



# PRODUCT CATALOG

Design, Engineering, Layout & Project Execution



# UNISONS

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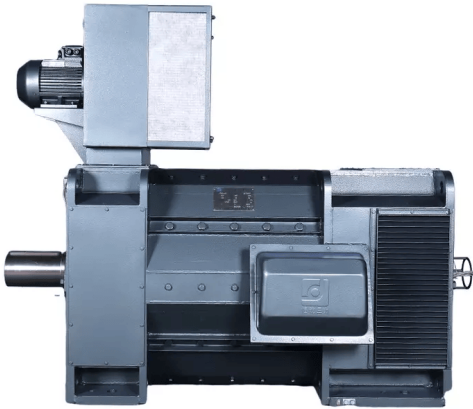
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# GENERAL PRODUCTS

# MOTORS

Motors are the backbone of modern industrial processes, driving the machinery and systems that power production across various sectors. Heavy-duty applications in steel manufacturing and cement production, motors provide the mechanical energy required for efficient operations.

## DC MOTORS

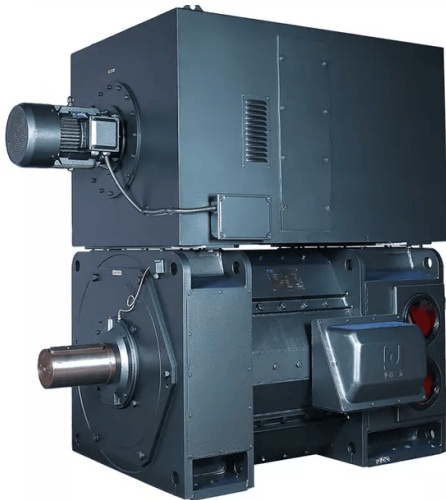


### Model: Z560-2B

A space-efficient motor providing an efficient and economical solution due to its compact design, easy installation and safe operation.

#### Technical Parameters

Power	350kw - 2000kw
Rate Speed	100 - 2000rpm
Field Voltage	180V, 220V, 310V, 330V

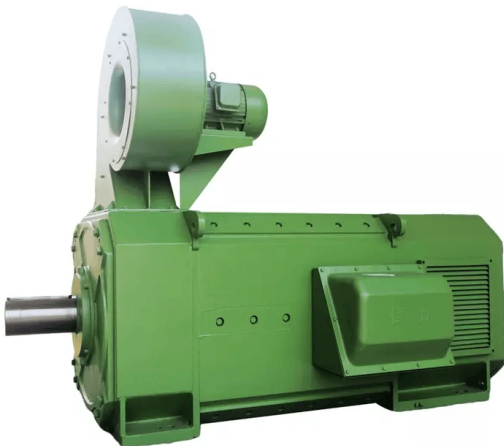


### Model: Z500/Z560/Z630/Z710

High-powered DC motor suitable for diverse applications, from high-speed tasks to heavy-duty industrial processes. These motors are engineered to deliver exceptional performance, reliability, and precision.

#### Technical Parameters

Power	350kw - 2000kw
Rate Speed	100 - 2000rpm
Field Voltage	180V, 220V, 310V, 330V



### Model: ZFQZ

Built to withstand harsh industrial environments and prolonged usage. Its bidirectional functionality allows for both forward and reverse rotation, ensuring smooth and efficient operation.

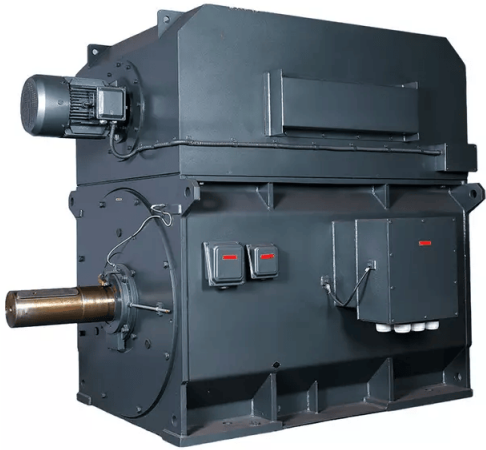
#### Technical Parameters

Power	37kw - 630kw
Rate Speed	250 - 1200rpm
Field Voltage	180V, 220V, 310V

# MOTORS

Their role in ensuring consistent performance, optimizing energy consumption, and enabling automation makes them indispensable in achieving industrial efficiency and scalability. By selecting the right motor for specific applications, industries can enhance productivity, reduce downtime, and maintain a competitive edge in today's fast-paced markets.

## AC MOTORS



### Model: YPZGS

AC Motor with high energy conversion efficiency minimizing power loss and reduces operating costs. Suitable for harsh conditions, including high temperatures and dusty or corrosive environments.

#### Technical Parameters

Power	up to 6000kw
Rate Speed	According to requirements
Voltage	690V

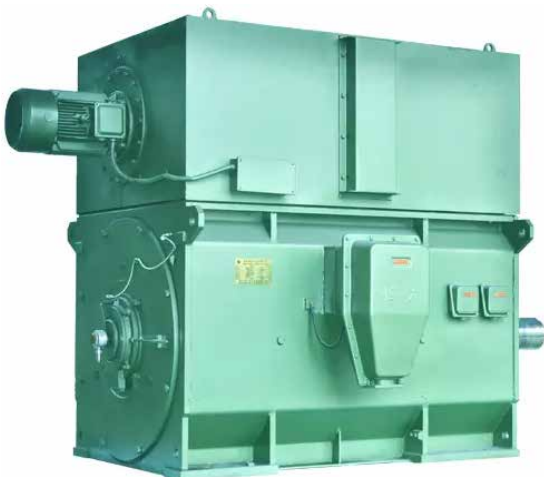


### Model: YR,YRKK,YRKS

Suitable for applications requiring strong initial torque to start operations. Easily integrated with industrial automation and control systems for efficient operations.

#### Technical Parameters

Power	up to 12500kw
Three-phase	50, 60Hz
Voltage	380 to 11000V



### Model: Y/YKK/YKS

Robust construction ensures consistent operation in demanding environments. Designed to consume less power, reducing operational costs over extended periods.

#### Technical Parameters

Power	up to 11,500 kW
Rate Speed	250 - 1200rpm
Field Voltage	3300 to 11000V

# GENERAL PRODUCTS

## GEARS



Gears are fundamental components in industrial machinery, playing a crucial role in transmitting power, controlling speed, and adjusting torque to meet the demands of various applications. Their versatility, coupled with the ability to customize gear ratios and configurations, makes them indispensable

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### MRG Series Rolling Mill Gearboxes

This Gear Series comes in single input, double output or triple output structures, with four layout options to choose from: H1, H2, H3, and V. These gearboxes also feature a compact structure, impact resistance, and stable operation

#### Technical Parameters

Torque Range	up to 1200 kN.m
Speed Ratio	1-120
Maximum center distance	1100mm

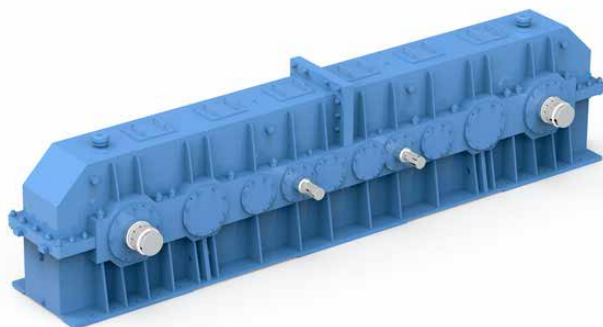


### Flying Shear

This product series includes crank-link flying shears, rotary flying shears, and a combination of crank-link and rotary flying shears, providing the required cutting speed and force under different operating conditions. It can perform frequent starts and stops under the control of an integrated electromechanical system on the rolling line, achieving shearing with large inertia.

#### Technical Parameters

Max Shear Section	17600mm <sup>2</sup> (φ150 mm)
Max Shear Speed	22 m/s



### YZ Series Monoblock Cast Hoist Gearboxes

These gearboxes feature a wide range of center distances, high load-bearing capacity, as well as other advantages such as high reliability and relatively low weight. They are suitable for the lifting drive mechanisms of various metallurgical cranes and casting hoists.

#### Technical Parameters

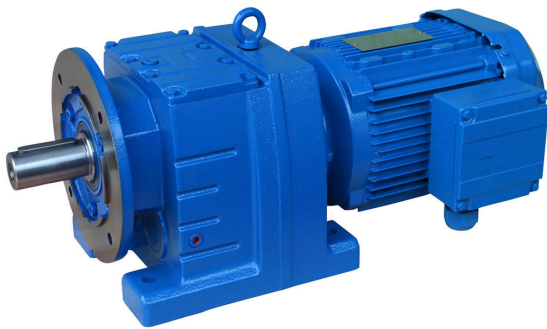
Torque Range	6.6 - 470 kN.m
Speed Ratio Range	14 - 250

# GENERAL PRODUCTS

## GEAR MOTORS



A critical component in various heavy-duty operations in steel, cement, glass, fertilizer and other industries, gear motors enable efficient and reliable mechanical performance. By optimizing energy transfer and ensuring smooth operation, gear motors contribute significantly to the productivity and longevity of industrial systems.

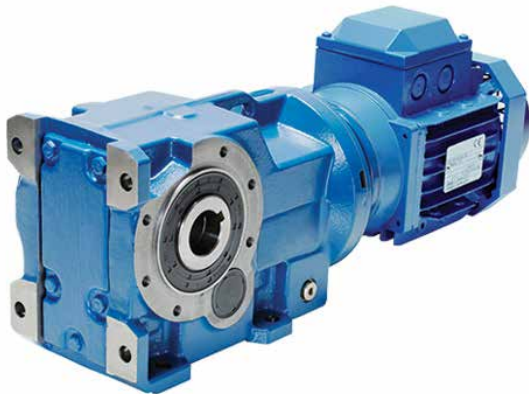


### Helical Gear Motors

- **Applications:** Conveyor systems, material handling equipment.
- **Features:** High efficiency, smooth operation, and compact design.

#### Technical Parameters

Power Range	0.12 – 200KW
Transmission range	1.3–33000
Output Torque	up to 50 Kn.m
Horsepower	upto 350HP



### Bevel Gear Motors

- **Applications:** Roll changers, vertical rolling mills.
- **Features:** High efficiency, smooth operation, and countless combination possibilities.

#### Technical Parameters

Power Range	up to 160kW
Output Torque	up to 50 Kn.m
Motor Sizes	From IEC 63 to 280



### Worm Gear Motors

- **Applications:** Auxiliary machinery like lifting and lowering systems.
- **Features:** High reduction ratios, quiet operation.

#### Technical Parameters

Torque Range	6.6 – 470 kN.m
Speed Ratio Range	14 – 250

# GENERAL PRODUCTS

## REFRACTORIES

Magnesia Bricks	Dolomite Bricks	Silica Bricks
		
Fireclay Bricks	Alumina Bricks	Chromite Bricks
		
Cement Castables	Lining Machine	
	 	



# GENERAL PRODUCTS

## PRESSURE VESSELS

Pressure vessels are essential components in various industrial processes, where they are used to store and process liquids and gases under high pressure. These vessels are critical for processes such as steam generation and evaporation, ensuring the safety and efficiency in operations.

Designed to withstand extreme pressures and temperatures, pressure vessels are made from durable materials to prevent failures and ensure the integrity of the system.


**Evaporators**

**Vacuum Pans**

**Juice Heaters**

**Condensers**

**Steam Accumulators**

**Autoclaves**

**Distillation Columns**


# GENERAL PRODUCTS

## CONVEYOR BELTS



### Chevron Conveyor Belts



Chevron conveyor belts provide excellent grip, preventing materials from slipping or sliding during inclined conveying. They are commonly used for transporting bulk materials on steep inclines, such as in cement plants for conveying materials to crushers or from storage facilities to processing areas.

#### Features

- + Fitted with space-saving cleats
- + Belt width sizes 600 mm - 1 600 mm
- + Tensile strength: 200 to 2 500 N/mm

### Steel Cord Conveyor Belts

Steel cord conveyor belts are constructed with steel cables embedded in the rubber cover. These belts offer high tensile strength and are capable of handling heavy-duty applications in the cement industry. They are commonly used for long-distance conveying and in areas where high tension is required.

#### Features

- + Excellent cord/rubber adhesion even under tough working conditions
- + Exceptional resistance to repeated impact
- + Outstanding resistance to penetration limiting longitudinal cuts and tears



### Heavy Duty Rubber Conveyor Belts



Heavy-duty rubber conveyor belts are widely used in the cement industry due to their durability and resistance to abrasion. They can handle heavy loads and are suitable for transporting bulk materials such as cement clinker, limestone, and gypsum.

#### Features

- + Extreme tensile strength Highly resistant to dynamic stress
- + Exceptional resistance to repeated impact
- + Outstanding resistance to penetration limiting longitudinal cuts and tears

# GENERAL PRODUCTS

## SEAMLESS PIPES

Seamless pipes are critical components in industrial applications, known for their durability, strength, and ability to withstand high pressure and temperature. Unlike welded pipes, seamless pipes are manufactured without joints, ensuring superior structural integrity and reducing the risk of leakage or failure under demanding conditions. Widely used in industries such as Cement, Sugar, Fertilizers and more.



### Seamless Pipes



## YOUR DEDICATED PARTNERS IN

# GENERAL INDENTING

Unisons Steel Solutions has been carrying out General Indenting services since 1999, supplying essential industrial items tailored to meet the unique demands of our valued customers. With a commitment to reliability, efficiency, and aftersales services, we are your trusted partner for streamlining operations and driving productivity.



## Brass Spray Nozzles



For Cooling Systems

## Crane Claw



For all Industrial purposes

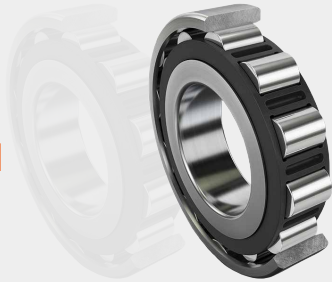
## Magnets



For every Industrial need

## Bearings

For all industrial applications.



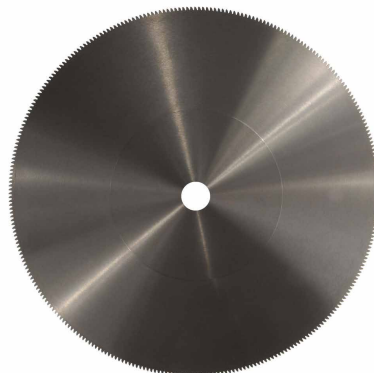
## Contact Blocks

For all industrial applications.



## Saw Blades & Disc Springs

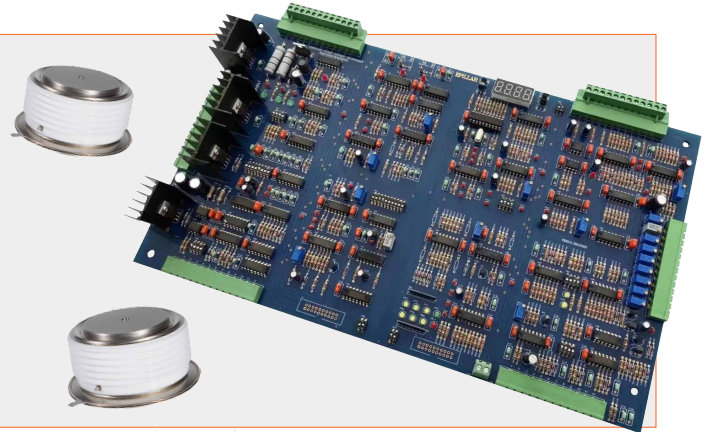
High-performance cutting tools designed to handle extreme temperatures. Built for durability, they ensure precision and efficiency in demanding industrial applications.



## PCB Cards & Thyristors

For all industrial applications.

Essential components in industrial electronics, enabling efficient power control and management. Designed for reliability, they support high-performance operations in steelmaking and other heavy industries.



## Electrical Transformers



## Inverters



## Thermocouple Rods

For temperature measurement with precision.



## Hydraulic Seal Cylinder

For all industrial applications.



## Sensors & Measurement Systems



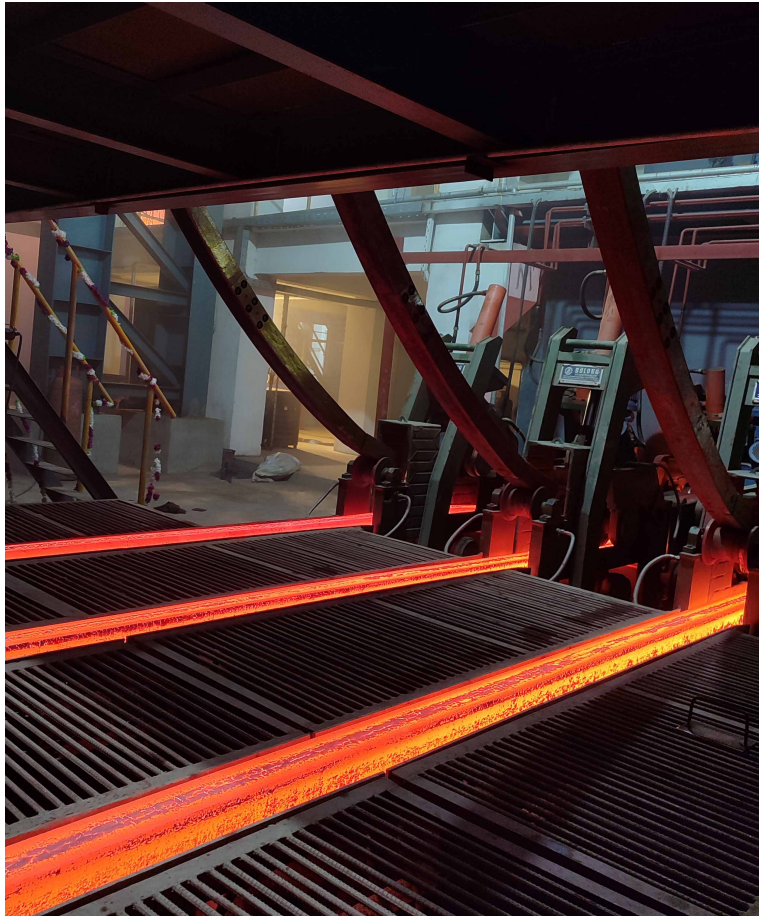
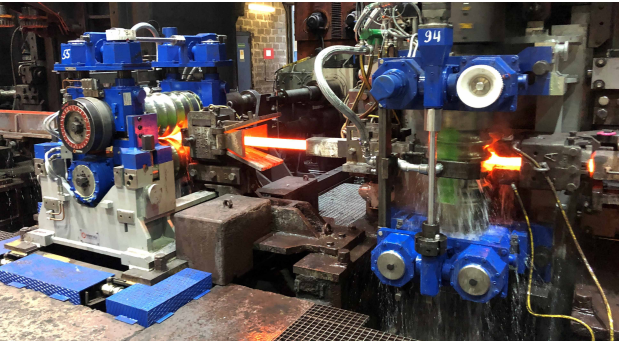
Hot Metal Detector



Loop Scanner



Laser Measuring Sensor



**50+** Projects & Consultations

 20+ Revampings

 10+ Project Feasibilities

 9+ Induction Furnaces

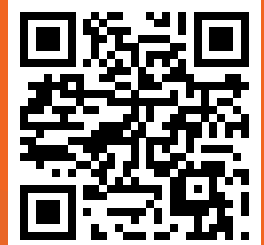
 8+ Rolling Mills

 7+ CCMs

 3+ Dust Control Systems

 2+ Reheating Furnaces

 2+ Billet Induction Heaters



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