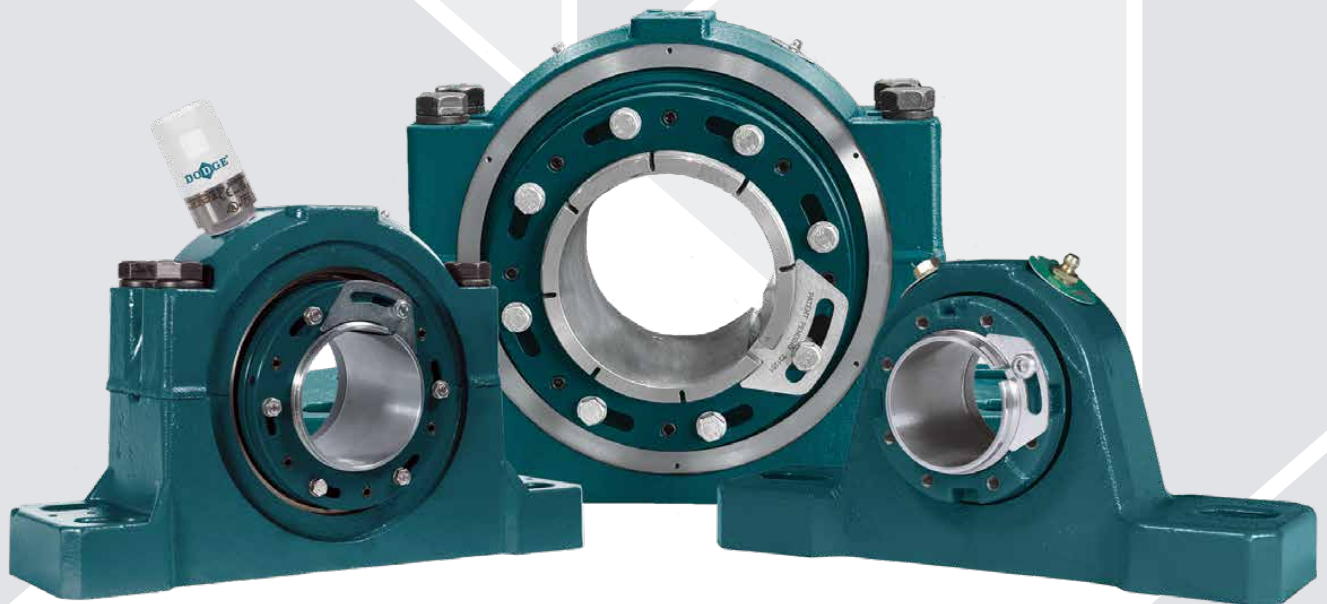


MOUNTED SPHERICAL ROLLER BEARINGS

Safety Mount® Family

Built-in mounting and dismounting to be safer, faster, and easier





Your trusted partner

With over 100 years of mounted roller bearing expertise, Dodge® is renowned for superior designs that outperform and outlast the competition. Our spherical roller bearing solutions can be found across the globe in the harshest industries from aggregate and mining to forest products and steel processing. Ideal for your most critical applications, our spherical roller bearings are world class for a reason. Safety and innovation are the pillars that continue to drive us forward, empowering you with the safest, highest quality, and most reliable solutions to keep your operations moving.

The safer, faster, and easier solution

With the launch of our patented push-pull adapter mounting system in 1996, the Safety Mount family of mounted spherical roller bearings has grown to represent the pinnacle of safety, reliability, and innovation. Shaft-ready out of the box, our Safety Mount bearings change the game by providing an installation with no guesswork or brute force required. The built-in mounting and dismounting system uses leverage to create a secure fit on the shaft and the predetermined clearance removes subjective calculations for a correct installation every time. With Safety Mount, experience the precision and reliability of innovation at work.

Precision engineered for a perfect fit and easy removal

With Safety Mount, the tapered adapter sleeve widely known and relied upon for spherical roller bearings gets a critical upgrade. Imagine installing a mounted bearing with no guesswork or brute force required and removing it with no shaft damage or dangerous tools—that is the power of the Safety Mount adapter mounting and dismounting system, so you can work smarter, not harder.

- **Wedge-tight attachment:** the patented lock nut design cleverly pulls the bearing up the adapter sleeve, creating a powerful wedge effect for a secure, precise fit
- **Predetermined clearance:** forget the old process of subjective measurements and manual calculations to correctly set bearing clearance, our engineering team did all the math for you—determining the exact clearance needed in advance for optimal performance and zero guesswork
- **Mechanical advantage:** the integrated design of the lock nut harnesses the power of mechanical advantage, rather than excessive force, to effortlessly clamp the adapter onto the shaft and to allow for easy removal



3-1/2 inch and smaller

Solid lock nut

Tapered adapter sleeve

3-11/16 inch and larger

- Split lock nut
- Patents: 8,857,061 and 9,284,979

Tapered adapter sleeve

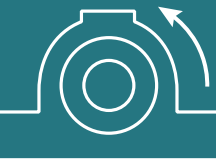
Mounting bolts

Dismount screws

Mounting

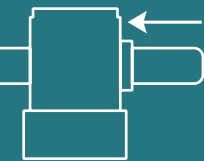
Loosen it

Rotate lock nut to expand adapter



Slide it

Mount bearing on shaft



Tighten it

Rotate lock nut to hand tight



Secure it

Tighten adapter to preset clearance



Lock it

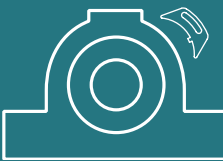
Install lock plate



Dismounting

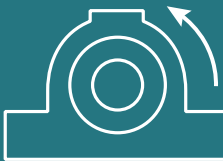
Unlock it

Remove lock plate



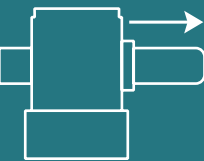
Loosen it

Use built-in mechanism to release adapter sleeve



Remove it

Slide bearing off shaft



Note: Refer to the appropriate instruction manual for full installation and removal instructions.

Innovative features for increased performance

Manufactured in the USA



Shaft-ready out of the box

Factory-assembled and pre-lubricated with Dodge engineering-approved grease to eliminate the opportunity for contamination and simplify installation—saving time and increasing reliability

Patent-pending lock plate

Single-bolt, reversible design allows for securement in any position, eliminating the need for adjustments to provide an even easier installation

Tapered adapter sleeve

Advanced, thin-walled design conforms precisely to the shaft to mitigate fretting corrosion while providing superior holding power and accommodating commercial shaft tolerances

Built-in expansion capability

Field-convertible between expansion and non-expansion for maximum installation flexibility

Outer-ring riding steel cage

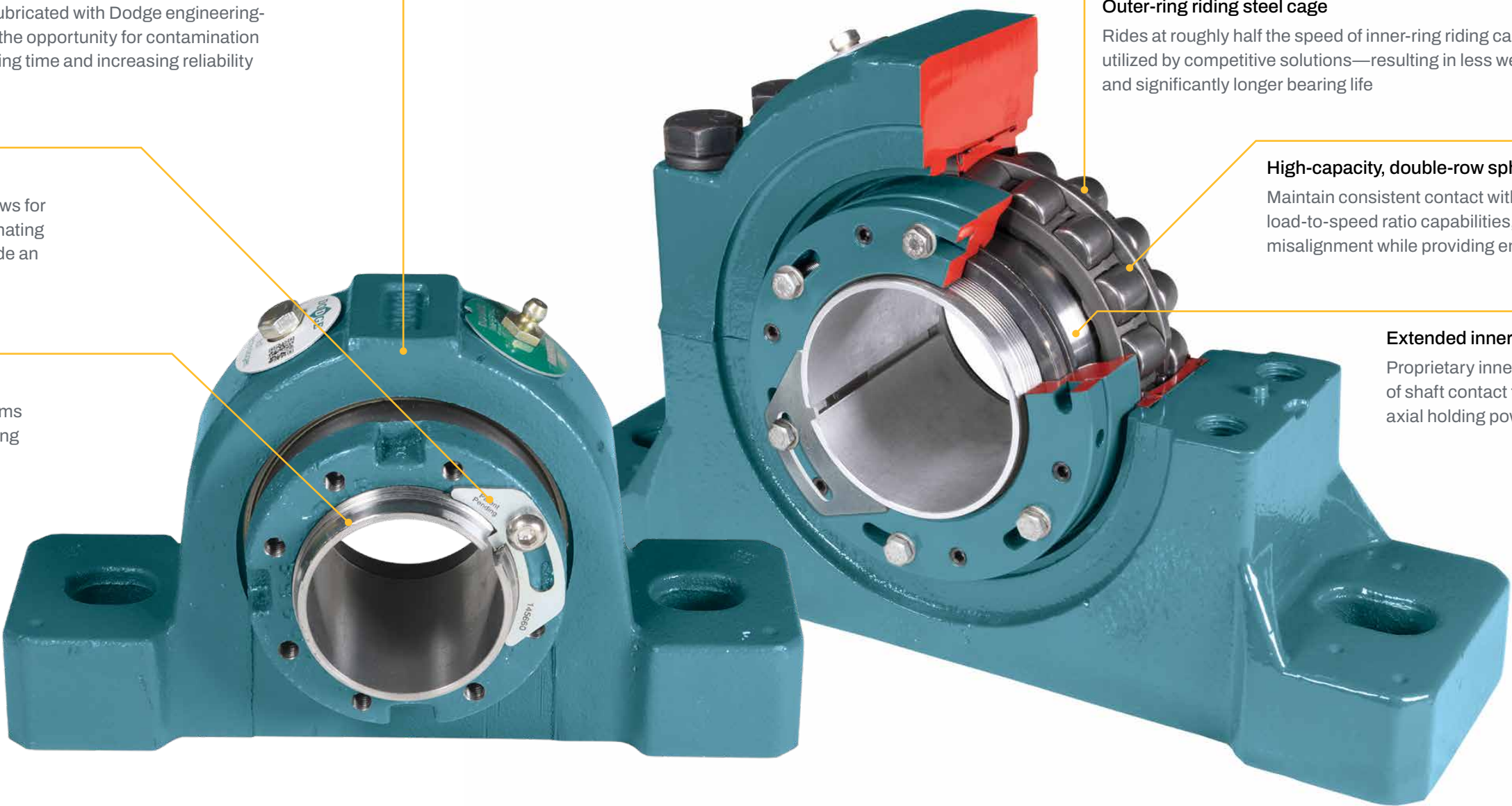
Rides at roughly half the speed of inner-ring riding cages utilized by competitive solutions—resulting in less wear and significantly longer bearing life

High-capacity, double-row spherical rolling elements

Maintain consistent contact with the outer ring, optimize load-to-speed ratio capabilities, and accommodate dynamic misalignment while providing enhanced load capacity

Extended inner ring

Proprietary inner ring design maximizes area of shaft contact for over 17 percent greater axial holding power than the competition



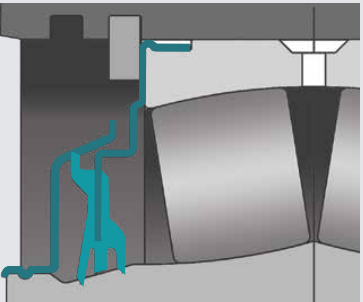
Sensor-ready

Easily install OPTIFY sensors to remotely monitor bearing health for enhanced predictive maintenance and improved on-site safety



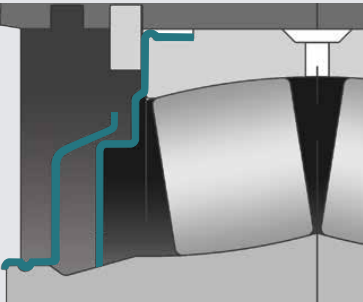
OPTIFY™ Intelli-Lube® compatible

Seamlessly replace manual lubrication to effortlessly extend the life of your mounted bearings



Trident™ triple-lip seal

Mechanically-retained seal provides three points of contact featuring a tapered seal landing to prevent seal blowout and contamination for extended product life



Labyrinth seal (optional)

Corrosion-resistant flinger and steel clearance seal offer protection in high-speed and high-temperature applications

IP

Solid-housed design

Launched in 1996, Safety Mount IP boasts the original, patented design that spearheaded the revolutionary push-pull adapter system that sets the Safety Mount family apart. The unitized bearing is available in standard cast iron and steel housings, as well as Type E-dimensioned units—providing a high-capacity, reliable solution across a wide range of applications.

For the harshest applications, the rugged cast-steel housing provides superior durability and maximum tensile strength over standard ductile iron for optimized performance—backed by a lifetime guarantee against breakage in the cast-steel housing.

Housing options	Housing material	Bore size range
• 2-bolt pillow block • 4-bolt pillow block • 3-bolt round flange • 4-bolt round flange	• 4-bolt square flange • Piloted flange • Narrow piloted flange • Wide-slot take-up Cast iron or steel	1-1/8 in—7 in (35 mm—125 mm)



ISN

SN-dimensioned solution

Safety Mount ISN mounted spherical roller bearings are the drop-in replacement solution to traditional SN-dimensioned products, extending the Safety Mount legacy to keep your operations up and running across the globe.

Traditional SN plummer blocks require on-site assembly and lubrication, exposing the bearing to contamination upon installation and greatly increasing potential for premature failure. Misaligned applications result in diminished seal pressure, further exposing the bearing to contamination. Upon replacement, SN bearings require the use of dangerous tools for removal. Safety Mount ISN is shaft-ready with a built-in mounting and dismounting mechanism and enhanced sealing, offering a superior solution at every turn.

Housing options	Housing material	Bore size range
• 2-bolt pillow block • 4-bolt pillow block	Cast iron	30 mm—170 mm (1-1/8 in—6 in)



ISAF

Split-housed, SAF-dimensioned unit

SAF-style bearings are notorious for inferior sealing systems and complicated installations that require full component assembly and on-site lubrication. Their ineffective grease paths prevent clean grease from reaching the rolling elements—failing to protect against contamination and leading to premature failure. Additionally, the requirement to use feeler gauges to set bearing clearance introduces subjective calculations, often resulting in inconsistent installations that compromise reliability.

Dimensionally interchangeable with traditional SAF-style bearings, Safety Mount ISAF features a split-housed design to accommodate static or dynamic misalignment up to a total of two degrees. Its optimized housing design uses five times less grease than SAF bearings and its superior sealing system ensures correct lubrication without the risk of seal blowout. With more than 80 percent of bearing failures caused by lubrication issues, ISAF is engineered for superior reliability and dependable performance—being available in bore sizes up to 10.5 inches for expanded application versatility.

Housing options	Housing material	Bore size range
• 2-bolt pillow block • 4-bolt pillow block	Cast iron	1-7/16 in— 10-1/2 in (35 mm—260 mm)



Safety Mount ISAF	VS	SAF
✓	Pre-lubricated	×
✓	Pre-assembled	×
Triple-lip	Seal points of contact	Varies
✓	Tapered seal landing	×
✓	Effective grease purge capability	×
✓	Only common hand tools needed	×
✓	Built-in dismount capability	×
✓	Preset clearance (no feeler gauges required)	×
USA	Manufacturing location	?



Engineered for savings, proven in performance



\$578,502

Grain industry cost savings

In the \$94 billion dog food market, an industry-leading grain processing plant in southwestern Missouri plays a crucial role by producing a significant portion of the global dry and wet dog food supply. Blower fans play a critical role in mitigating equipment failure at their plant, but were continually overheating due to contamination of the existing 300-series mounted ball bearings utilized on the fans. Each bearing failure caused over \$195,000 in material, labor, and downtime costs.

Plant management installed Safety Mount bearings and immediately realized significant improvements in system reliability with no signs of failure due to overheating—saving the plant \$578,502 in annual costs. The successful results led plant management to implement the Safety Mount solution on all 15 blower fans to maximize production output and minimize maintenance costs.

Get the full story



\$163,018

Forest product industry cost savings

At a leading lumber manufacturer’s mill in Warren, Arkansas, competitive SAF-style bearings on their dry kiln fans were failing annually—requiring two skilled maintenance workers, 6 hours of labor per replacement, and costing \$40,800 per hour in production value. The plant tested two Safety Mount bearings on one of the fans, which immediately resulted in reduced installation time from 6 hours to 2 hours and provided an annual cost savings of \$163,018. The preassembled, pre-lubricated solution led to significantly improved reliability in the highly contaminated environment, leading plant management to standardize their facility on Safety Mount bearings to maximize uptime.

Get the full story



\$156,863

Wastewater industry cost savings

A large wastewater treatment plant in the northeastern US experienced continual SAF-style bearing failure at their rotating biological contactors, which operate around-the-clock and expose the bearings to constant splashing and corrosive elements. The switch to Safety Mount provided an easy, drop-in replacement to the existing bearing while reducing exposure to contamination upon installation—resulting in annual savings of \$156,863 and over 16 hours of labor saved per bearing replacement. The plant soon standardized their operations on the Dodge solution.

Get the full story



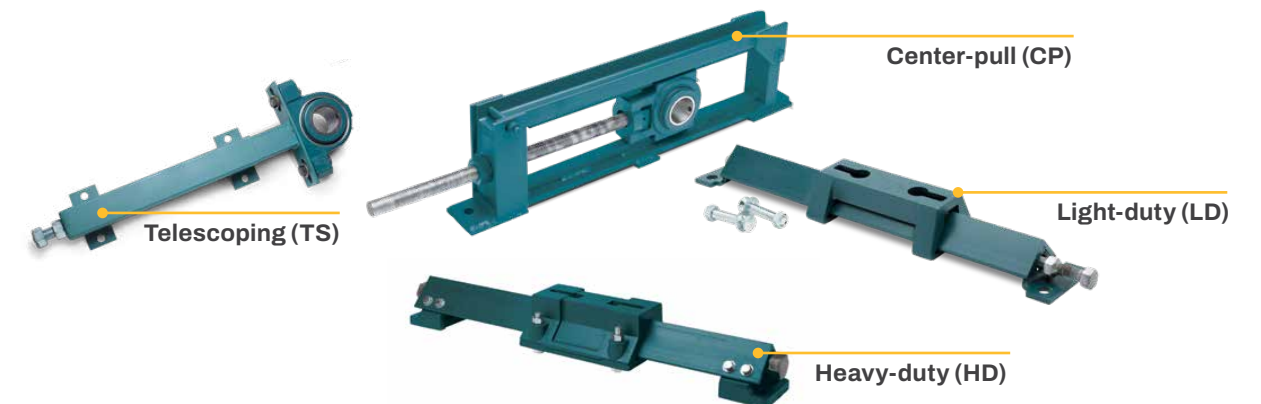
Manufactured in the USA for over 100 years

Our mounted roller bearings are manufactured at our facility in Marion, NC that adheres to ISO 9001:2015 Quality Management System and world-class quality standards to provide you with unparalleled product availability and reliability. With multiple warehouse locations across the USA, there isn't another mounted bearing manufacturer in the world that can provide you with the same level of support.



Take-up frames for added support

Take-up frames provide a structure to install mounted bearings, promote belt tracking, prevent belt slippage, and maintain shaft centers for belt conveyor systems with a manual take-up design.



Safety, more than an accessory

When extra protection is needed, easy-to-install end covers are available to keep your employees safe from rotating shafts and minimize risk of on-site injuries while accommodating OSHA and MSHA safety guidelines.



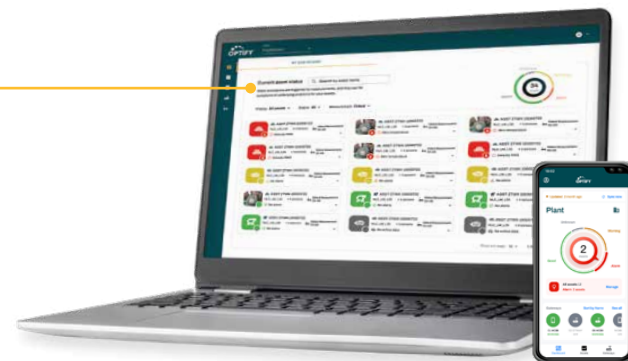


Work smarter, not harder

OPTIFY, our portfolio of Industrial Internet of Things (IIoT) solutions, allows you to easily monitor the overall health of your power transmission equipment and gain powerful insights—letting you know when maintenance is needed before it's too late.

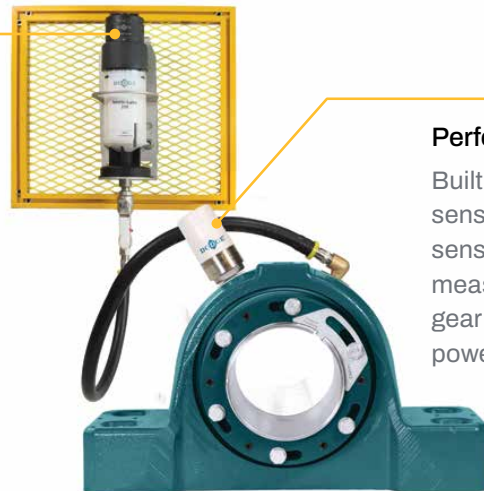
Platform

Take the guesswork out of work with the free OPTIFY condition monitoring platform that empowers you with overall health indicators of your assets anytime, anywhere through its web portal or mobile app—providing you with a continuous flow of data for safe, hands-free gathering of measurements



Intelli-Lube

The premier automatic, connected lubricator that effortlessly extends the life of your bearings by replacing your manual lubrication process—streamlining maintenance, lowering costs, and improving safety with the right grease, volume, and interval every single time



Performance Sensor

Built on the proven success of Dodge sensors, the specialized wireless sensor remotely captures accurate measurements in your mounted bearings, gear reducers, and motors for complete powertrain condition monitoring

Scan to access OPTIFY
or visit dodgeoptify.com



The OPTIFY app is available at:



PT Wizard

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Backed by over 145 years of engineering excellence, PT Wizard is the easy-to-use program that provides a guided experience with built-in tools at your fingertips to ensure you can quickly find the exact solution you need.

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- Competitive interchange
- Belt conveyor design tool
- Bearing grease calculator



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