

# Koyo®

## High-performance Product Series for Steelmaking and Rolling Equipment



ISO9001/QS-9000  
Certificate No. 927265

Industry throughout the world is required to reduce energy consumption, save labor, improve efficiency and be environmentally friendly. To satisfy such needs, new products are being made available.

Founded on years of experience and know-how, Koyo's steel making and rolling equipment products are perfect for such needs.

In steel making and rolling applications, Koyo's advanced, high-performance bearing products are highly recommended, along with other Koyo products.



## RHR Type Spherical Roller Bearings

The Spherical Roller Bearing Series features increased load ratings thanks to optimized design. The surface of contact between the rollers and inner and outer rings is optimally shaped to realize ideal pressure distribution across the surface, thus ensuring excellent shock-load resistance and improved durability and reliability.



## SOLPACK Bearings

SOLPACK Bearings have a polymeric lubricant enclosed in the internal space. Possessing excellent oil retention characteristics, these bearings enable extended grease replenishment intervals, keeping the equipment free from oil smears, and thus realizing a clean work environment. The SOLPACK Bearing technology is applicable to deep groove ball bearings, cylindrical roller bearings and spherical roller bearings.



## HSC Bearing Units

HSC Bearing Units support the driving rolls of continuous casting machines. Provided with a full complement cylindrical roller bearing, these units ensure improved reliability in load-carrying performance. The specially designed two-split housing has self-aligning capability and copes with the expansion and contraction of the bearing.



## SC Bearings

SC Bearings are designed to support the guide rollers of continuous casting machines. Provided with a full complement cylindrical roller bearing, these units ensure improved reliability in load-carrying performance. The bearing is coupled with an aligning shaft, providing aligning capability and enabling smooth axial movement.



## Four Row Cylindrical Roller Bearings

These large Four Row Cylindrical Roller Bearings support the backup roll necks of rolling mills. Optimized for rolling mills, these bearings are suitable for excessive-load, high-speed applications. Compared with oil-film bearings, these bearings have improved stable running accuracy, enhancing production precision.



## Sealed Type Four Row Tapered Roller Bearings

Sealed Type Four Row Tapered Roller Bearings are designed for the work rolls and intermediate roll necks of rolling mills. Thanks to a compact seal, these bearings feature increased load ratings. The modified seal between the double cones has superseded the cone spacer, enabling easier handling.



## Cylindrical Roller Bearings for Backing Shafts

These Cylindrical Roller Bearings are designed for the backing shafts of multi-roll mills. Because they support loads while maintaining contact with the intermediate roll, the outer ring is made of special material and is heat-treated for surface hardness to ensure impact resistance, and thus reliability.



## Sealed Type Two Row Tapered Roller Bearings

Sealed Type Two Row Tapered Roller Bearings are designed to support axial loads on the roll necks of rolling mills. The side plate on the outer ring is provided with a preload spring and bearing seal to prevent grease leakage and ingress of contaminants, enabling extended maintenance intervals.



## Backup Roll Units

Backup Roll Units are for use on plate levelers and tension levelers. Units can be custom-made using optimal roll material and seal structure according to service conditions and requirements. The Backup Roll Units are completely sealed, realizing a clean work environment.



## Hybrid Ceramic Ball Bearings

Hybrid Ceramic Ball Bearings are deep groove ball bearings with ceramic balls. They feature excellent high-speed performance and seizure resistance. These bearings help improve the reliability of equipment that feature high-speed rotation. They are typically suitable to support the guide rollers of wire/rod mills.



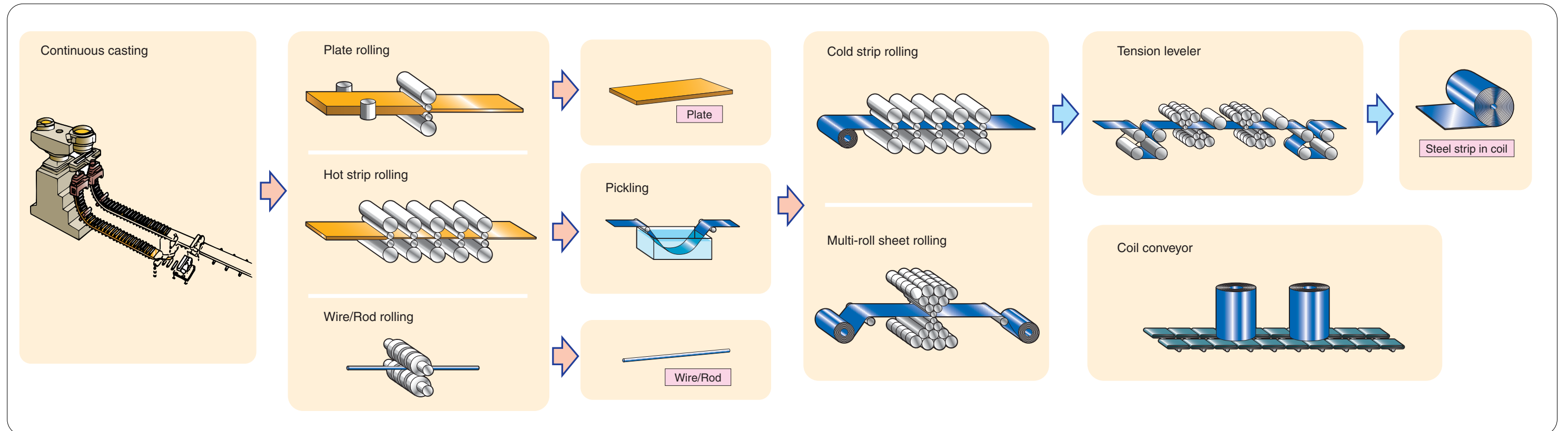
## Drive Shafts

These drive shafts are optimized for large-load applications such as mill rolls. Incorporating many new technologies and mechanisms, these shafts feature improved service life, strength and corrosion resistance.

## Koyo High-performance Products and Application Equipment

Product Name Equipment	RHR Type Spherical Roller Bearings	SOLPACK Bearings	HSC Bearing Units	SC Bearings	Four Row Cylindrical Roller Bearings For roll necks	Sealed Type Four Row Tapered Roller Bearings For roll necks	Cylindrical Roller Bearings for Backing Shafts For multi-roll mills	Sealed Type Two Row Tapered Roller Bearings For roll necks	Backup Roll Units	Hybrid Ceramic Ball Bearings	Drive Shafts
Continuous casting machines	●		●	●							●
Plate mills					●	●		●			●
Hot strip mills					●	●		●			●
Cold strip mills					●	●		●			●
Multi-roll mills							●				●
Levelers									●		●
Skin pass mills						●		●			●
Wire/Rod mills						●				●	●
Surface treatment equipment		●									●
Transfer equipment	●	●		●							●

## Typical Steel Production Line



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KOYO SEIKO CO., LTD. (Japan) is certifide to ISO 9001 and QS-9000. \* : QS-9000 certified. \*\* : ISO 9001 certified.



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Value & Technology