



**LIKE-NEW PERFORMANCE
FOR A FRACTION OF THE COST**
SOLUTIONS FOR INDUSTRIAL BEARING
REPAIR AND MAINTENANCE

RUN LONGER FOR LESS

RECONDITIONING GIVES NEW LIFE TO YOUR BEARINGS AND MAXIMIZES THE SERVICE LIFE OF YOUR EQUIPMENT

WHY RECLAIM YOUR BEARINGS

Primetals Technologies is an industry leader in precision bearing manufacturing and repair. With more than 100 years of combined experience, we have what it takes to restore your critical bearings to like-new condition.

A reconditioned bearing from Primetals Technologies can cost 20- to 80-percent less than a new bearing. In some cases, a bearing can be reconditioned multiple times to improve service life and further reduce operating costs.

GOOD AS NEW

Bearing maintenance and reconditioning services from Primetals Technologies do more than make your bearings look nicer. In fact, reconditioning refreshes the inner rolling geometry of your bearings and keeps minor etching, denting and surface blemishes from propagating into major, unreparable fatigue damage.

Reconditioning restores life to your roller bearings and keeps them running longer.



Reconditioned bearings are returned to full service life and, in many cases, are better than when new.

MAIN BENEFITS OF PRIMETALS TECHNOLOGIES BEARING REPAIR SERVICES

- Maximized bearing life
- Fraction of the cost of a new bearing
- Faster turnaround than the typical lead time for a new bearing
- Multiple options and levels of repair to meet many needs and budgets.

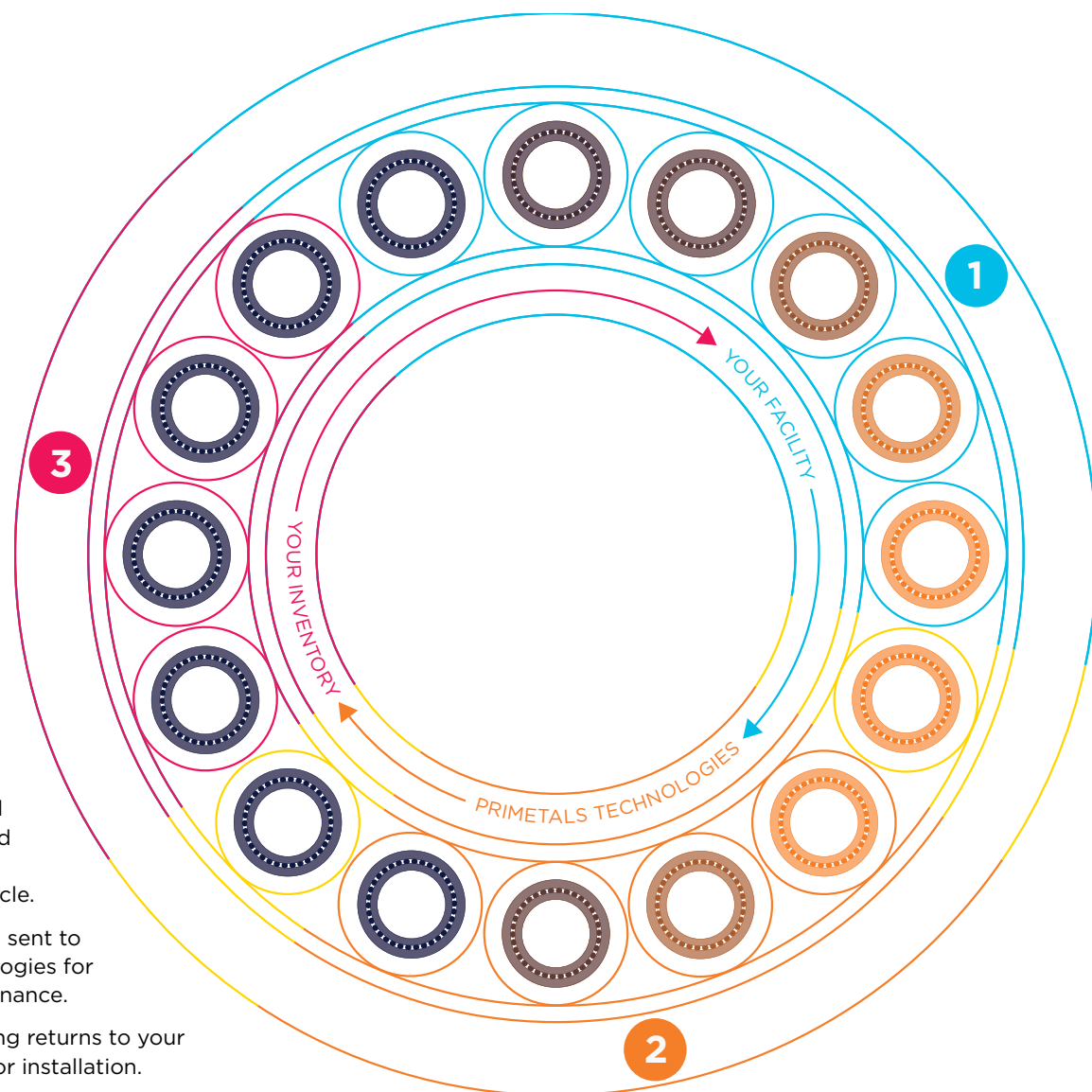
ELIMINATE DOWNTIME DUE TO LONG LEAD TIMES ON CRITICAL SPARES WITH A BEARING INVENTORY THAT PRACTICALLY PAYS FOR ITSELF

Remanufactured bearings by Primetals Technologies have a significantly shorter lead time than new bearings and can cost 20 to 80 percent less, depending on the scope of repair. Our bearing repair and maintenance services dramatically reduce downtime and lower operating costs while helping you to better manage your spares inventory.

HOW IT WORKS

Send your bearing to Primetals Technologies when it is taken out of service. Our highly-skilled bearing specialists rigorously inspect each bearing assembly.

Internal rolling elements are inspected visually and dimensionally, exceeding OEM bearing manufacturer specifications for geometry, roundness and surface finish. The reconditioned bearing is sent back to you and placed into a spares inventory. When the next bearing is removed, the reconditioned bearing can be installed immediately. This avoids costly downtime from waiting for out of stock parts. Send the used bearing to Primetals Technologies' bearing shop and the cycle repeats.



1. New or repaired bearing is installed and begins to run through its life-cycle.
2. Used bearing is sent to Primetals Technologies for repair and maintenance.
3. Like-new bearing returns to your inventory ready for installation.

REGARDLESS OF THE INDUSTRY BEARINGS FOR MOST APPLICATIONS CAN BE RECONDITIONED

BEARING RECONDITIONING FOR INDUSTRY

Primetals Technologies has the ability to recondition most bearings used in the following industries:

- Primary metals and rolling
- Mining
- Oil drilling
- Manufacturing
- Pulp and paper
- Wind power
- Power generation
- Gear drives

ALMOST ANY BEARING IS ELIGIBLE

- Tapered roller bearings
- Cylindrical roller bearings
- Spherical roller bearings
- Thrust bearings
- Ball bearings
- Specialty bearings



CUSTOM REPAIR OPTIONS

BASED ON OUR EXPERTS' BEARING KNOWLEDGE AND EXPERIENCE

TYPES OF REPAIR OPTIONS

Expert knowledge and experience are key factors in successfully reconditioning bearings. Most bearings that are nearing their fatigue life can be refurbished if a preventative maintenance system has been followed. Primetals Technologies has developed the following repair options to maximize the life of your bearings:

Type 1: Clean & inspect - This type of repair option involves a thorough cleaning with hot water & detergent, visual inspection and dimensional measurement of all components. Clearance checking and adjustment is performed as needed.

Type 2: Polish - This type of repair option includes all of the procedures done for a type 1 repair, plus damage analysis, quote to repair and polish all accessible components.

Type 3: Minor repair - This type of repair option includes all of the procedures done for a type 1 repair, plus damage analysis, quote to repair, polish accessible cone / roller sub assembly and grind cup raceways. This repair option is specifically for tapered roller bearings.

Type 4: Rebuild - This type of repair option includes all of the procedures done for a type 1 repair, plus damage analysis, quote to repair, raceway grinding of inner and outer raceways, a new set of rollers, replacement of pins if needed (if the bearing has a pin-type cage).

Type 4A, B, C, or D: Major rebuild - This type of repair option includes all of the procedures done for a type 1 repair, plus damage analysis, quote to repair, make (a) new replacement component(s) (A = inner race, B = outer race, C = cage, D = other part), a new set of rollers, and replacement of pins if needed (if the bearing has a pin-type cage).

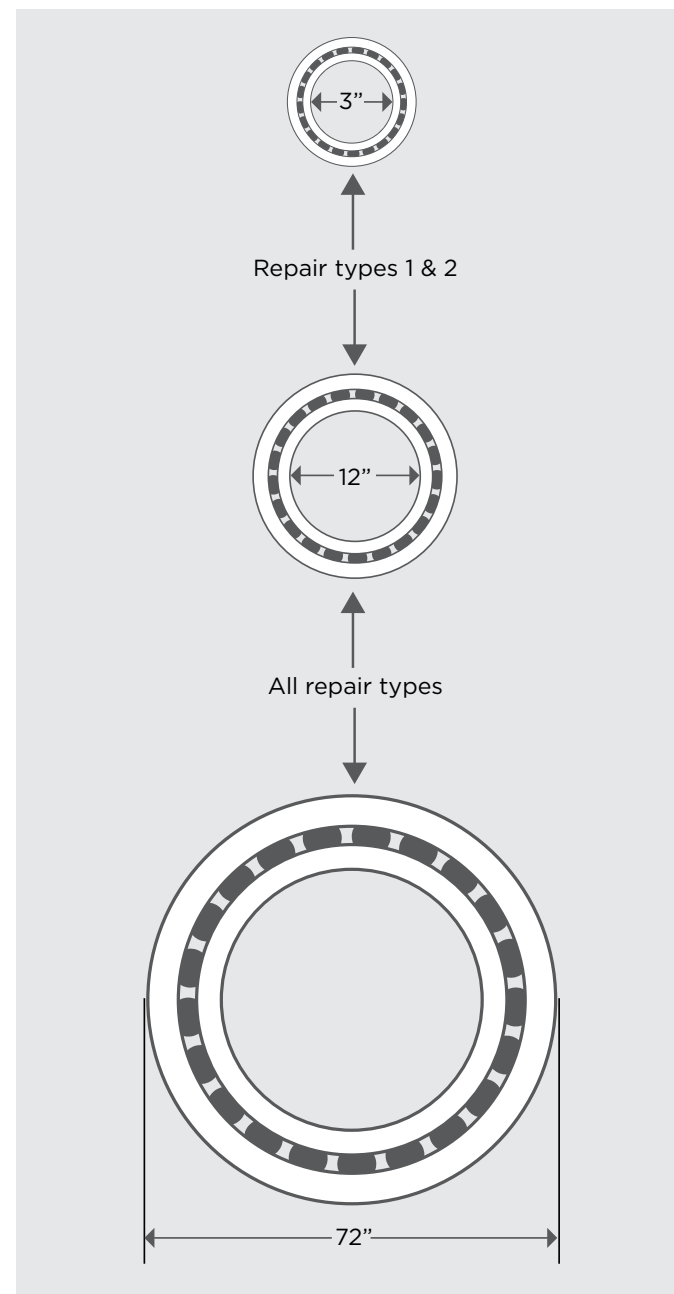
Type 7: Miscellaneous work, seals, and O-rings - This type of repair option includes replacing seals and O-rings, grinding cup or cone spacers and packaging for long-term storage.

Type 9: Manufacture complete new bearing - This option includes engineering, design and manufacture of a complete new bearing. Other types of repair are also available such as clearance change, bore change, lubrication holes and taper bore.

REPAIRABLE SIZES

Typically, any bearing that has a 12" diameter bore or larger is a great candidate for all types of bearing reconditioning.

Bearings from 3" to 12" diameter bore are great for repair types 1 & 2 only because of their cost to repair versus the cost of a new bearing.



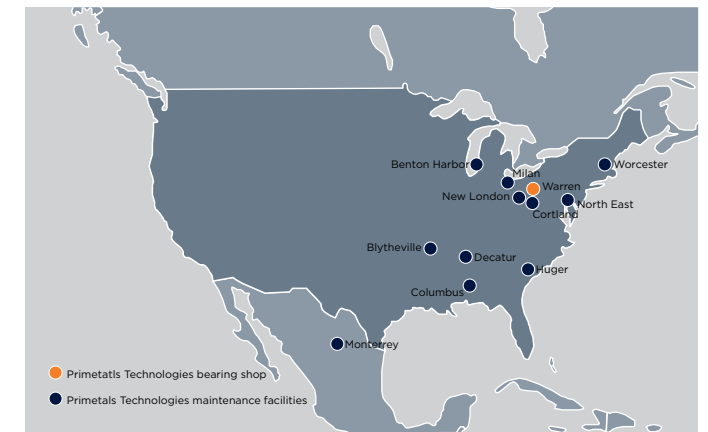
BEARING REPAIR IS A GREEN SOLUTION



BETTER FOR YOUR BOTTOM LINE AND BETTER FOR THE ENVIRONMENT

Bearing repair services from Primetals Technologies not only substantially reduce costs, they are also a green solution. Repairing a bearing consumes less energy and fewer raw materials than manufacturing a new bearing. The benefits of repair service are multiplied each time a single bearing is repaired and placed back into service.

PROUDLY MADE AND REPAIRED IN AMERICA



ALWAYS CLOSE TO OUR CUSTOMERS

Primetals Technologies' North American network of offices, engineering, workshop and service centers provide immediate support to our customers whenever required.

Primetals Technologies USA LLC

A joint venture of Mitsubishi Heavy Industries and partners

250 Dietz Road
Warren, OH 44483, USA
Tel: +1 (330) 395-6061

primetals.com

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