



### **Solutions by Solve**

Nothing tests the strength and performance of heavy-duty equipment — and their bearings and power transmission components — like a day on the job at a mining or aggregates processing operation. Punishing loads, constant vibration, extreme temperatures, and the never-ending swirl of dust, dirt, and other contaminants make for a challenging environment.

Owners and operators need equipment and components they know are up to the task.

Solve's portfolio of bearings and power transmission components for mining and aggregates processing are engineered and tested to stand up to the harshest conditions.

Our bearings, belts, sheaves, bushings, couplings, and seals are constructed using the latest processes and materials and are supported by a national network of sales and service specialists.

When unplanned downtime is not an option and extended maintenance cycles are a requirement, you need proven products from a trusted partner.

You need Solutions by Solve.















### SAF & SDAF Series Split Pillow Blocks

Solve's series of Split Pillow and Metric Plummer Blocks from PTI are built to handle a variety of punishing applications, including the heavy loads, high and low speeds, and constant vibration.

With shaft sizes ranging from 3/4" to 24", these units are available in Cast Iron, Ductile Iron, or Cast Steel housings and include multiple seal options for the toughest work environments.

The mounted bearings feature a rugged base for superior strength. Pry slots and match markings have been added to facilitate the easy mounting and removal of caps and to help ensure the caps and base remain a pair to maintain proper bearing seat fits.

The pillow blocks are available with spherical roller bearings and double-row ball bearings along with multiple seal options to suit your application.









SAF SNG SDAF \$3000K



# Spherical Roller Bearings

Solve's collection of high-capacity spherical roller bearings perform consistently in adverse conditions such as shock loads, shaft deflections, marginal lubrication, extreme speeds, contamination, and critical application stresses.

The bearings utilize two rows of rollers operating in a common sphered outer ring raceway. The design provides a self-aligning solution that is the combination of a radial and thrust bearing that operates even if the shaft and housing are, or become, misaligned under load.













### Seals & Adapters

Seals play a critical role in protecting your bearings from contaminants, extending their life, and helping ensure they're operating at peak performance.

Solve offers a variety of seals designed for harsh environments including the Standard LER triple labyrinth aluminum seal in industry standard dimensions for interchangeability; the LER with a dust cover for added sealing; the PER with an O-ring shaft seal; and the Drop-In Taconite Labyrinth featuring a grease barrier and O-ring for added protection, even during misalignment.

Solve has standard inch and metric bore adapters for both tapered bore Spherical Roller Bearings and Double-Row Ball Bearings used with standard Split Pillow Blocks and Plummer Blocks.

Larger adapters are offered as the hydraulic type which includes a provision for the bearing to be removed or adjusted during installation. This feature is especially helpful during installation should the initial bearing position be incorrect.





PER, PER-PTV



**Dust Cover Wiper Seal** 





TER, TER-OS

#### ADAPTERS

**LER** 



**SNW & SNP Series** Inch-Based Threads



**H** Series Metric-Based Threads



Withdrawal Sleeves



**Hydraulic Adapter** 



**Hydraulic Nut** 



### **Unitized Roller Bearings**

Solve's unitized roller bearing units from PTI are rugged, assembled, ready-to-install and available from 1-7/16" through 5" and 40mm through 125mm shaft sizes.

These high-capacity bearings perform consistently in adverse conditions such as shock loads, shaft deflections, marginal lubrication, extreme speeds, contamination, and critical application stresses.

The standard Ductile Iron housing combined with dynamic misalignment capability make these some of the most capable units on the market. The units feature Set Screw Lock Collars for easy installation and premium lithium grease with a temperature range of -22° F to 290° F comes standard.

The PTI units are interchangeable with competitive brands. SR2200 series models compare to "2000" series products. SRE models compare to "E" dimensioned products.

#### PILLOW BLOCKS



2-Bolt Pillow Block 1-7/16" thru 3-1/2" Shaft Sizes



2-Bolt Pillow Block

SR2-PB2

1-7/16" thru 4" Shaft Sizes



SRE-PB4 4-Bolt Pillow Block

2-11/16" thru 5" Shaft Sizes



SR2-PB4 4-Bolt Pillow Block

2-11/16" thru 5" Shaft Sizes

#### FLANGES

SRE-PB2



SR2-FB4 4-Bolt Flange

1-7/16" thru 4" Shaft Sizes



SR2-FC4 Piloted Flange

1-7/16" thru 4" Shaft Sizes

### TAKE-UPS



SR2-WSTU Wide Slot Take-Up

2-7/16" thru 4" Shaft Sizes

### **Belts, Sheaves & Shaft Bushings**

Belt drives play a critical role in the crushing, screening, and conveying stages of mining and aggregate processing.

Engineered to meet the demands of heavy-duty quarry equipment, Solve offers an extensive line of single- and banded-belts, sheaves, and bushings from MasterDrive.

Solve's banded belts are ideal for heavy shock load applications and where pulsating loads are present.

The lateral rigidity keeps the belt running in a straight line to help prevent belt whip, turnover, vibration, and jumping off that can occur in multiple drive applications.

Corded belts employ a high-density, flexible, compression rubber layer to increase durability and reduce stretch eliminating the need for constant belt tension adjustments.



**QD Sheaves** 



**DST Sheaves** 



**TB Sheaves** 



**BTS Sheaves** 



**QD Bushings** 



**DST Bushings** 



**TB Bushings** 



**HTD Timing Pulleys** 



**L&H Timing Pulleys** 



Weld-On Hubs



**Timing Belts** 



**V-Belts** 



## Your Source for Power Transmission Components



**Mounted Ball Bearings** 



Corrosion-Resistant Mounted Ball Bearings



**Split Block Roller Bearings** 



Unitized Mounted Roller Bearings



Spherical & Cylindrical Roller Bearings



**Tapered Roller Bearings** 



Deep Groove & Angular Contact Bearings



**Needle Roller Bearings** 



Cam Followers & Yoke Rollers



Spherical Plain Bearings & Rod Ends



**Sheaves** 



**Timing Pulleys** 



QD, DST & Tapered Shaft Bushings



Weld-On Hubs



**MD Flex Couplings** 



**Jaw Couplings** 



**Sprockets** 



**Precision Roller Chains** 



Corrosion-Resistant Roller Chain



V-Belts & Timing Belts

Solve Industrial Motion Group is an industry-leading manufacturer and supplier of industrial-grade bearings and power transmission components.

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