. Normally the enclosure of the Bag Filter is fabricated in Panel formation so as to avoid excessive welding of stiffeners on the outer wall of enclosures. Each panel is laser cut and then bent on the computerized machine which ensures the perfect assembly prior to final welding. Further the Rotary Air Lock, Screw Conveyor & Chain Conveyor required for conveying the dust from the dust hopper are also manufactured in house. Our major customers include Amrit Cement, Bhushan Steel and Power, Binani Cement, Jindal Saw, Nirma Group, Ultratech Cement & Wonder Cement etc.

NON REVERSIBLE HAMMER CRUSHER

MASYC an ISO 9001-2008 certified company specialize in the field of Bulk Material Handling System, Conveyor Equipment, Crushers, Screens & Bag Filters etc. The Non Reversible Hammer Crushers are manufactured based on proven technology and in house strict quality control. Masyc Non Reversible Hammer Crusher is used for size reduction / crushing.



Material is broken first by impact between hammer and material and then by a scrubbing action (attrition) of material against breaker plate. Size reduction starts by impact, when the hammer strikes the material as it enters the crushing zone. Shattered fragments are swept down into final crushing zone for further reduction at the pinch points between the hammers and the breaker plate. Oversize material remains in the machine until it is reduced sufficiently to fit through the hammer and breaker plate opening. This crusher is available with adjustable cages, a feature that permits the user to make changes in the product size of the crushed product. The tighter t e clearance between breaker plate and hammer, the smaller will be the particle size of the crushed product. These Non Reversible Hammer Crushers are used for hard coal, lignite, limestone, gypsum and other soft and medium hard material. Masyc Non Reversible Hammer crusher have welded casing, screwed lining with high carbon steel plates and hammer path (one way) with wear resistant breaker plate which is mechanically adjustable. Dust proof spherical roller bearing are provided. The crusher is provided with tramp iron deflector and tramp iron tray so that crusher is protected from un-crushable material. Hammer heads are made of manganese steel or as per customer requirement. Our major customers include Ultratech Cement, Bhushan Steel and Power, Binani Cement, Nirma, Amrit Cement, Jindal Saw and Orient Cement etc.

TOOTHED DOUBLE ROLL CRUSHER

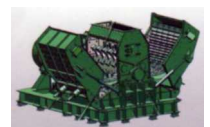
MASYC an ISO 9001-2008 certified company specialize in the field of Bulk Material Handling System, Conveyor Equipment, Crushers and Screens & Bag Filters etc. Masyc Toothed Double Roll Crushers are manufactured based on proven technology and under in- house strict quality control. Masyc Toothed



Double Roll Crusher is used for size reduction / crushing and material is crushed by high pressure between two rolls. The crushing starts as soon as material enters the crusher and falls on the toothed segment. High pressure on the circulating crushing tooth segment reduces the material into considerable sizes. Material, while passing through both the toothed double rolls gets crushed into desired size. Toothed double roll crusher produces more uniform produced than any other type of crusher. The crusher having separate drives has wide range of adjustment which makes possible to conform to tough specifications regarding sieve analysis of the product. These Roll Crushers are used for crushing the hard coal, lig ite, limestone, gypsum and other soft and medium hard material. It is of compact design, simple maintenance, high throughput, uniform material with lesser dust / fines generation. Masyc Toothed Roll Crushers have welded robust housing, roller cores in polygon shape with surface-ground supports for the tooth segment. Locking of the crushing tooth segments is by means of dovetail guide and fastening by screwed bolts. Crushing tooth segments are individually replaceable without lifting the Crusher Roll. One roll is fixed and other is movable, this helps the uncrushable material to pass through. Masyc can offer Toothed Double Roll Crusher upto a capacity of around 800 TPH and having Roller dia 1400mm. Our major customers include Ultratech Cement, Bhushan Steel and Power, Binani Cement, Nirma, Amrit Cement, Jindal Saw and Orient Cement etc.

REVERSIBLE HAMMER CRUSHER

MASYC an ISO 9001-2008 certified company specialize in the field of Bulk Material Handling System, Conveyor Equipment, Crushers and Screens etc. The Reversible Hammer Crushers are manufactured based on proven technology and under in-house strict quality control. It has the unique



design feature such as Welded Casing, Screwed Liner with High Carbon Steel Plates, Hammer heads made of chrome alloy cast steel or manganese steel depending upon the application. Rotor shaft is made out of forged steel, Hammer grinding path with Wear Resistant Plates which are Mechanically/Hydraulically adjustable and Dust Proof Spherical Roller Bearing. It crushes material in two stages i.e. initially the material is reduced by impact

between hammer and material followed by scrubbing action (attrition) against breaker plate. Masyc Reversible Hammer Mill is used for Hard Coal, Lignite, Cooking Coal, Lime Stone, Gypsum and other soft and medium hard material. These Mills are rugged in structural, design and easy to maintain, giving high throughput and low wear. The maximum reduction ratio can be as high as 12:1 depending upon the WBI of the material. Masyc can offer Reversible Hammer Crusher upto a capacity of around 700 TPH and having Rotor dia 2000 mm. Our major customers include Ultratech, Bhushan Steel and Power, Binani Cement, Nirma, Amrit Cement, Jindal Saw and Orient Cement etc.

www.masycproject.com

➤ MBH PUMPS (GUJARAT) PVT. LTD.

**MBH
PUMPS**

MBH Pumps is ISO 9001 Certified Company Since 1969 having a profound understanding of different concepts used for mine dewatering. Being one of the only manufactures from India offering submersible pumps with flow rates upto 4000 m³/hour, our designs provide pumping heads upto 210 m. Our metallurgist select the finest alloys for the pumps, which are corrosion and abrasion resistant.

A pump forms an essential part of mining infrastructure and MBH helps ensure cost effective, continuous operations which is always focused on concept of high quality and safety.

Apart from durable, user friendly and low maintenance submersible pumps, MBH has also attained mastery in Auto prime Centrifugal surface pumps, which can be a great investment for any mine owner.

- (1) MBH Pro-Prime series Auto prime pumps capable to pump upto 180 m and 3000 m³/hr with Engine capacity upto 1000 HP
- (2) Submersible Tough series and DC series Dewatering pumps capable to pump upto 210 m and flow rates upto 1000 m³/hr
- (3) Slurry pumps with glycol cooling closed loop cooling system in Hi-Chrome and Ni-hard MOC achieving 700 BHN hardness on wet ends having capacity upto 60 Mtr Head with flow rates upto 800 m³/hr.
- (4) Submersible Contractor series pumps upto 60 HP, an economical solution for handling slurries in opencast and underground mines.

Apart from these pumps MBH Pumps manufactures a variety of utility pumps with focus on Dewatering, waste water and Raw water applications.

PRO-PRIME SERIES - AUTO PRIME PUMPS

- Head : upto 200 meters with single stage impeller
- Flow : upto 2500 m³/h
- Solids handling : upto 125 mm
- Mechanical seal fitted pumps
- Diesel Or Electric Drive

Application: • Municipal • Mining and Quarrying • Industrial • Construction and Tunnelling • Oil & Gas • Marine



HD SERIES - TOUGH DEWATERING PUMPS

- Head : upto 210 meters
- Flow: upto 550 m³/hr
- HP: 120
- Solid Size: upto 15 mm
- Moc: cast Iron
- Frequency: 50 / 60 Hz



Applications: • Mining Source Water • Tunneling Face & Stage Dewatering • Open Pit - Underground Mine Dewatering

DCAL SERIES LIGHT WEIGHT ALUMINUM DEWATERING PUMPS

- Head : upto 100 meters
- Flow: up to 1000 m³/hr.
- Hp: 1 to 85
- Solid Size : upto 15 mm
- Moc : Aluminium with Stainless Steel
- Frequency : 50 / 60 Hz



Applications: • Cooling Tower • Jack Well Installation • Removing Dirty Water • Dewatering Pits • Open Cast Mining • Barge Mounted Dewatering

NI HARD - SLURRY PUMPS CLOSED-LOOP COOLING SYSTEM WITH GLYCOL COOLING

- Head : up to 60 meters
- Flow : upto 800 m³/hour
- HP : upto 85
- Solid content by weight : 65%
- Particle Size : 40 mm
- Moc : Ni-Hard Impeller & Volute
- Specific gravity : 2.8 kg/l
- Frequency : 50 / 60 Hz



Applications: • Fly Ash, Dredging & Thick Mud • Coke Pits • Sand and Gravels Excavation • Silt Removal • Ocean Sand Mining • Mill Scale • Coal Washery

CP SERIES - SUBMERSIBLE CONTRACTOR PUMPS

- Head : upto 50 m head
- Flow : 450 m³/hour
- HP : upto 60
- Particle Size : 40 mm
- Moc : 27% High Chrome impeller, 2% Ni-Ci Volute
- Frequency : 50 / 60 Hz



Applications: • Construction Slurry • Dewatering

NS SERIES PUMPS - SUBMERSIBLE SEWAGE PUMPS

- Head : upto 65 m head
- Flow : 4000 m³/hour
- HP: 0.5 to 250 Hp
- Particle Size : upto 150 mm
- Moc : Cast Iron / Duplex Stainless steel
- Frequency : 50 / 60 Hz



Applications: • Handling of Industrial Abrasive Slurry • Untreated Sewage Containing Solid Particles • ETP • Municipal Sewage Plant

www.mbhumps.com

➤ MINCEPTION



Minception

Vimson: Shivanand Salgaocar group is an Indian conglomerate with its origins in Goa over seven decades ago. With successful business ventures in mining, trading, finance, real estate, healthcare and sports, Vimson has worked relentlessly towards the betterment of the host community in which it operates and promoting environmentally sustainable practices. Committed to advancement, innovation and achieving excellence in every field, Vimson is rooted in values and driven by fervor.

With longstanding legacy backed by strategic partnerships, VIMSON has formed a unique consulting platform Minception, which through multi-disciplinary consultation services transcending geographies and commodities, provides integrated and practically implementable solutions to exploration, mining and mineral companies in optimizing their growth.

Mining projects of today need an experienced knowledge partner equipped to tackle the complexities of the present landscape. Minception, built on a legacy-rich foundation, is a team of global experts carry collective operating and technical experience in exploration, cartography, GIS, mining, mineral processing, plant engineering, financial modelling, project evaluation & management, open innovation, value engineering, multi-modal logistics, and mineral sales & trading.

Vimson has partnered with Newlab, a US based multi-disciplinary technology center, to create Prospect Mining Studio, a first-of-its-kind platform for applied R&D in mining value chain. Prospect explores new possibilities across the metals and mining value chain by bringing together startups, entrepreneurs, mining industry experts, venture partners, and leading academics from across the globe to define challenges, prototype rapidly, and implement pilots.

GEOSPATIAL SERVICES

We reinforce mine planning activities with accurate geospatial data obtained using precision-boosting survey tools and software. Our site-specific survey

schemes use hyper visualisation techniques that deliver accurately, every time.

- Topographic survey of Greenfield & Brownfield sites
- 3D terrain model generation
- Cut & fill volume survey
- AI based assessment of survey data integrated with exploration data

EXPLORATION

A quintessential part of the mining process is the exploration of potential mineral deposit sites. We use advanced exploration technologies to design and implement tailored strategies for each project.

- Exploration through Mapping, Geochemical Sampling, Drilling & more
- Airborne and ground geophysical prospecting
- Remote sensing data interpretation

MINERAL PROCESSING

Our expert metallurgists and engineers follow updated, scientifically backed methods to help design and implement sustainable mineral processing operations with optimum returns.

- Metallurgical testing & development
- Construction & commissioning of ore processing plants
- Process engineering of plant designs & flow sheets

MINE ENGINEERING

Running a smooth mining operation requires a wealth of experience. Right from resource estimation to mine closure, we offer solutions for optimum production scheduling and effective unit operations.

- End-to-end assistance from planning to operations
- Process mapping to improve operations

MINE REMEDIATION

Mine closure and site rehabilitation are two of the most challenging aspects of mining operations. Our experienced crew is equipped to factor in these challenges and guide in integrating the remediation approach into the mine life cycle.

- Sustainable remediation approaches
- Overseeing reclamation process

CIRCULAR MINING

Tailings and waste rock dumps can pose ecological and social challenges for mining operations. We offer customised solutions to manage and repurpose or reprocess them to mitigate potential hazards, along with reducing the carbon footprint of the operations.

- Revenue-generation using mineral waste
- Sustainable solutions customised to the project's TRL

PROJECT EVALUATION

Our team of multidisciplinary specialists can help mitigate risks and maximise the value of exploration and mining through a holistic, integrated approach.

- Feasibility studies
- Due diligence reviews
- Economic evaluations & risk assessment

LOGISTICS

End-to-end logistic solutions are imperative for the smooth functioning of every mining operation. Our expert team is adept at multimodal logistics including road transportation, inland waterways, transshipping, and ocean-going vessels.

- Forward pricing contracts
- Flexible post-fixtured operation

TRADING

With decades of diverse global trading expertise, we offer support to mining companies for exporting and trading in new markets. Through in-depth research, market monitoring, and analysis of industry trends, we assure maximised margins for clients.

- Strict KYC & documentation
- Financial risk mitigation

MINERAL ASSET VALUATION

Strategic investments are key to scale up volumes from diverse mineral assets and multiple commodities. Our expert evaluation highlights the risks and opportunities of every potential target to help investors arrive at an informed decision.

- Analysis of resource potential, geotechnics & environment

- Assessment of commodity demand-supply & price dynamics

INNOVATIVE TECHNOLOGIES

Our extensive network offers investors access to select innovative early-stage tech investment opportunities in the natural resources sector.

- Exclusive access to emerging technologies
- Product market fit analysis

TECHNOLOGY ROADMAP

Rapid developments in technological innovation have significantly impacted the mining industry in recent years. To stay competitive and alleviate risks, we offer mining companies technology-led solutions that work.

- Agile, tech-empowered mining process
- Efficient, cost-effective operations that
- prioritise environment & worker safety

OPEN INNOVATION

The new challenges of the mining industry require advanced solutions. Our partnership with tech entrepreneurs, emerging startups and prominent researchers of frontier technologies enables us to provide innovative and sustainable solutions tailored to a project's needs.

- Access to our ecosystem partners
- Pilotable solutions
- Industry-first technologies

www.minception.com

» MINOCULAR (BLUEBANYAN TECHNOLOGIES PVT. LTD.)

Minocular is a technology-based solution provider for the mining industry, offering a suite of applications designed to improve the efficiency of mining processes. Their platform is customized to meet the specific requirements of each mine, delivering automated processes and tech-enabled solutions across all aspects of mining, from digital mapping to fleet management, quality monitoring, safety, compliances, and more. Minocular's advanced technology platforms and centralized dashboard provide real-time data and analytics, empowering mining companies to make informed decisions and stay future-ready.

Minocular's solutions have earned them a reputation as a trusted partner for leading mining companies, including Dalmia, ACC, Nuvoco, SAIL, and many others. Their innovative approach to mining technology has helped these clients improve productivity, decrease fuel consumption, and achieve better management and monitoring of mining operations.

Minocular is a suite of technology-based solutions for the mining industry that improves the efficiency of the entire mining process. It includes digital mapping, drilling and blasting automation, fleet management, quality monitoring, safety compliance, and more. Backed by the latest technology platforms, Minocular delivers a complete mine monitoring and management platform. Clients such as Dalmia, ACC, Nuvoco, and SAIL have benefited from Minocular's tailor-made solutions, leading to decreased fuel consumption, increased productivity, and better management of mining areas.

Minocular's Drone Survey solution is designed to conduct surveys of mining areas while adhering to the Mineral Conservation and Development Rules (MCDR) regulations. It involves using drones to capture high-resolution aerial images of mining sites, which are then processed to generate accurate 3D models and maps. This helps mining companies to plan and execute their operations efficiently, monitor progress, and comply with regulatory requirements.

Mine compliance as per 12TH Safety Conference recommendations.

www.minocular.com

➤ NATIONAL ENGINEERING INDUSTRIES LTD. (NBC BEARINGS)

Founded in 1946, National Engineering Industries Ltd (NEI), a part of the US\$ 2.8 bn CK Birla group and manufacturer of NBC brand of bearings. Enabling sustainability by making movement more efficient, NEI is India's largest manufacturer and exporter of bearings with production of 200 Mn bearings annually in over 2300+ variants for application across automotive, railways, aerospace and industrial segments to serve customers in more than 30 countries. It also serves the Indian aftermarket through a countrywide network of over 550 authorized stockists and thousands of retailers.



CK BIRLA GROUP

Headquartered in Jaipur, India NEI is the only bearings manufacturer in the world to win the prestigious Deming Grand Prize (2015). With an employee strength of over 2,800 and five manufacturing plants in Jaipur, Newai (Rajasthan), Manesar (Haryana) and Vadodara (Gujarat), NEI is equipped with global manufacturing and process technology and one of the best R&D centres in India. Apart from being technologically advanced, the company practices methods of sustainability by using alternate sources of energy and increasing the efficiency of the manufacturing process by leveraging on the power of digitisation. NBC Bearings is committed to be carbon neutral by 2039.

In 2020, NBC also acquired Kinex bearings in Europe to enhance and diversify to provide best-in-class products to its existing and potential customers. In 2022, NBC opened its Global Technology Centre in Germany to support its global customers and innovation.

DOUBLE ROW CYLINDRICAL ROLLER BEARINGS

- Bearing solution for Pallet Car(Coke Oven and Sinter Plant)

DOUBLE ROW TAPERED ROLLER BEARINGS

- Bearing solution for Pallet Car(Coke Oven and Sinter Plant)

SPHERICAL ROLLER BEARING

- Bearing solution for Converters, Roll neck Bearings, Roller Tables, Continuous Casters and Gearboxes

FOUR ROW TAPERED ROLLER BEARING

- Roll Neck Bearings

FOUR ROW CYLINDRICAL ROLLER BEARING

- Roll Neck Bearings

INSULATED BEARING

- Bearing solution for Electric Motor Application

CONDITION BASED MONITORING

- NBC Provides intelligent solutions for Condition Monitoring in order to improve the reliability of assets.
- CBM service helps industries maintain their machinery failure-free



www.nbcbearings.com

➤ NETZSCH PUMPS & SYSTEMS

NETZSCH

Proven Excellence.

NETZSCH Pumps & Systems India is the leading pump manufacturer and is the subsidiary of Netzsch Pumps and Systems Germany. We, design, manufacture and service NEMO Progressing Cavity Pumps, TORNADO Rotary Lobe Pumps, NOTOS Multi Screw Pumps, PERIPRO Peristaltic Hose Pumps and Grinders. We are serving the industry globally for over 70 years. We operate in about 40 countries globally directly and with our partners.

We have satisfied clients from across different industry segments demanding high standards of services for us and our products. Our customers choose us for, a reliable product that offers solutions to the challenges they face for trouble-free operations of their plants. This will secure and maintain production with long-term cost efficiency.

NEMO® B.Max Mixing Pump

Solution for mixing and conveying in biogas technology and environmental technology. B.Max® mixing pump feeds the fermenter with a mix of dry and liquid substrates.



TORNADO® ROTARY LOBE PUMPS

The main advantage of Rotary Lobe Pumps is the compact design, high power and maximum operational reliability.

Advantages:

- Great suction capacity - up to 8mWC
- Highly resistant to dry running
- Direction of rotation and of conveyance reversible
- Can be installed in any position
- Quiet, low-noise running
- Low life cycle costs
- Service without pump removal



NOTOS® MULTI SCREW PUMP

In mining you need equipment that is well prepared for working with different types of rock and that work tirelessly. To ensure the required reliability of ball mills and sag mills working in this harsh conditions reliable lubrication is essential. NOTOS® multi screw pumps provide the continuous supply of lubricant and fulfil two essential tasks: supply to the injection unit and the actual lubrication oil circulation.



PERIPRO PERISTALTIC PUMP

PERIPRO peristaltic pumps are particularly suitable for aggressive and abrasive media with a solids content of up to 70 percent. The group of peristaltic pumps offer you an extremely high suction capacity with minimal maintenance at the same time.

Your benefits:

- Excellent resistance to abrasion in the pumping of products with high solid content
- Ease of maintenance and operation for continuous work applications (24 h/7 days) due to the design and robustness of the equipment
- Low shear pumping for dosing of polymers and flocculants
- Maximum process efficiency
- Pump with no valves or mechanical seals
- Indefinite dry running
- Reversible pump



www.netzsch.com

➤ ORBINOX INDIA PVT. LTD.



ORBINOX
VALVE SOLUTIONS IN MORE THAN 70 COUNTRIES

We are a subsidiary of Orbinox SA, Spain engaged in the manufacture of Knife gate valves. With more than 45 years of experience in the industrial market worldwide, we have become a well known knife gate valve manufacturer responding to new industrial developments.

Our 35,000 Sq ft factory located in Coimbatore produces Knife gate valves from the best quality raw material. Design and engineering are done by our R&D wing located in Spain. Our product range offers you many model soft Knife Gate Valves designed for various applications. These different models are available in a wide range of Material and Sizes.

Orbinox India produces more than 4000 knife gate valves every month, 60% of which are exported to European and American markets. 40% of the production are presently sold in India. We have kept a spare capacity of around 1000 valves per month considering our growth in domestic market share.

Orbinox offers a wide range of knife gate valves for handling diverse applications in the following industries.

- Power
- Paper and Pulp
- Steel
- Cement
- Mining
- Petrochemicals
- Foods and Beverages etc.



We are an approved supplier of knife gate valves to major EPC's & Power producers like BHEL, NTPC, GE Power, Macawber, Thermax, KPCL, GSECL etc.

Our mission is to meet the needs of our customers and to continue improving our products and services through teamwork, training and performance. The company's growth is balanced on years of experience from research, design, production and marketing with a firm determination to maintain recognition of its quality and service on the market and to remain competitive in the knife gate valve industry.



www.orbinox.com

➤ ORIONE HYDRAULICS PVT. LTD.



Orione Hydraulics Pvt Ltd established in 1992 and has grown over the past 25 years providing Integrated Engineering Solutions in Oil Hydraulics to customers of domestic and exports markets.

Our team of experienced and technically qualified personnel are highly customer oriented and have established ourselves as solutions providers with innovative ideas to ensure a high degree of customer satisfaction and retention

Our state of art manufacturing facilities include right blend of conventional and modern (CNC) machines, assembly stations and test rigs to meet international standards and is housed in a 18000 Sq Mts. facility with much more space for further expansion.

Orione products are proven, accepted and widely used in Mining , Construction & Infrastructure Companies, Process Plants , Power , Petro- chemicals, Shipyards, Railways, Heavy Engineering, , OEM, Aerospace, Research and Development .

We manufacture a varied range of Hydraulic Products which include Hydraulic Jacks for various application and customizable to customers Requirement.

- Hydraulic Cylinders of various types and sizes.
- Lock Bolt tools & Equipments for Mining & Railway sectors
- OEM Tools like Pin/Bush Removable

HYDRAULIC POWER PACK

- Designed robust with good aesthetics & are easy to maintain
- Efficient, leak-free valve blocks, hydraulic elements and electrical of reputed make to ensure trouble free operation
- Options: Hand lever / Solenoid
- Capacity 2 - 200 HP / Flow rate up to 400 LPM
- Pressure capacity upto 700 Bar



DOUBLE ACTING TELESCOPIC HYDRAULIC CYLINDER

- Orione Cylinders are precision engineered in design & construction for reliability and trouble free performance

- Cylinder tube - St 52 /ASTM A103 machined & honed
- Piston rod - C45 machined, ground & hard chrome plated to 50 microns layer thickness
- Gland bush of Phosphor Bronze to IS:28 ingot grade
- Seals: Polyurethane / glyd rings Double Acting Telescopic Cylinders 3 Stage with Both End Clevis Pressure 100 - 400 bar



HYDRAULIC FORMING PRESS

Precision machined to maintain alignment of the moving frames under operating loads

- Based on the type of press & application, guiding arrangements are provided
- Hydraulic and electrical elements of reputed make to ensure trouble free operation & productivity



This Picture is of a 800 Ton Forming Press with Hardened wear Plates

HYDRAULIC JACKS

- General application jacks Gland Nut designed to withstand dead end load Ideally suited for application requiring sustained load holding in Construction projects & heavy industries
- The Picture shows a Hydraulic Jack with Threaded Ram with safety Lock Nut Capacity 10 - 400 ton | Stroke 150 mm | Max. Working Pressure 700 bar



TRACK PIN/BUSH REMOVING TOOL

- Removal & Installation of Track Link Pins & Bushes
- Maintenance of track chains in workshops & on sites
- Suitable for all brands of Earth moving equipment
- Hand pump / Power Pack Unit operated
- Sprocket puller optional for OTPP 100-350
- Guard for safe operation
- Case for safe storage
- Choice of toolings to suit range of track pins
- Frame Construction: Upto 100 ton - Casting 200 ton - Fabricated



HYDRAULIC LOCK BOLT TOOL

Hydraulic Lock Bolt Tool for Mining application, Lock Bolting Technique is Preferred for Vibratory Parts, Orione Make Lock Bolt Tools are manufactured from sizes of 3/8" to 1-3/8" along with suitable Hydraulic Power Pack with Max. Working Pressure of 700 Bar.



www.orionehydraulics.com

➤ P & G GEOHAZARD SOLUTIONS PVT. LTD.

WHO WE ARE?

Rapid infrastructure growth and demand of smooth connectivity in the mountainous region is leading to non-scientific cutting of slopes which is resulting in continuous landslides, rockfalls, debris flow and avalanches.



P&G Geohazard Solutions in collaboration with its foreign partners (Australia, Italy, Spain & Switzerland) is involved in providing cutting edge protection solutions against natural hazards for highways, tunnels, defence establishments, hydro power plants etc. The founder has the privilege of introducing the concept of green slope and green tunnel portal which significantly reduces the carbon footprint and cost of construction of these infrastructures. P&G Geohazard Solutions has in-house capabilities of survey, design, supply and installation of these protection systems according to EOTA (European Organization of Technical Approval) guidelines.

OUR STORY

- P&G Geohazard Solutions Pvt. Ltd. Is newly founded company based out of Gurgaon, NCR. The company aims to provide cutting edge geohazard solutions such as slope failures, landslides, rockfall, debris flow, avalanche etc.

- P&G Geohazard Solutions have vast experience in disaster mitigation solutions and Lidar Survey.

Some of the landmark projects in disaster mitigations which our director has executed successfully are as follows:

- Design, supply & execution of Slope stabilization system for approach road to North portal of Nashri-Chanani Tunnel, J&K.
- Protection of track road to Shri Mata Vaishno Devi Shrine at Katra, J&K.
- Design & supply of rockfall protection & slope stabilization system for western & ventilation portal at Z-Morh Tunnel, J&K.
- Design, supply & execution of rockfall protection & slope stabilization system for Kiratpur-NerChowk Expressway, Himachal Pradesh.
- Design, supply & execution of rockfall protection system for Khed-Sinnar Expressway, Maharashtra.

Flexible Rockfall Barrier P&G Geohazard is able to design, supply & install ETA (Euro pean Technical Approval) approved flexible rockfall barriers from 100 kJ to 5000 KJ

Flexible Slope Stabilization System P&G Geo-hazard has the ability of design, supply and execution of ETA approved high strength low deformation slope stabilization system.

Rockfall Protection System P&G Geohazard designs and supplies ETA approved active and passive rockfall protection systems made out of high tensile steel wires.

With more than ten years of experience in the field of natural hazard mitigation P&G Geohazard has the ability to offer the most appropriate solutions without product constraints

Slope Protection – Anchored Wall for help to Protect Global Failure of Road.

www.pggeohazards.com



➤ PERFECT ENGINEERING COMPONENTS PVT. LTD.

Since its establishment in 2005, Perfect Engineering Components (P) Ltd. has become one of India's leading manufacturers of conveyor rollers/idlers, pulleys, fabricated pulleys, and other components for the bulk handling industry. Today, the company specializes in providing high-quality and long-lasting premium belt conveyor components that are designed to meet the demanding needs of all major bulk handling applications, such as mining, cement, steel, quarries, power plant installations, and more.

Perfect Engineering Components (P) Ltd. has developed a reputation as one of the most trusted brands in the industry, thanks to its close partnership with customers, OEMs, engineering companies, and end-users. The company's traditional values and openness to innovation have been critical to its long-term success.

The company's research departments are equipped with state-of-the-art test facilities where products are thoroughly examined under extreme conditions to ensure they meet the highest standards. Perfect Engineering Components (P) Ltd. continuously works on improving its product range, which is considered among the best in the market.

Perfect Engineering Components (P) Ltd.'s products improve the performance, safety, and reliability of systems, equipment, and machines within the bulk handling industry. Whatever your materials handling problem may be, the company has the expertise, experience, and products to meet your needs.

A heavy duty conveyor roller is a robust component used in conveyor systems, capable of supporting heavy loads and withstanding harsh environments. These rollers are commonly used in industries such as mining, construction, and manufacturing, where heavy materials are transported over long distances. Heavy duty conveyor rollers are made of durable materials such as steel, and are designed



with sealed-for-life bearings that require minimal maintenance. These rollers can handle high loads and are available in various diameters and lengths to fit different conveyor belt widths. Their rugged construction and ability to withstand extreme conditions make them ideal for heavy-duty applications.

A belt cleaning roller is an essential component of conveyor systems that is used to remove unwanted material, such as dirt, dust, and debris, from conveyor belts. It is typically positioned at the tail end of the conveyor belt and rotates to effectively scrape off any material that may have adhered to the belt during its operation. Belt cleaning rollers come in a variety of designs, including rotary brush, scraper, and comb styles, each with unique features and benefits. Properly functioning belt cleaning rollers are critical for maintaining conveyor belt efficiency, reducing maintenance costs, and increasing overall productivity in industries such as mining, construction, and agriculture.



A heavy duty impact roller is a specialized type of conveyor roller designed to handle the impact and shock of heavy loads dropped onto conveyor belts. They are commonly used in industries such as mining, quarrying, and construction, where heavy materials are transported over long distances. Heavy duty impact rollers are made of durable materials such as steel and rubber, and are designed with shock-absorbing features to protect the conveyor belt from damage. They are typically positioned at the loading point of the conveyor system and can handle impact loads of up to several tonnes. Their robust construction and ability to handle heavy loads make them ideal for high-demand applications.



A conveyor pulley is a critical component of conveyor systems used in the mining industry. These pulleys are used to transmit power from the drive unit to the conveyor belt, providing the necessary tension for the system to operate effectively. Conveyor pulleys are made of durable materials such as steel and are designed to withstand the high stresses and harsh conditions found in mining operations. They come in various sizes and types, including head pulleys, tail pulleys, and snub pulleys, each with unique features and benefits. Properly functioning conveyor pulleys are essential for maintaining conveyor belt performance, reducing downtime, and increasing productivity in the mining industry.



www.pecrollers.com

➤ PRABHU INDUSTRIAL UDYOG PVT. LTD.

The Company, Prabhu Industrial Udyog Pvt Ltd was incorporated in 1986 under Companies Act, 1956 having its Reg. Office & Factory at 1, Tarpan Ghat Road, Kolkata - 700 053.



The manufacturing activities started with Flameproof & Non Flameproof low Tension & high-tension Switchgear upto 6.6KV whose applications are mainly in Coal Mines and Industries.



The present Directors are:

- MR. RAMJEELAL AGARWALA (MANAGING DIRECTOR)
- MR. ANAND KUMAR AGARWALA (DIRECTOR)
- MR. AYUSH AGARWALA (DIRECTOR)

MISSION

To be the leader in the industry in which we compete.

VISION

To introduce new products regularly, maintain quality products and providing services to customer till they are satisfied.

OBJECT

Development & manufacturing activities of NON- FLAME PROOF AND FLAME PROOF items namely:

1. NON- FLAME PROOF & FLAME PROOF STARTERS (HT AND LT)
2. NON-FLAME PROOF & FLAME PROOF GATE END BOX

3. FLAME PROOF DRILL PANEL
4. FLAME PROOF LIGHTING TRANSFORMER
5. NON FLAME PROOF & FLAMEPROOF AIR CIRCUIT BREAKER PANELS
6. FLP/NFLP Tran switch Units up to 6.6KV, 1000KVA , Unitised Sub Station up to 12KV.
7. FLP/NFLP VCB Panels up to 12KV, 1250A
8. Vacuum Contactor up to 7.2KV, 400A
9. NFLP VFD Panels, LT Switch Board Panel, LT Power Distribution Board Panel Etc.

All FLAME PROOF items are tested by Central Mining Research Institute, Dhanbad, DGMS approved and BIS marked.

Our major Customers are Coal India & its Subsidiaries, Public Sector Undertaking, Private Sector Unit and also OEM. We supply the materials directly to the followings:-

- BHARAT COOKING COAL LTD, DHANBAD
- CENTRAL COALFIELDS LTD, RANCHI
- EASTERN COALFIELD LTD, ASANSOL
- MAHANADI COALFIELDS LTD, ORISSA
- NORTH EASTERN COALFIELDS LIMITED, GUWAHATI
- SOUTH EASTERN COALFIELDS LIMITED
- SINGARENI COLLIERIES CO LTD, KOTHAGUDEM
- WESTERN COALFIELDS LIMITED, NAGPUR

With changes in technology in the nature of the business, one thing that is constant since inception is the quality of the materials and service to our customers which makes the company unique from its competitors.

A wholly owned family company, which has emerged in last 30 yrs as a significant player in the electrical/mining industry.

The FLP Transwitch Unit is a HT Switchgear product designed for safety and distribution of power to machines for varied applications in underground mining. The FLP Transwitch unit is designed for Voltage up to 6.6KV on the Primary side and upto 1140V on the secondary side.



The FLP Vacuum Circuit Breaker Panel has been developed for use in GAS group I. The purpose of this breaker panel is for breaking high current at high system voltage. The panel is fitted with various protections for safety of the machines.



The purpose of this breaker panel is for breaking high current at high system voltage. The panel is fitted with various protections for safety of the machines.



The FLP ACB fitted with MCCB has been developed for use in Gas Group I. The ACB panel is so designed to offer high breaking capacity to protect low voltage application in high power circuits. This can be use in underground mines as Main Switch to distribute the 550V supply to different machineries.



The purpose of this GEB is for control and protection of underground machines like SDL, LHD, Shuttle cars. The outgoing of the GEB is through a Plug & Socket.



www.prabhuelectricals.in

➤ REACTORE

REACTORE

Reactore is a rapidly growing, innovative software product company providing bespoke software digitalisation solutions for mining and associated industries across the globe, since 2013. Reactore's ISO 9001:2015 certified solutions offer real-time tracking, management, and optimisation of all processes, to improve productivity, resource utilisation, output and the like. Reactore innovation has been designed with miners to guarantee adaptable, simple-to-use software for improvement of tasks, decrease in expenses and mitigation of risks. Reactore's digitalisation solution, MineOne® has been implemented at multiple mining sites since 2016 and is presently being sold and supported by the Reactore Group in Southern Africa, India and Australia as well as by a

global partner affiliate network.

Utilising the success of the MineOne®, Reactore recently rolled out the low-code IIoT studio, Devum®, to assist organisations in creating versatile, integrated applications across any business domain. Reactore is consistently creating and upgrading its solutions and offers various professional services to assist enterprises to digitally transform their operations. Clients can benefit from these solutions and stay competitive in today's digital economy. Following are some of the key services that we offer:

- Enterprise App Building
- Digitalisation Roadmaps
- 3D Digital Twins
- System Integrations
- Solution Design

MINEONE® | www.Reactore.com/MineOne

With mining research at its core, MineOne® is a modular pit-to-port enterprise-grade mining software digitalisation solution to improve productivity and safety. Reactore has a near decade's experience in transforming mines across the world. MineOne® has helped businesses improve production by ~15%, efficiency by ~18%, data accuracy by ~99.9%, legal compliance by ~30%; reduced downtime by ~27%; and increased profits, on average, by ~16%.



DEVUM® | www.Devum.com

Devum® empowers non-software developers to rapidly build enterprise-grade software solutions on their own. Devum is a one-stop low-code platform that empowers businesses to build, deploy and manage their own enterprise-grade web and mobile applications through a graphical user interface (GUI), but with all the power and flexibility you would expect from a professionally developed, or off the shelf business application. Integrated software solutions are often the glue that bind a digital transformation initiative together. Devum® provides all the blocks for a bespoke digital transformation solution to generate tangible ROI.



www.reactore.com

➤ ROCSCIENCE INC

rocscience

Founded in 1996, Rocscience is a global leader in developing innovative 2D & 3D software for civil, mining, and geotechnical engineers. Since inception, Rocscience has been a company focused on bridging the gaps in analysis, design, and visualization tools for the mining and civil engineering industries. Born as a spin-off company from the University of Toronto, our software development combines innovation and research, allowing us to develop cutting-edge software solutions that work for you today and is evolving constantly to meet your needs for tomorrow.

Our motto "Geotechnical tools, inspired by you" means we are continuously listening to your specific geotechnical challenges so that we can build tools to help you overcome them. Whether you're focused on slope stability, excavation design, or foundation analysis, our comprehensive suite of 18 programs means that no matter what your needs are, we have a software solution for your projects.

Slide2

2D Limit Equilibrium Analysis for Slopes.

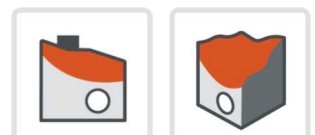


Slide3

3D Limit Equilibrium Analysis for Slopes.

RS2

2D Finite Element Analysis.



RS3

3D Finite Element Analysis.

Settle3

3D Soil Settlement & Consolidation Analysis.

RSPile

3D Pile Analysis.

EX3

3D Stress Analysis for Underground Excavations.

RocFall2

2D Statistical Analysis of Slopes at Risk of Rockfalls.

RocFall3

3D Statistical Analysis of Slopes at Risk of Rockfalls

Dips

Graphical and Statistical Analysis of Orientation Data.

SWedge

Surface Wedge Stability Analysis.

UnWedge

Underground Wedge Stability Analysis

CPillar

Crown Pillar Stability Analysis.

RSDData

Strength & Stress Analysis of Rock and Soil Materials.

RocPlane

Planar Wedge Analysis for Slopes.

RocTopple

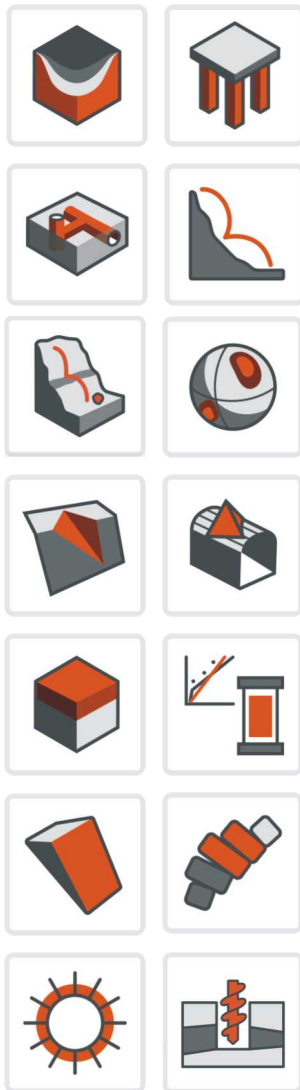
Toppling Stability Analysis for Slopes.

RocSupport

Support Estimation using Ground Reaction Curves.

RSLog

Web-based Borehole Log Management.



www.rocscience.com

» ROYALEO FUTURISTICS

Royaleo Futuristics is an organization without boundaries - growing, and challenging. From the vehicles running in Mining sites, Manufacturing units, Warehouses, construction sites to machines operating in ports, we strive to deliver unparalleled quality through our customized value added, Safer and innovative solutions. Continual improvement in our product and service portfolio along with zeal to cater value added products to customers has been our motto. This helps us put out foot mark across industrial domains.

India is a growing economy and will scale vertically. This economy has a lot to offer for the industry by their investment in various sectors such as Roads, Ports, Mining, Agriculture, Metro, Real estate, Power, Railways, Manufacturing Hubs, etc. Government has announced their plans for investing more in infrastructure projects. We see good investments in various industries and further positive business for the stationary and mobile equipment industry. Quality customer service is the prime motto of our company. Being a client centric company, we have channelized all our resources to offer utmost level of satisfaction to the clients through our qualitative and timely service. With these kinds of business policies, we have earned a reputation of being a leading supplier of industrial safety equipment in the market. With constant efforts on improvement in terms of policies, products and services, we let our customers speak for our performance. A long-lasting business relationship with clients has been a driving force for our performance.



PROXIMITY WARNING SYSTEM (COLLISION AVOIDANCE SYSTEM)

Commercial vehicles in mining, construction, and manufacturing area are big or even large Vehicle Mobility Large vehicles with large blind zone, especially when the drivers' seats are in high level. In harsh environment, such as thick dust or darkness, it's more dangerous.



Proximity Warning System (Collision Avoidance System) is a safety system designed to warn, alert, or assist drivers to avoid imminent collisions and reduce the risk of incidents

REAR VIEW CAMERA SYSTEM

Vehicle reversing cameras not only save money by reducing minor accidents, they also save lives by giving drivers increased visibility behind their vehicles. Reverse cameras can help you park more quickly and safely.



DRIVER FATIGUE MONITORING SYSTEM

In a single day, 150,000 drivers fall asleep on the road, and at least one crash occurs due to driver fatigue every 15 seconds. Driver fatigue system is a safety technology that can prevent accidents that are caused by drivers who fell asleep while driving. Driver fatigue will immediately send an alarm signal to remind the driver



INTEGRATED CAMERA SYSTEM

Integrated Camera System is New-age Technology which helps to alert the operator about any human and object behind the vehicle in blind zone. It uses AHD camera and display system with proximity warning sensor jointly



KILL ZONE RED LIGHT

Mining Vehicle are heavy and have a large turning radius and can run over the feet of people who are standing too close to the machine. Having a projected light on the floor will remind them to stand outside the perimeter and avoid getting crushed by machine in operation.



www.royaleo.in

» SACHIN INDUSTRIES LTD.



Sachin industries limited are an established and a reputed name amongst the polypropylene filter press manufacturing company in India as well as abroad. The company was established in 1982 in Ahmedabad, Gujarat and now become a one of the global leaders in solid - liquid filtration & the separation industry.

SACHIN INDUSTRIES LTD.
Mfr. of Glass Lined Reactors & Filter Presses

Our products - Filter press, Filter plates & accessories are being manufactured with world-wide updated technology to give outstanding performance & desired result in filtration system. With an emphasis on quality, we also possess ISO 9001:2015 Lloyd's Registered Quality Assurance (LRQA) company certificate.

We manufactured fully automatic SCADA based Auto cloth washing type filter presses, Membrane filter presses, Hydraulic filter presses, Shifter & shaker type filter presses adding to that we manufacture Recessed plates, Membrane Plates, CGR (Caulked & Gasketed Recess plate), Metallic Plates, Plate & frame type plates size ranges from 305mm x 305mm to 2000mm x 2000mm.

All these are manufactured by us in-house.

AUTO CLOTH CLEANING MECHANISM:

- Auto cloth cleaning mechanism is the advance technology to wash the cloth in place, which helps in productivity by reducing cleaning time as well as increase the life cycle of the cloth.
- The entire system along with pump, motor, valve, tank & associated accessories are supplied with



equipment to provide a plug & play kind of solution.

PLC BASED AUTO SYSTEM

- In recent years, mode of operating the filter presses has changed to automated systems.
- We provide fully automatic filter presses wherein all the sub-components are interlocked & pre-programmed in PLC and controlled through PLC operated system via MHI or SCADA work station. This helps in ensuring the cycle time as there is no dependency on operators.



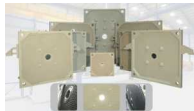
AUTO PLATE SHIFTING TYPE SEMI-AUTOMATIC FILTER PRESS

In this type of filter presses, shifting of the plates are done automatically by shifter mechanism.



FILTER PLATES

- Filter plate is the essential element of the filter press as this is the where filter cloth is fixed and real filtration process happens. We manufacture all the filter plates in-house with ICM technology from virgin polypropylene HP/CP compositions.
- All the plates are suitable for high pressure (up to 25 bar) operation.
- Size ranges from 305mm x 305mm to 2000mm x 2000mm



MEMBRANE PLATE

Membrane plate look like conventional plate but it has a diaphragm which flexes & compress the cake formed inside the chamber.



CGR – CAULKED & GASKETED RECESSED PLATE

CGR plate made of polypropylene has a special piped surface to protect the filter cloth. These types of plates are mainly used in application of leak-free operation.



www.sachininternational.com

» SAKAR RUB-TECH PVT. LTD.



Greetings from Sakar Rub-Tech Pvt. Ltd., India's leading Wear Resistant Rubber Liner manufacturer in India. Established in 2016, with a very humble start but with a vision to grow into one of the most trusted and reliable Wear Resistant Rubber Lining manufacturing companies in the country. We have grown from strength to strength since then and today have our own comprehensive designing and manufacturing facilities.

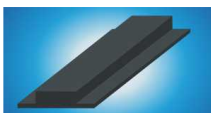
SAKAR Rub-Tech provides an excellent grinding solution through the rubber lining of Ball Mill/Rod Mill/Scrubber all over Ceramic, Mineral, and Steel plants. SAKAR Rub-Tech takes care of Ball Mill with wear & tear and abrasion-resistant rubber products. We strictly follow our principle of "Always deal with a quality product only". Quality remains our top priority and equal attention is given even to the smallest of the equipment leaving our factory.

Customization is our forte, which has led the way for us to service almost all industrial sectors like Power, Steel, Mining, Ceramic, and other Engineering fields.

The products which we supply to our clients are,

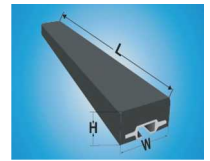
1. Wear Resistant Rubber Liners Ball/Rod Mill.
2. Wear Resistant Chute Liners
3. Rubber Bellows and other industrial rubber products

SAKAR's Rubber Shell Liners are used to protect the inner shell of cylinder (Ball Mill/Rod Mill) from being impacted and worn directly by material and grind-ball. At the same time one can use different size of shell liners to adjust the direction of ball mill motion to improve the grinding effect of the grinding media to material, and to help the ball mill to improve the grinding efficiency, increase



production and reduce consumption. The product provide by SAKAR ensure the greatest wear resistance and tenacity to protect the inner shell of cylinder, reduce the maintenance times and prolong the service intervals of ball mill. We can provide customized products as per client requirement.

Liner Plates is one of the most important parts of ball mill, so far most of the liner plate has lifter bar to improve the lifting force of the medium to so as to achieve the best promotion effect. SAKAR's offered Ball Mill Liners and Lifter Bars are created to ensure maximum lifespan and performance of ball mill, with a selection of rubber and rubber composite liners availability. These are the result of state-of-the-art software-driven designs with industry leading inspection data, achieving an optimal charge trajectory and rate of wear life for your ball mill. These can be tailored to the specific application requirements of your mineral processing operation, with different rubber formulations and attachment system materials available.



This Product is an important part for conical ball Mill and its call " feed end liners for ball mill". Its main function is to protect the end cover of ball mill. The high wear-resistance head-end plates provided by our SAKAR have improved the wear condition of the feed end liners for ball mill that make the end liners have good wear-resistance and effectively increase the service life.



This Product is an important part for conical ball Mill and its call "Discharge end liners for ball mill". Its main function is to protect the end cover of ball mill. The high wear-resistance head-end plates provided by our SAKAR have improved the wear condition of the Discharge end liners for ball mill that make the end liners have good wear-resistance and effectively increase the service life.



Rubber as a lining material has proved to be very useful in material handling applications due to its inherent dampening properties. The dampening effect of a rubber liner depends on the angle of impact. Sakar wear resistant rubber liners are manufactured from special rubber compound by high pressure molding which imparts abrasion, impact and corrosion resistant properties to these liners. The wear pattern of these elements can be predicted fairly accurately which enables proper maintenance planning and hence reduces the overall costs. we can also bend, roll or shape the liners to suit each individual application.



SAKAR's specially design Combo Liners are more economical and easy to install. As it is combined with shell liners and lifter bar it's called Combo Liner. Are also used to protect the inner shell of cylinder from being impacted and worn directly by material and grind-ball. SAKAR Combo Liners are available in many size to be install in ball mill with different dimensions.



www.sakarrubtech.com

» SNWEL ENGINEERING PVT. LTD.

snwel Engineering® is an integrated engineering services & solutions company. We offer services & solutions that are simultaneously affordable, sustainable and of high quality. Leveraging technology, domain knowledge, & our robust work planning methodology to ensure an effective delivery model for engineering services projects.



We provide services in the following verticals - Oil & Gas, Petrochemicals, Power, Process, Paper & pulp, Chemical, Infrastructure, Mining & Metals, Manufacturing and Pharmaceutical.

ENGINEERING SERVICES WE PROVIDE:

- 3D Plant Engineering Services (Multidisciplinary Plant Engineering)

- Intelligent P&ID, Structural, Piping, E&I Engineering & Production of GA, Fabrication & Piping Isometrics
- 3D Laser Scanning Services for Brownfield/ Greenfield Construction Projects
- 3D Modelling Services (Concept Design to Detail Engineering)
- 3D Printing Services for Plant & Product Development
- 3D Model Reviews for Constructability, Operability & Maintainability Study
- Utility, Fire Fighting & HVAC Engineering
- Analysis Services (Pipe Stress Analysis/ CFD Analysis/ FE Analysis)
- Civil & Structural Design, Analysis & Detailing
- Instrumentation Engineering
- Preparation (2D/ 3D) Engineering Data

3D Plant Engineering Services: Our Multi-disciplinary 3D Plant Engineering Services focuses on designing, modelling, and simulating industrial plants using advanced 3D plant modelling software. Our services offer a comprehensive solution for plant design, including detailed engineering, procurement, construction, and commissioning. We can create accurate digital models of a facility, to optimize layout, equipment placement, and processes before any physical construction begins. This can lead to significant cost savings and reduced risk in the long run. 3D Plant Engineering Services are crucial for industries such as chemical, mining and metals, oil and gas, pharmaceutical, and food and beverage, where precision and safety are of the utmost importance.



We provide multi-disciplinary plant engineering which includes, 3D modelling of plants from basic engineering data, Conducting 3D Model Reviews, Clash Checking & Delivering GA, Fabrication, Piping Isometrics & MTO for construction purpose.

3D Laser Scanning Service: We use high-resolution laser scanner to capture precise and accurate three-dimensional measurements of objects, plants, buildings, or environments. It is a non-invasive method that generates highly detailed and comprehensive 3D models with a level of accuracy that is impossible to achieve with traditional surveying methods. These models can be used for a variety of purposes, including engineering and construction projects, architecture, forensic investigations, and cultural heritage preservation. Our 3D Laser Scanning Service provides clients with highly accurate, detailed, and measurable data, which can lead to significant cost and time savings in the long run, as well as improved safety and efficiency in project planning and execution.



Material Handling Engineering: We provide Material Handling Engineering services to design and develop automated manufacturing and material handling systems to assist with bulk material movement and conveyance of specified material.



3D Printing: Our 3D printed blueprints can empower Architects, Engineers, and Construction (AEC) professionals in transforming tomorrow's landscape. We also provide product design, prototype development starting from concept to finalization of product. Pattern Development, Jigs & Fixtures & Training Models



Printing Material: ABS+, PLA, Metal fill, Carbon fibre, Polycarbonate, Polyurethane, ABS - PC



www.snwel.com

➤ STM CONSTRUCTION EQUIPMENT INDIA PVT. LTD.

STM Construction Equipment was founded in 2010 in Singapore and established an Indian branch office in Navi Mumbai in 2012. The company specialises in introducing new and advanced methods from manufacturers in Europe and Japan. The main products include Xcentric Ripper for soft rock, Yamamoto Rock Splitter for hard rock, STM Rock Breakers and Darda handheld rock splitters. STM strives to provide the best possible after-sales support, both in terms of highly trained service engineers, as well as a high level of spare parts and consumable inventory. Through a close and long term cooperation with our overseas principals we can solve technical issues quickly but also give feedback to make products more suitable for Indian requirements.



Xcentric Ripper is a newly developed excavator attachment specifically designed for primary excavation of rock without the use of explosives. It is based on a patented impact vibration accumulation technology, which enables excavation in less time, at lower cost, and with minimal noise compared to conventional rock breakers. It was developed in Europe in 2009 and was introduced in India in 2012.



The main applications include limestone mines and overburden removal in coal mines. It is mounted on conventional excavators and often used to replace blasting and surface miners. There are currently about 70 units working in India.

www.stm-ce.com

➤ TATA STEEL INDUSTRIAL CONSULTING

--- Resolute Practitioners to Passionate Consultants



Tata Steel Industrial Consulting (TSIC), is Tata Steel's maiden foray in the Consulting space. The goal is to co-create solutions to complex problems both Strategic and Tactical in nature, by leveraging more than a century of experience of successfully running India's First Mega factory and evolving into a Light House of Indian Industry today.

So, what makes our services unique and different? TSIC is more than just consultancy – the vertical comprises practitioners and experienced subject matter experts who have delivered results in an organizational context. This allows us to leverage this practical experience and execute proven solutions!

Our expertise lies in the below areas:

- Mining and Exploration: Experienced professionals who are focused on quality and productivity at the mines and provide end to end solutions for every aspect of an exploration project, since 1915
- Human Resource Management
- Organizational Excellence
- Technology and Best Practices
- Total Quality Management
- Learning and Development
- Digital and Automation Solutions
- Corporate services – including Safety, Ethics and Information Security

www.consulting.tatasteel.com

➤ TECHFAB INDIA INDUSTRIES LTD.



TECHFAB INDIA

TechFab India (TFI) was founded in 2003, with the objective of providing world class geosynthetic & GeoHazard Mitigation products and services to enable owners, consultants and contractors to design and implement reliable, economic and easy to construct solutions for a wide range of geotechnical, transportation, hydraulic and environmental related problems.

TechFab India started its operation, with head office at Mumbai, design office at Vadodara and sales offices are at Ahmedabad, Hyderabad and New Delhi. Our manufacturing facilities are located in Silvassa, Daman, and Haridwar.

Our manufacturing facilities have ISO 9001:2015 certification and our product are CE certified, from SKZ Germany. All our manufacturing facilities have full-fledged in-house laboratories for quality control testing.

We have been scaling up our manufacturing capacities to meet the growing demand for Geosynthetics & GeoHazard Mitigation Products in the infrastructure projects.

TechFab India is manufacturing in India almost all types of Geosynthetics & GeoHazard Mitigation products meeting global quality standards and our production capacities are sufficient to fully meet the demands of infrastructure in India.

We assure the best in terms of quality of products, engineering capability, competitive pricing and delivery schedules.

TECHGRID POLYESTER GEOGRIDS

Techgrid Geogrids are knitted and Polymeric coated polyester geogrids manufactured from superior grades of high tenacity, high molecular weight and low carboxyl end group polyester yarns, which are formed into a dimensionally stable grid structure using a highly sophisticated weft insertion warp knitting and coating technology. This is extensively used for haul road applications.



TECHGRID PP BIAXIAL GEOGRID

Techgrid PP Biaxial – an integrally formed biaxial geogrid consisting of high quality polypropylene and carbon black. The punched and drawn manufacturing process are so designed that they provide the lateral confinement and helps in reinforcing the weak soils. This is extensively used for haul road applications.



TECHCELL GEOCELL

Techcell is a light weight yet strong, three dimensional honeycomb like cellular confinement system. It is used with infill granular material and used for ground improvement to weak foundation soil by increasing its load bearing capacity and also to control slope erosion by surface protection system.



TECHDRAIN DRAINAGE COMPOSITES

Drainage composites are formed by a combination of geotextile (woven or nonwoven), acting as a filter and separator on one or both sides with a core of Geonet. It has remarkable integration with full-fledged production with in house lines under one roof.



CCGM (CONCRETE CANVAS)

CCGM (Concrete Canvas) is a flexible, concrete filled geosynthetic, that hardens on hydration to form a durable, water proof concrete layer. It is used for a wide range of erosion control, Channel lining, Rockfall protection and weed suppression applications.



TECHFAB METAL GABION/MATRESS AND NETTING

TechFab Metal Gabion-Netting is metallic wire mesh double-twisted hexagonal type of netting has the high mechanical resistance required to prevent the danger of sudden rock shock loads and dissipate rock fall energy created from loose fractured rock. Since the double-twist, hexagonal-woven mesh does not unravel when some wires break.



TechFab Metal Gabion/Matress and Netting is available in different sizes.

TECHRHOMBUS HIGH TENSILE ROPE NET SYSTEM:

TechRhombus high tensile rope net system is made out of high tensile steel wire ropes with tensile strength of more



than 1960 N/mm² which is a superior alternative to conventional rockfall protection system. High Tensile rope net system works in combination with or without bearing plates and other elements like top & bottom support ropes, wire rope anchors and soil nails. TechRhombus can be used for both active and passive rockfall protection system.

TECHSLOPE FLEXIBLE SLOPE STABILIZATION SYSTEM

TechSlope flexible slope stabilization system made out of high tensile steel wire which has minimum deformation and maximum tensile strength, the mesh has unique advantages over conventional slope stabilization methods using hard facings such as shotcrete. The flexible slope stabilization system works in combination with or without bearing plates and other elements like top & bottom support ropes, wire rope anchors and soil nails.



TECHANCHOR - SELF DRILLING ANCHORS

TechAnchor - Self drilling anchors are most commonly used items for slope stabilization projects as well as tunneling and mining projects because of its flexibility to use in various type of soil and rock conditions. TechAnchor systems reduces the cost of project to a significant amount with its lower cost of stocking as it can be kept with full length and can be cut as per project requirement.



www.techfabindia.com

➤ TECHFLOW ENTERPRISES PVT. LTD.

TECHFLOW is a dominant player in the field of AIR POLLUTION CONTROL EQUIPMENTS & SYSTEMS since 1979. The sheer dynamism of the company's strategic vision ensures cost-effective value-added solutions for its customers. The competitive edge gets exhibited through Constant technology upgradation, Innovative Product designing with engineering skills and Proven performance.



TECHFLOW is TUV SUD certified ISO 9001: 2015 company. TECHFLOW has four decades of experience in design, supply and install the APCS equipment across the Asia and India. TECHFLOW tops in manufacturing of:

- Dust Collection Systems
- Fume Extraction & Filtration Systems
- Centrifugal Blowers & Fans
- Pneumatic Conveying Systems

The state-of-the-art facility is spread over 2,50,000 square feet area equipped with latest technology machinery and skilled manpower, which makes Techflow Gujarat's largest & India's leading manufacturers. Techflow is proud to supply to more than 20 industry sectors with special focus in Minerals and Mining Sector.

TECHFLOW works in close harmony with its customers' requirements and develop quality products for the market needs of today and future. For every product, task, or service there is a quality process, ensuring the quality of the result.

**“प्रदूषण मुक्त भारत, हम सब का संकल्प
शुद्ध वातावरण, हम सबका अधिकार”**

AIR POLLUTION CONTROL SYSTEMS / DUST COLLECTION SYSTEMS

TECHFLOW are a leading manufacturer of the dust collection system and air pollution control devices in Ahmedabad, Gujarat, and has achieve excellence in manufacturing various types of APCS and Dust Collectors:

- Reverse Pulse Jet Bag Filter (Online/Offline)
- Reverse Pulse Jet Cartridge Filter
- Reverse Pulse Jet Envelope Filter
- Reverse Air Cleaned Cassette Filter
- Electrostatic Precipitator
- MDC & Cyclone



- Wet Scrubber / Venturi Scrubber

TECHFLOW expertise in design, supply and installing the APCS equipment and customize them as per the industry needs and regulatory norms. With an excellent after service team, TECHFLOW stands as leader in the industry.

FUME EXTRACTION & FILTRATION SYSTEM

Techflow believe in protecting and preserving the environment from harmful gases, and keep it safe for the future generations, without affecting the development, and production capacity of the various heavy industries.

- Primary Furnace Fume Extraction System
- Secondary Furnace Fume Extraction System
- Centralized Welding Fume Extraction System



Techflow is expert in catering to all the furnace types e.g. Electric Arc Furnace, Induction Furnace, AOD Furnace, Skelner Furnace, Rotary Furnace Cupola Furnace etc. The scope of supply includes design, manufacturing, supply, erection, commissioning anywhere in the globe.

PNEUMATIC CONVEYING SYSTEMS

Pneumatic conveying represents the core of a bulk material handling system. They help in the transport of bulk solids, powder granules material vacuum conveying (conveying of large aggregated granular chunks of powder) through a pipe by the use of the flow of air or gas. Besides performing the role of effectively moving bulk powder through the system they can be well customized to meet the unique requirements of the plant and other material characteristics as required by the manufacturer.



Techflow specialized to convey the powder and granules conveying using:

- Dense Phase Conveying
- Lean Phase Conveying
- Flux Recovery Feeding, Heating, Baking and Recovery Systems (SAW Welding)

CENTRIFUGAL FANS & BLOWERS

TECHFLOW has developed a series of fans for almost all the industrial requirements. Centrifugal Blowers designed and supplied by TECHFLOW are highly efficient, proven, reliable & sturdy.



TECHFLOW is master in designing and manufacturing customized fans like Multi Vapor Recompression Fan (MVR Fan), Water Jacketed Fan, Special Bearing Cooling Arrangements for High Temperature fans. These are categorized by their pressure generation capacities & Drive types.

The Design range is as per below,

- Airflow / Air Volume: 1,000,000 m³/hr
- Motor Power: 1300 kW
- Static Pressure: 1500 mmWC

Centrifugal Blower can be considered as the heart of any processing industry. It is known as many type like ID Fan, FD Fan, Industrial Blower, Industrial Air Blower, High Pressure Fan, Hot Air Circulation fan, Bag Filter Blower, Dust Collector Blower, Blower, Pneumatic Conveying Fan.

ELECTROSTATIC PRECIPITATOR

Electrostatic Precipitator (ESP) is special type of system which uses electric charge to remove fine smoke and dust from the flue gases. The flue gases with impurities are entered through inlet and passed thorough electric charge, this are results separation of toxic particles like lead and sulphur & attracted to the plates where they are collected and removed.

- Range of Flows 20,000 m³/hr to 200,000 m³/hr
- Guaranteed Emission that can be achieved: Less than 30mm/nM3
- Operating Temperatures: From Ambient to 220°C
- Additional Items Like 3 phase T/R Set
- Opacity/Dust Monitor, ESP Management System
- CEMS can also be Supplied along with our offered ESP's.



www.techflow.net

» TERRE ARMEE INDIA



TERRE ARMEE

Terre Armée began its activity in the Indian Peninsula in 1996, initially through a licensee. In 2006, the business was transferred to Reinforced Earth India, a subsidiary of Terre Armée, which subsequently became a part of the Soletanche Freyssinet Group with its headquarters located in Paris. By being at the forefront of innovation and path-breaking technology, has forged an unrivalled level of expertise and experience to provide unique and benchmarked solutions for the construction industry. The company has always invested in a strong R&D program, which has enabled it to create and evolve original techniques, know-how and scientific processes.

Terre Armée India is headquartered in New Delhi and has 3 regional offices – Mumbai (West), Kolkata (East) and Bengaluru (South), in addition to a manufacturing and testing facility at Arjikuja, near Ahmedabad. The company also has an active presence in neighbouring countries like Nepal, Bhutan, Bangladesh, Myanmar, Sri Lanka, and Maldives.

Terre Armée India provides innovative and sustainable design engineering solutions to our clients in areas like:

- Mechanically Stabilized Earth Structures
- Precast Structures
- Slope Engineering & Geohazards Solutions
- Basal Reinforcements
- Coastal Engineering & Hydraulic Protection
- Drainage Systems

www.terre-armee.com

» TH COMPANY INDIA PVT. LTD.



TH COMPANY is an international industrial company that helps its customers to process natural resources efficiently through the design, manufacture, sale and servicing of equipment and installations for mining, industrial processes and fishing.

After several years of intense mining activity in the country, TH COMPANY decided to open a subsidiary in India, to become closer to its Indian customers and to reinforce its world class customer service on the Asia Pacific region.

The office located in Kolkata, belongs to the company's TH business unit and provides rocks and minerals processing solutions for the mining, industrial minerals and aggregates industries. TH also provides a wide array of services ranging from plant audits to the supply of spare parts, operation & maintenance and technical assistance.

Specifically, for the mining sector, TH offers complete solutions for Iron Ore Beneficiation and Dewatering Solutions for Tailings & Concentrates Treatment. TH Company has added Grinding and Pelletizing Technology (up to formation of Green Ball) to its portfolio by associating with CEMTEC, Austria and Magnetic separation Technology by association with GAUSTEC, Brazil for the Indian market.

Over 50 years of experience and a continual emphasis on innovation have made TH's technology a worldwide benchmark. TH currently works with some of the world's leading mining concerns, and its solutions and equipment have been successfully implemented all over the world.

IRON ORE BENEFICIATION COMPLETE SOLUTION

We provide our customers with complete solutions for Iron Ore Beneficiation customized to their specific needs. From engineering services to the implementation of complete iron ore beneficiation plants, which include grinding, magnetic separator & filtration circuits, we support our customers from the beginning to the end of the useful lifetime of their projects.



We also provide a wide array of services ranging from plant audits to the supply of spare parts, operation & maintenance and technical assistance.

DEWATERING SOLUTIONS

With over 50 years of experience, we are specialists in dewatering solutions for concentrates and tailings management from large scale mining, we offer a wide range of filter presses, slurry pumps and thickening equipment characterised by their mechanical



simplicity and robustness.

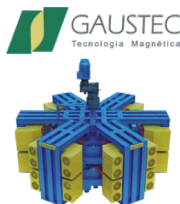
All our equipment is designed for easy operation and maintenance and to ensure lower OPEX than other solutions available in the market.

We have equipment in place and operating all over the world and our currently works with some of the world's leading mining companies.

We also provide a wide array of services ranging from plant audits to the supply of spare parts, operation & maintenance and technical assistance.

WHIMS MAGNETIC SEPARATORS

As Gaustec's official agent in India, we provide our customers with Wet High Intensity Magnetic Separators (WHIMS). With capacities ranging between 30 tph and 1,400 tph and magnetic fields of up to 18,000 Gauss (1.8 Tesla), we can provide the right equipment to fit any project.



CEMTEC MILLS

We manufacture and implement under CEMTEC license, a wide range of CEMTEC's comminution solutions which include:

- Ball Mills
- Rod Mills
- Drum scrubber
- Semi-autogenous (SAG) Mills
- Pelletizing Discs
- Mixers
- Additive Grinding Mills



WORLD CLASS SERVICES

At TH we offer a variety of services to support our customers from the beginning to the end of the useful lifetime of their projects. From plant audits, to operation & maintenance, to providing operation & maintenance service as well as after sales technical service and supplying spares, TH is there in support.

Our staff works closely with our customers to identify long term solutions and back this up with regular support to optimise the output efficiency of those solutions.

Over 50 years of experience make TH the ideal partner to ensure that projects will meet their potential throughout their useful lifetimes.



www.thsa.com

» THEJO ENGINEERING LTD.

ENGINEERING SOLUTIONS FOR CONVEYOR SYSTEMS, MINERAL PROCESSING & CORROSION PROTECTION



Thejo is a pioneer and leader in the belt conveyor maintenance business. Established in 1974, currently a public limited company, Thejo has the privilege of being the first company to be listed on the National Stock Exchange of India under its EMERGE platform.

Thejo's global headquarters is located in Chennai, India along with 5 of its manufacturing plants, and a state of the art Technical Excellence & Research and Development centre. The R&D centre has the recognition and approval of the Department of Scientific and Industrial Research: Ministry of Science and Technology of India (DSIR), and is actively engaged in the development of IP's.

OUR VISION

A one-stop Solution Provider to the Core Sector, viz. Mines, Metals & Minerals, Energy, Port etc., always ensuring Safety, Reliability, Quality and Cost Competitiveness.

OUR MISSION

To be the Firm of first choice Globally, for Customers, Employees, Suppliers and Shareholders, that offers tailor



made Products and Services.

CONVEYOR CARE

Belt Repair Chemicals / Vulcanising Equipment / Belt Winders / Pulley Lagging Sheets / Tools

TRANSFER POINT SOLUTIONS

Belt Cleaners / Spillage Control / Belt Tracking / Belt Supports / Material Flow Promotion

MINERAL PROCESSING SOLUTIONS

Wear & Abrasion Liners / Trommels / Screen Panels / Wet Abrasion Lining

FILTRATION SOLUTIONS

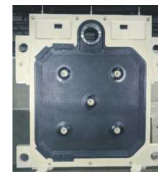
Filter Plates / Diaphragms / Grids / Pinch Valve Sleeves / Hoses / Plate Pack Seals / Spares

CORROSION PROTECTION

Hot Rubber Lining / Cold Rubber Lining / Acid Brick Lining

SPECIAL PURPOSE MACHINERIES

Industrial Autoclave / Rigid Mandrel Hose Building Machine / Rubber Curing Press



www.thejo-engg.com

» THYSSENKRUPP INDUSTRIES INDIA PVT. LTD.

Thyssenkrupp Industries India Pvt. Ltd. in the last 75 years has grown to become one of the most trusted names in the fields of Sugar Plants & Machinery, Open Cast Mining & Bulk Material Handling Systems, Cement Plants & Machinery and Boilers & Power plants. With strong foundations and access to world-class technology thyssenkrupp Industries India plant making capabilities are helping the industry become competitive world over. Strategic vision of thyssenkrupp Industries India as an EPC Contractor to execute turnkey projects is derived from its core strength of integrated engineering expertise and automation in manufacturing backed by an excellent team of project executives. The company firmly believes in delivering total customer satisfaction spanning from Concept to Commissioning and prompt after sales service.



thyssenkrupp

Thyssenkrupp Industries India highly competent project management capabilities are a result of its tradition of anticipating and fulfilling specific customer requirements. A highly qualified team of engineers and technicians, supported by the most modern IT infrastructure ensures the brand of quality that thyssenkrupp is known for worldwide. The emergence of a true market leader speaks volumes about the world-class technology inherent in the company's products. The company's nationwide branch network along with the support of thyssenkrupp's global establishments enable it to meet the needs of customers on time.

Mining and Bulk Material Handling

Mining and Bulk Material Handling division was established in the year 1976. Since then we have been partnering growth in core sectors like power, mining, ports and refinery. Our expertise lies in designing, manufacturing and installing open cast mining & bulk material handling equipment/complete plants on turnkey basis and we are leaders in these fields.

Being a group company of thyssenkrupp Industrial Solutions, Germany, who are one of the world's leading designers and manufacturers in this field, makes us well equipped to handle this specialized market. It also gives us access to the widest range of world class technology which includes the technology of Krupp, Buckau Wolf, PHB, PWH, O&K, Demag Lauchhammer, Weserhutte and Robins which have merged with thyssenkrupp Industrial Solutions over the years.

We have had the privilege to render our services to PSU giants like NLC, NTPC, BHEL, DVC, NALCO, NMDC, IOCL, VSP and almost every state electricity board across the country, we also have the privilege to work with large private conglomerate like Reliance, Adani, Tata, Shapoorji, Doosan, GE and many more, thus having to our account execution of more than 70 major projects across India.

Having our own technology and manufacturing facilities ensures better control

on quality. This combined with our experience over years in procurement, project and site management ensures that timelines are better managed leading to scheduled project completion. Thus we are well equipped in successfully meeting customer's high expectations in the most satisfactory manner.

Combined Stacker—Reclaimers are single unit machines which can operate in both stacking and reclaiming modes separately.

Not only are these systems economical alternatives to those which involve separate reclaimer and stacker, but they also permit a high degree of automation in both modes of operation.

Thyssenkrupp also manufactures Reversible Stacker—Reclaimers for use in cases where the layout does not permit unidirectional flow of stockyard conveyors. These machines can be offered with the conventional cross conveyor system or with retractable tripper.

Combined Stacker—Reclaimer can be used for blending/ mixing different types of coal for power plant applications.

Thyssenkrupp Industries India has a large presence in the field of Long Distance Cross Country Conveyors and Pipe Conveyors. thyssenkrupp Industries India manufactures critical components like idlers and pulleys in its manufacturing facilities

Thyssenkrupp Conveyors are manufactured from high—grade materials and proven components to give maximum reliability.

The advantages are numerous:

- Ability to negotiate 3—D curves, resulting in minimum requirement of transfer points
- Material being transported is protected from wind, rain and other environmental hazards
- Dust and air—borne emission is avoided
- Pipe Conveyors require minimum space, have stable running characteristics in all operating modes, and can be routed through narrow curves or up sharp inclines

Thyssenkrupp offers a wide range of Crushers that are designed to take on any crushing job. Different types of crushers are used for crushing different types of materials — ranging from soft coal to very hard iron ore. Each type of crusher comes in various sizes, with selection dependent on the requirement of particular capacity, feed and crushed product size. They can be offered for stationary and mobile applications.

- Product Range
- Double Roll Crushers
- Ring Hammer Will Ring Granulator
- Rotary Breakers
- Jaw Crushers
- Hammer Mills
- Cone Crushers



Thyssenkrupp manufactures a wide range of Tipplers, including Side Discharge Tipplers and Rotary Tipplers for railway wagons. These tipplers can handle wagons of various widths, heights and lengths.

Thyssenkrupp Side Discharge Tipplers, available with both mechanical and hydraulic tipping drives, are capable for 25 tips per hour or more according to new RDSO design guidelines

thyssenkrupp Single and Twin 'C' type rotary tipplers unload the wagons by turning them through 180 degrees. A hydraulic holding system secures the wagons from side and top during tipping process.

Advantages of Twin Wagon Tippler

- Wagon unloading capacities are doubled
- For a 25 Tips/ hr wagon tippler, 50 wagons will be unloaded in 1 hour, leading to a faster turn—around of Rakes

Thyssenkrupp has developed Paddle Feeder machines with a large range of capacities, which come with both electrical as well as hydraulic drives.

Thyssenkrupp Paddle Feeders ensure high reliability, compactness in design, low power consumption, operational simplicity and ease in



capacity variation thus making them ideally suitable for operation in mines and thermal power stations

Thyssenkrupp offers Apron Feeders, in different sizes and capacities; for a wide range of applications, with electro—mechanical or hydraulic drives to suit customer requirements.

Thyssenkrupp Apron Feeder applications vary from in—plant to mine installations. Apron Feeders are suitable for stationary, semi—mobile or mobile crushing installations.

Thyssenkrupp offers Apron Feeders with 'in board' as well as 'out board' chain designs. Use of special material makes these Apron Feeders more reliable, maintenance friendly and more silent with lower—power consumption.



www.thyssenkrupp.com

» UNITECH PROJECT

Unitech Project is an ISO 9001:2015 certified company where we constantly strive for quality at an economical price for all of our products. We have an exciting array of products which are deemed for customer satisfaction. We operate from our state-of — art factory in India, where all our products are manufactured with utmost care.



UNITECH PROJECT

We are manufacturer & exporter of all types of belt conveyor products and mining equipments which are used in the conveyor systems in Thermal Power Plants, Steel Plants, Cement Plants, Mining Industries etc.

IMPACT BED

Impact Bed is installing in material loading point of the belt conveyor system for absorbed heavy impact load to prevent belt damage and reduce material spillage. Manufacturing as per customer's requirements.

Features:

- Absorb heavy impact load
- Long lasting
- Reduce material spillage
- Lower maintenance cost
- Corrosion resistance body



SELF ALIGNING CONVEYOR IDLERS

Self Aligning Conveyor Idlers are specially designed with exciting features, which are used on material conveying side of the belt conveyor system for auto controlling the belt sway and prevent belt damage and material spillage. Available all standard rubber belt widths from (600-2000) mm

Features:

- Exceptional performance
- No material spillage
- No belt sway
- Long lasting wear resistant rubber lagging idlers
- Auto sway control self-lubricated double bearings mechanism
- Corrosion resistance body
- Lower maintenance cost
- Easy to install

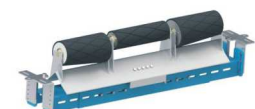


SELF ALIGNING RETURN IDLERS

Self Aligning Return Idlers are used to correct belt misalignment on the return side of the belt conveyor system. Available all standard rubber belt widths from (600-2000) mm

Features:

- Exceptional performance
- No material spillage
- No belt sway



- Long lasting wear resistant rubber lagging idlers
- Auto sway control self-lubricated double bearings mechanism
- Corrosion resistance body
- Lower maintenance cost
- Easy to install

TROUGH TRACKERS

Trough Trackers is used on material conveying side of the belt conveyor system for taking heavy load and auto controlling the belt sway to prevent the belt damage. Available all standard rubber belt widths from (600-2000) mm

Features:

- Exceptional performance
- No material spillage
- No belt sway
- Long lasting wear resistant rubber lagging roller
- Auto sway control self-lubricated double bearings mechanism
- Corrosion resistance body
- Lower maintenance cost
- Easy to install



RETURN TRACKERS

Return Trackers are used to auto align the misaligned belt more effectively on the return side of the belt conveyor system. This central pivoting system and taper edge, works as a steering mechanism and helps to track the belt to keep it running true constantly. Available all standard rubber belt widths from (600-2000) mm..

Features:

- Exceptional performance
- No material spillage
- No belt sway
- Long lasting wear resistant rubber lagging roller
- Auto sway control self-lubricated double bearings mechanism
- Corrosion resistance body
- Lower maintenance cost
- Easy to install



TROUGH CONVEYOR IDLERS

Trough Conveyor Idlers helps to ensure the load carrying capacity of the conveyor belt along the entire length of the belt. Trough Conveyor Idlers are available in 20°, 30°, 35° and 45° trough angle.

Features:

- Exceptional performance
- Corrosion resistance body
- Lower maintenance cost
- Easy to install



➤ UNIVERSAL ELECTRICALS & ELECTRONICS

Founded in 2016 in KG Halli, Bangalore, UNIVERSAL ELECTRICALS & ELECTRONICS its foot as an Electronics R&D and Mining Safety equipment trading and services company.



Over the years, the company has earned a reputation for excellence and professionalism for continuously striving to meet - and even exceed - standards which set the climate for a sustainable business relationship with its clients.

As an E&E solution specialist, we offer Mining Safety equipment products ranging from AFDSS, Audio Visual Alarm, Seat Belt Alarm, Body Lifting Alarm, Wiring Harness, Auto Dipper, Anti-Tilt Warning Device, Rear View Camera System, Driver Fatigue Warning Device, and other Safety equipment's. The company also offers control products such as variable frequency driver, work

Lamps, Proximity system based on LIDAR, Ultrasonic device etc. We also engage in safety product installations, testing and commissioning, preventive maintenance, automation, and energy saving solutions. Our commitment is to deliver outstanding results that will exceed your expectations.

The company Collaborate with some of the biggest manufacturers and distributors in the E&E industry to ensure high quality products. Robu.in, Hilux, Stonkam, Xiamen, Autostar Electronics co Ltd haonai Industrial co Ltd, Guangzhou leisure auto safety technology Ltd, Roots india pvt Ltd, are the trusted brands that we carry. Moreover, we continuously look for new products and enhance our services to serve our customers better. We look forward to providing our services and products to your company. Rest assured that we live by our service commitment: Delivering Results, Exceeding Expectations.

AUDIO VISUAL ALARM

Audio Visual Alarm is used for the purpose of reversing with the guidance of audible and visual indication. In open cast mines while reversing of equipment especially; dumpers and tippers, audio visual alarm plays significant role in warning pedestrians.



DUMP BODY RAISED WARNING SYSTEM

The Tipper Body Raised Warning system consists of a small ECU that is mounted under the dash in the driver's cab. There is a dash mounted push button switch with built-in VOICE CONTROLLER and LED that allows the driver to activate the system and give them feedback on body raised position in human voice



SEAT BELT VOICE ALARM SYSTEM

A seat belt is a safety device used to secure the operator of a vehicle against a collision or a sudden stop. A seat belt functions to reduce causality or serious injury.

It is provided with covered spring-loader Reel and an Inertial Locking mechanism.



REAR VIEW DISPLAY SYSTEM

A Rear-view Camera system is intended to aid the driver while reversing and avoid collision with any obstacle, vehicle, or human being.



AUTO DIPPER

automatically shifts the headlight beam of Vehicles from high to low according to the traffic conditions. Also, as per the road and traffic requirements, the high beam is then automatically restored.



PROXIMITY RADAR SYSTEM

77GHz Radar Detection System is built on millimeter wave technology allowing for good performance in all weathers. It's highly helpful for obstacle detection when reverse or park and widely used in large vehicles such as trucks, construction machinery, and agricultural machine



BACKUP ALARM (SWING ALARM)

- Penetrating, long range alarm sound
- Integrated bracket for universal mounting
- Reverse and over voltage protection
- Multivolt for a wide range of vehicles



BATTERY CUT-OFF SWITCH

Lockout-tagout is a safety procedure to ensure that dangerous equipment is properly shut off and not started up again before maintenance or servicing work is completed. It requires hazardous power sources to be "isolated and rendered inoperative" before any repair procedure is started.



DRIVER FATIGUE MONITORING SYSTEM

Face detection and pupil identification technology, recognize driving fatigue status. With GPS We have both Monitoring and Warning Systems Depending upon application.



LED BEACON LAMP

Amber LED Warning Beacon Lamp. Operate at 12-110V DC



less than 500mA Consumption. Ideal for trucks and all other heavy vehicles

60W LED LAMP

- White LED 60Watt
- Colour Temperature: 5500-6500K
- Effective Lumen: 3500LM
- Operating Range: 12-48V DC

100W LED LAMP

- White LED 100Watt
- Colour Temperature: 5700-6500K
- Effective Lumen: 7000LM
- Operating Range: 12-48V DC



Auto Fire Detection & Suppression System Dual Zone



Auto Fire Detection & Suppression System Single Zone



Other LED LAMP



Other LED Work LAMP & Parking Lamp



Other LED Work Lamp LAMP

LED BEACON LAMP

Ideal for Forklifts and other Vehicles with low power consumption.

High quality Amber Light



➤ VINNI CHEMICALS PVT. LTD.

Vinni Chemical is an IATF 16949 certified manufacturer of custom labelling in customer branding. Vinni Chemicals Pvt Ltd is a pioneer in the field of Brake fluids, Radiator coolants & Performance enhancing additives, working as a solutions provider for many reputed brands both within India and abroad.

Established in 1986, Vinni Chemicals was focused on research and development for nearly a decade before it forayed into manufacturing coolants and fluids in 1998, adding a string of high-profile customers in short period of time.

We are partnered with global giant AFTON CHEMICALS USA to blend their Performance Enhancer Additive in India and pack in smaller SKU for various OEM and Aftermarket buyers.

RADIATOR COOLANT

- Antifreeze Radiator Coolant
- Water Based Coolants
- Ready to Use

PERFORMANCE ENHANCING ADDITIVE

- Fuel additive for Diesel & Petrol engines
- Reduces emission (C & NOx)
- Improves fuel economy
- Corrosion protection
- Increases Fuel Filter Life

BRAKE FLUID

- DOT 3
- DOT4
- DOT 5.1



Vinni Chemicals Pvt. Ltd.

➤ VP SYNERGIC WELD SOLUTIONS PVT. LTD.

We "VP SYNERGIC WELD SOLUTIONS PVT LTD", Chennai, Tamilnadu-India, are in the business of Design, Manufacture, Supply and Installation of Welding & Cutting Automation Systems.



We aim to become an Innovative & Best solution provider through automation in the field of Welding & Cutting and it was the prime factor in establishing "VP SYNERGIC WELD SOLUTIONS PVT LTD". We are Innovative Professionals striving hard to give very high-quality Automated solution to create a comfortable, functional yet efficient work environment with everlasting client relationship.

Our activities are mainly are in Welding, Cutting with allied Material Handling automation on turnkey basis.

"VP SYNERGIC" Core team possess very high level of expertise and exposure in the field of Cutting and Welding automation with adequate application knowledge on various processes of manufacturing including Cutting and Welding technologies, Metallurgy and related pre and post weld heat treatment, Tooling and Fixture devices to adapt simple, hard and robotic automations.

This brand-new company with highly experienced personnel is quite eager to extend our immaculate and wholesome technical services to our valued clientele. We strive to support our esteemed customers with high quality and reliability, economical price and on time delivery. "VP SYNERGIC" caters to wide spectrum of industries in Heavy Engineering Industry, Construction, Automotive, Pipes, Pumps, Valves, Power & Energy, Oil & Gas, Defence, Marine, Aerospace, Pre-Engineered Buildings, Steel, Cement, Etc.

VP Synergic Weld solutions Robotic Laser Cutting System is a type of automated cutting machine that uses a laser beam to cut materials. It is equipped with a robot arm that is capable of performing precise and efficient cutting operations. The robot arm is controlled by a robotic controller, allowing for automated cutting operations.



The laser beam used in the system is highly precise, providing clean and accurate cuts. The robotic laser cutting system is suitable for cutting a wide range of materials, including metals, plastics, and wood. The system is widely used in industries such as aerospace, automotive, and electronics manufacturing, providing a flexible and cost-effective solution for cutting operations.

The use of our robotic laser cutting system SPM results in improved cutting accuracy, increased production speed, and reduced labour costs compared to traditional manual cutting methods.

VP Synergic Weld solutions Cobot Welding Machine is a type of collaborative robot designed for welding applications. It is equipped with advanced technology such as sensors and machine learning algorithms, which allow it to work safely and effectively alongside human operators.



The compact design of our Cobot welding machines makes them highly flexible and easy to integrate into existing production lines. These machines are capable of performing various welding processes including MIG & TIG welding, making them suitable for a wide range of applications.

Our Cobot welding machines are known for their high accuracy, consistency, and repeatability, which result in improved quality and reduced costs compared to traditional manual welding methods.

They also provide a safer and more ergonomic working environment for operators, reducing the risk of injury and fatigue. Our Cobot welding machines are ideal for small to medium-sized manufacturing companies looking to automate their welding processes.

VP Synergic Weld solutions Gantry CNC Plasma/Flame Cutting Machine is a type of cutting machine that uses a combination of plasma and flame cutting technologies for cutting metal sheets and plates. It is equipped with a computer numerical control (CNC) system that provides precision and accuracy in cutting operations.



The gantry design of the machine provides stability and supports large cutting areas, making it ideal for cutting metal sheets of varying sizes. The plasma cutting technology uses high-heat plasma to cut metal, instead of gas flame used in the flame cutting technology to cut metal.

Our machine can be widely used for industries such as shipbuilding, construction, and metal fabrication, providing efficient and cost-effective cutting solutions.

VP Synergic Weld solutions Multi Torch Flame Cutting Machine is a type of

cutting machine designed to cut thick metal plates and sheets with precision and efficiency. It is equipped with multiple torches that can be controlled by a computer numerical control (CNC) system, allowing for automated and precise straight cutting operations.



The multi-torch design enables the machine to handle large cutting tasks, making it ideal for cutting metal plates of varying sizes and thicknesses. The machine can also be used for straight cuts, providing versatility and flexibility for a wide range of cutting applications.

Our Multi Torch Flame Cutting Machines are widely used in industries such as shipbuilding, construction, and metal fabrication, providing efficient and cost-effective cutting solutions. The use of our Multi Torch Flame Cutting Machine results in high quality, consistent cuts, reducing the time and cost associated with manual cutting methods.

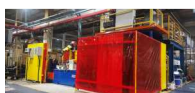
VP Synergic Weld solutions PEB Beam Welding Machine is a specialized machine used for welding large steel beams used in the construction of Pre-Engineered Building (PEB) structures. This machine is equipped with a welding system that can handle large welding tasks with precision and efficiency.



Our PEB Beam Welding Machine can also handle multiple welding processes such as MIG and Submerged Arc Welding, making it a versatile solution for welding PEB beams. Our machine is designed with a fixed torch and moving job system, which allows for easy movement and positioning of the welding gun, ensuring accurate and efficient welding.

The use of our PEB Beam Welding Machine results in high quality, consistent welding, reducing the time and cost associated with manual welding methods. This machine can be widely used in the construction of large-scale PEB structures such as warehouses, factories, and commercial buildings.

VP Synergic Weld solutions Robotic Hydraulic Cylinder Welding Machine is a specialized welding machine used for welding hydraulic cylinders. It is equipped with a robot arm that is capable of performing precise and efficient welding operations.



The robot arm is controlled by a robotic control system, allowing for automated welding operations. Our machine is designed for hydraulic cylinder welding applications, ensuring high accuracy and consistency in welding. The use of a robotic welding machine reduces the time and cost associated with manual welding methods, providing an efficient and cost-effective solution for hydraulic cylinder welding.

Our Robotic Hydraulic Cylinder Welding Machine is widely used in industries such as construction equipment, agriculture, and mining, providing reliable and high-quality welding solutions for hydraulic cylinder production. The use of a robotic welding machine also provides a safer and more ergonomic working environment for operators, reducing the risk of injury and fatigue.

www.synergicweldsolutions.com

➤ WENZHOU CHISUN IMPORT AND EXPORT CO., LTD.

Welcome to CHISUN, a company with over 20 years of experience in producing high-quality industrial valve products. We are a leading manufacturer of knife gate valves, specializing in over 15 different series and more than 2800 specifications.

CHISUN®

Our products are designed with the latest CAD and 3D computer design technology and are produced in our state-of-the-art R&D and testing centers. We are committed to developing new products and expanding into new fields to ensure that we continue to provide our customers with the highest quality modern industrial valve products.

Our commitment to excellence has been recognized with 120+ certificates, including 36 national patents, national key new products, and national Torch Plan projects. Our products are rated as internationally advanced level after signing, and we are proud to be recognized as a top-selling brand in the valve industry.

At CHISUN, we are dedicated to providing exceptional service to our customers both domestically and internationally (more than 50 countries). The company prioritizes understanding and fulfilling customer needs while striving for top notch quality products and services.

Thank you for considering CHISUN for your industrial valve needs. We look forward to the opportunity to work with you and provide you with the best products and services in the industry.

QB SERIES KNIFE GATE VALVE

QB Series Knife gate valve is with replaceable rubber seal knife gate structure, its sealing principle is mainly by closely connection between gate and rubber seals. Its main characters are that the rubber sealing ring is set in seat 'groove and is locked by metal seat, which will prevent rubber seal off when opening and closing the valve. If the seal is broken, can remove the metal seat and replace rubber seal, which will greatly improve valve' working efficiency. This valve is a cost-effective, high-performance product. It can be equipped with pneumatic actuators, as per requirements of different industrial and mining use.



QJ SERIES KNIFE GATE VALVE

QJ Series No groove bi-directional seal rubber lining knife gate valve, Ductile iron body, rubber lining design, avoiding the media corrode the body, the bottom of the body with groovless. When the valve is closed, the bottom of the gate edge contact with the seal and then compress the seal into the groove in the body and sealed gate realization;



Sediment accumulated in the body cavity of the groove, no clogging, no residue, and pipe easy to clean, so as to effectively improve the sealing effect knife gate valve to prevent leakage when the valve is closed.

QP SERIES KNIFE GATE VALVE

QP Series No groove bi-directional seal knife gate valve is used to seal the body with a flexible seal at the bottom with grooves. The bottom of the gate edge contact with the seal and compress the seal into the groove in the body, sealing gate realization.



The most important idea is that when the gate opens, the separate gate from the bottom edge of the seal will bounce to the same level as the groove, to prevent leakage and to make the media sediment accumulated in the body cavity of the groove easier to clean

QU SERIES KNIFE GATE VALVE

QU Series No groove bi-directional seal knife gate valve is used to seal the body with a flexible seal at the bottom with grooves. The bottom of the gate edge contact with the seal and compress the seal into the groove in the body, sealing gate realization.



The most important idea is that the gate opens, separate gate from the bottom edge of the seal, which acts like a groove to prevent leakage when the valve is closed, thus protecting the media sediment accumulated in the body cavity of the groove and allowing for easy cleaning.

QW SERIES KNIFE GATE VALVE

QW Series Self-sealing knife gate valve is to use two rubber seats on the clip pressed the knife a sealing effect. When the knife is fully open, the two seat seals combined together tightly, the pipeline pressure will make sealing better, while the valve is closed, and the gate can be arbitrarily removed convenient maintenance, no need to remove the entire valve repair and does not affect the normal operation of the pipeline.



The main characteristics of the valve bore full rubber seal seat, has a strong anti-wear properties and all-pass run off continuity. Suitable for use on those requirements valve wear mining.

COLLECTION OF CHISUN KNIFE VALVES

This is the collections of our special knife gate valves series. We are a leading manufacturer of knife gate valves, specializing in over 15 different series and more than 2800 specifications.

Main scopes of these valves in water management, oil and gas management, pharma industry, Mining, Sugar industry, Food processing, power plants, energy generations and so on.



www.chisunvalve.com

Announcing Dates of Next Edition

5th Edition

MET

www.metindiaexpo.com

15th Edition

& HTS

www.htsindiaexpo.com

International Exhibitions & Conferences on
• Materials • Engineering • Technology & Heat Treatment

TUE. 3rd - FRI. 6th SEPTEMBER 2024

Bombay Exhibition Centre, Mumbai, India

FOCUS SECTORS

DEFENCE



RAILWAYS



ALTERNATE ENERGY



HEAT TREATMENT



Expected Participation:

**500+
Stalls**

**20+
Countries**

**1,000+
Delegates**

**20,000+
Footfalls**

**10+
Country Pavilions**

MAJOR SPONSORS & PARTICIPANTS OF LAST EDITION



BHARAT FORGE

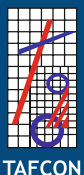


Contact Us



For Conference:
ASM INTERNATIONAL - INDIA CHAPTER
409, Srishti Square, LBS Marg, Bhandup (West)
Mumbai - 400079, Maharashtra, India
Tel: +91-22-35933220
Email: asmindia79@gmail.com
Web: www.asm-india.com

For Exhibition:
TAFCON PROJECTS INDIA PVT. LTD.
923 & 923A, 9th Floor, Devika Tower, 6 Nehru Place
New Delhi - 110019, India
Tel: +91-11-4985 7777 (50 Lines)
Email: metexpo@tafcon.in
Web: www.tafcon.in



We are committed to....
principal mining hazard management
plan, present at site to add safety value to it.



**Considering Mining operation
being at Remote location our reliable
product for this category has added advantage.**

SOLUTIONS WE HAVE

- Proximity sensor-Radar
- Rear view camera system
- Driver fatigue monitoring system
- Audio visual alarm
- Seat belt reminder system
- Pre-Start alarm
- AI human detection camera system
- Mining Flag
- Driver fatigue with ADAS system
- Kill zone light
- Fire suppression system
Automatic and Semi Automatic
- Auto Dipping system
- Beacon light
- Battery cut off switch
- LED worklight
- Blind spot mirror
- Payload sensor
- Tilt sensor

— A GATEWAY FOR BUSINESS EXPANSION —

ORGANISED BY



ISME

International Steel & Metallurgy Exhibition

November 6-9, 2023 | EcoPark, Kolkata

Co-Located with Prestigious



10th International Mining,
Equipment & Minerals Exhibition

ADVANTAGE

INDIA

Expected Participation:

200+ Stalls

300+ Delegates

20+ Countries

10,000+ Footfalls

— Country Pavilions from —
CHINA | GERMANY

SCAN QR CODE
TO ENQUIRE FOR EXHIBITING



BOOK YOUR STALL TODAY

to Avail Early Bird Discount & Prominent Locations

Contact at: metallurgy@tafcon.in / 011-49857777

For more information, visit us at:

www.steelandmetallurgyexpo.com

Media
Support

enfinder

EPCWorld

FORGINGS
TODAY

ISO

India
STRATEGIC

IndustryOutlook

IRON & STEEL REVIEW

Кабель.РФ

METALWORLD

TAFCON

Ore and Metals

Spigas

STEEL & METALLURGY
A COMPLETE STEEL MAGAZINE

STEEL TECH

STEELWORLD

TIMES INTERNATIONAL
YOUR GATEWAY TO INTERNATIONAL BUSINESS

Post Show Report - 9th IME 2022

The 9th edition "IME 2022 - International Mining, Equipment, Mineral & Metals Exhibition" (concurrent with 9th Asian Mining Congress) organised by TAFCON alongwith MGMI, during April 4-7, 2022, was a grand success, as informed by VVIPs, Delegates, Exhibitors and Visitors.

It aimed to upgrade the future of mining and allied industries in India. This institutionalised event has been envisaged as a catalyst for the development of Mining, Minerals, Metal and allied sectors in India. The prestigious biennial international event of the sector, is one of the largest shows of its kind in this part of the world. The event once again, proved to an ideal platform for the global mining, mineral & metal producers, decision makers, bureaucrats, investors, industry leaders and other key stakeholders of the industry to congregate, display products, exchange technologies, new initiatives, negotiate for mutual business development and forge meaningful partnerships.



The event was inaugurated by Chief Guest Shri Anil Kumar Jain, Secretary, Ministry of Coal, Government of India on April 4, 2022 in the presence of Guests of Honour Smt. (Mrs.) Rowan Ainsworth, Consul General, Australian Consulate General, Kolkata, Shri M. Nagaraju, IAS, Jt. Secretary, Ministry of Coal, GOI; Shri Pramod Kumar Agrawal, CMD, Coal India Ltd.; the other eminent dignitaries present on the occasion were President MGMI Shri P.M. Prasad, CMD, Central Coalfields Ltd.; Shri Roopwant Singh, MD, GMDC; Shri Amit Banerjee, CMD, BEMIL; Shri Sumit Deb, CMD, NMDC; Shri Rajesh Nath, MD, VDMA.

High level Trade Delegations and Country Level Group Participation from Germany, Australia and many other countries were a part of this important event. The Exhibition was participated by more than 223 Exhibitors from Mining, Equipment, Mineral, Metals and allied sectors for displaying their equipment, products, technologies, innovative applications and research & development alongwith large participation from mineral rich states of India such as Jharkhand, West Bengal, Rajasthan, etc.

Concurrently, a "Buyer Seller Meet" was organized on the 2nd day the event, which witnessed presentations from key stakeholders. It received an enthusiastic response from India and overseas.

On the third day of the event, Exhibitors Award Function was also organized, wherein Chief Guest Shri N.C Jha, Former CMD, Coal India

Facts & Figures of Last Edition

223 Exhibitors

14,560 Footfalls

15 Countries

515 Delegates

55 Technical Papers

Germany - Partner Country

Australia - Focus Country

Gujarat - Partner State

Buyer Seller Meet

Exhibitors Award Function

Few Glimpses of Last Edition



Few Glimpses of Last Edition



Exhibition Venue - EcoPark, Kolkata, India

New Town Eco Park is an urban park in Rajarhat, Kolkata. The park is situated on a 480 acres (190 ha) plot and is surrounded by a 104 acres (42 ha) waterbody with an island in the middle. The Eco park is located along the Major Arterial Road in Action Area - II of New Town, Kolkata. The park is surrounded by the Kolkata International Convention Centre and the Kolkata Museum of Modern Art on the North, the upcoming Central Business District and International Financial Hub on the east, and existing human settlement of Jatragachi / Hatiara on the South and West.

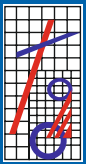


About Organisers



THE MINING, GEOLOGICAL & METALLURGICAL INSTITUTE OF INDIA (MGMI)

MGMI, the oldest institute of its kind in Asia has been promoting the cause of the mineral industry since its inception on 16 January 1906. It has been on the forefront of professional societies in mining and geosciences around the world. MGMI has always provided a forum for sharing experiences and learning of the latest in best practices and technology. The Institute presently has more 3,000 members serving the mining, minerals and metallurgical industry and diversified its valued added activities in various fields. The institute is having its headquarter and one of its branch in Kolkata and 18 more branches throughout the country.



35 Years
of Excellence

TAFCON PROJECTS INDIA PVT. LTD.

TAFCON is a professionally managed company with over six decades of experience and expertise in organising International Trade Fairs and Conferences in India and overseas, on various subjects namely Mining; Minerals; Metals; Materials; Defence; Heat Treatment; Foundry; Manufacturing; Surface Engineering, Paints & Coating; Packaging; Printing; Environment; Paper; Beauty; Lifestyle; Tot Teen & Mom; Education; Medical & Healthcare; Poultry, Dairy & Food Technology; Travel & Tourism; etc.

Media
Support



African Mining Market



CONSTRUCTION TIMES



EPC World

EQUIPMENT TIMES



Contact Us

For Congress:

THE MINING, GEOLOGICAL & METALLURGICAL INSTITUTE OF INDIA
GN-38/4, Sector-V, Salt Lake, Kolkata - 700091, West Bengal, India
Tel: +91-33-23573482 / 3987 / 6518
Email: office@mgmiindia.in
Website: www.mgmiindia.in

For Exhibition:

TAFCON PROJECTS INDIA PVT. LTD.
923 & 923A, Devika Tower, 6 Nehru Place, New Delhi - 110019, India
Tel: +91-11-49857777 (50 Lines)
Email: miningexpo@tafcon.in
Website: www.tafcon.in