

# Mechanical Power Transmission Solutions

Global product offering



## Who we are

Since 1878, Dodge<sup>®</sup> mechanical power transmission products have handled the toughest applications, providing the lowest total cost of ownership to our customers. Dodge offers a complete line of mounted bearings, enclosed gearing, mechanical drives, couplings, conveyor components, and connected condition monitoring solutions—all engineered and manufactured to perform reliably, with less maintenance.

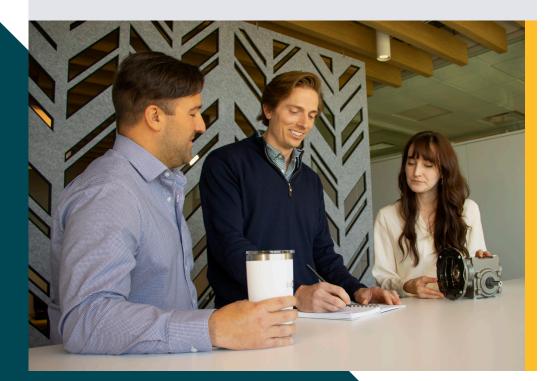
Over a century of experience applying mechanical products throughout a wide range of industries means we understand issues that impact productivity and can offer expertise to improve output and efficiency.

Dodge is your partner for total mechanical power transmission solutions:

- Innovative and globally compatible
- Designed for safety and reliability
- Easy installation, maintenance, and removal
- Feature-rich, high-quality, and long-lasting
- Lowest total cost of ownership

## **Our mission**

Reliably equip our customers with the safest, highest-quality mechanical power transmission solutions to achieve their strategic goals.



## **Mounted bearings**

#### Fully assembled bearings, ready for industrial use

Mounted bearings offer innovative designs, patented features, and consistent performance with a wide range of shaft attachment methods, rolling elements, housings, and seal choices. Our US-manufactured mounted bearings are designed to improve safety, maximize production, and lower operating costs.



	Ball bearings	Roller bearings	Plain bearings
Description	<ul> <li>Cast-iron, stainless-steel, or polymer housings</li> <li>Set screw, concentric collar, eccentric collar, and adapter mount</li> </ul>	<ul> <li>Tapered and spherical rolling elements</li> <li>Cast iron, ductile iron, or steel housings</li> <li>Set screw, clamp collar, adapter mount</li> </ul>	<ul> <li>Hydrodynamic and sleeve bearings</li> <li>Tin, carbon, polymer, and bronze inserts</li> <li>Cast-iron or polymer housings</li> </ul>
Recommended use	<ul> <li>Light to moderate loads</li> <li>Low to high speeds</li> <li>Clean, corrosive environments</li> <li>Shaft sizes 1/2— 3-1/2 inches (17—85 mm)</li> </ul>	<ul> <li>Light to heavy loads</li> <li>Low to moderate speeds</li> <li>Clean, harsh environments</li> <li>Shaft sizes 1-1/2—15-3/4 inches (35—200 mm)</li> </ul>	<ul> <li>Constant rotating rotors</li> <li>Low- to high-temperature applications</li> <li>Sleevoil<sup>®</sup>: Shaft sizes 1-7/16—14 inches (40—75 mm)</li> </ul>
Applications	<ul> <li>Unit handling, commercial air handling, food processing, beverage, pharmaceutical, forest products, baggage handling</li> </ul>	• Bulk material handling, industrial air handling, food processing, grain, roll-out tables, forest products, pulp and paper	<ul> <li>Fans for the power, oil and gas, pulp and paper, cement, and metal industries</li> <li>High-temperature fans</li> </ul>
Features and benefits	<ul> <li>High-performance sealing arrangements</li> <li>Numerous shaft-locking solutions that optimize performance</li> <li>Multiple seal configurations improve reliability</li> </ul>	<ul> <li>High-performance sealing arrangements</li> <li>Numerous shaft-locking solutions</li> <li>Ease of installation and removal</li> <li>Sensor-ready</li> </ul>	<ul> <li>High-load handling capability</li> <li>Sleevoil: Water-cooled liner</li> <li>Long lifecycle due to limited moving parts</li> </ul>

# **Market leader**

in North America for mounted bearings





# **Enclosed** gearing

### Engineered for reliability

Gearbox products deliver industry-leading performance in some of the most demanding applications, featuring innovations that provide you with maximum uptime with less maintenance.



	Tigear <sup>®</sup> -2	Quantis®	Torque-Arm family	Maxum <sup>®</sup> XTR/ MagnaGear XTR®	Controlled Start Transmission (CST)
Horsepower	Up to 25 hp (18 kW)	Up to 75 hp (55 kW)	Up to 400 hp (300 kW)	Up to 2,700 hp (2,000 kW)	Up to 2,500 hp (1,865 kW)
Torque capacity	Up to 6,800 lb-in (773 Nm)	Up to 110,000 Ib-in (12,500 Nm)	Up to 110,000 lb-in (12,500 Nm)	Up to 3,500,000 Ib-in (395,000 Nm)	Up to 2,500,000 lb-in (282,500 Nm)
Description	• Worm-style gearing	<ul> <li>Helical or helical-bevel style gearing</li> <li>Three styles in a modular configuration for use in almost any application</li> </ul>	<ul> <li>Helical or helical-bevel gearing styles</li> <li>Easy to install, patented industry-proven twin-tapered bushing system</li> </ul>	<ul> <li>Maxum XTR: Concentric gearing</li> <li>MagnaGear XTR: Helical, helical-bevel, or planetary gear options</li> <li>Harsh-duty features standard</li> </ul>	<ul> <li>Helical, helical-bevel, or planetary gear options</li> <li>Hydro-viscous clutch system</li> <li>Harsh-duty features are standard</li> </ul>
Features and benefits	<ul> <li>Most robust and longest- lasting worm gear design in the market</li> <li>Available from stock</li> <li>Maintenance- free and ready to install</li> <li>E-Z Kleen<sup>®</sup> and FoodSafe<sup>™</sup> options available for harsh washdown applications</li> <li>Sensor-ready</li> </ul>	<ul> <li>98.5 percent efficient per stage</li> <li>Available with c-face inputs for end user convenience or as an integral gearmotor to minimize cost and footprint</li> <li>E-Z Kleen and FoodSafe options available for harsh washdown applications</li> <li>Sensor-ready</li> </ul>	<ul> <li>Lowest total cost of ownership of any shaft- mount reducer in the world</li> <li>Available from stock</li> <li>Multiple mounting options</li> <li>Flexible modular design</li> <li>Sensor-ready</li> </ul>	<ul> <li>Rugged AGMA design provides reliability in the toughest applications</li> <li>Compact power- dense design</li> <li>Flexible mounting options</li> <li>Sensor-ready</li> </ul>	<ul> <li>Consistent, controlled, and adjustable starts and stops</li> <li>Smooth start of high-inertia loads on long conveyors</li> <li>Excellent load-sharing capabilities</li> </ul>

# Mechanical drives, couplings, and conveyor components

#### A worldwide reputation for reliability and quality

The Dodge offering of power transmission components leads the industry with an extensive portfolio that improves overall system reliability. Whether you are looking for a mechanical drive system, coupling, or conveyor pulley assembly, each product is engineered to exceed expectations in the most rugged applications. For more than 145 years, quality designs have proven to maximize uptime in any application, allowing you to meet your growing demands.



	Mechanical drive components	Coupl
Description	V-belt sheaves, synchronous sprockets, bushings, and belts are used to change the rotational speed between two pieces of equipment.	Coupli solutic equipr torque
Features and benefits	<ul> <li>Simple speed adjustment</li> <li>Acts as mechanical fuse to protect gearboxes and motors</li> <li>Synchronous belt drives deliver 98 percent energy efficiency with no maintenance after initial install</li> </ul>	<ul> <li>Exterequi</li> <li>Danin ag</li> <li>Acts to priand</li> <li>and</li> </ul>







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**Conveyor pulleys** 

lings provide an easy on to connect rotating e.

Conveyor pulleys support, train, and guide the belt while transferring ment and safely transmit the required driving power to move your conveyor system.

ends rotating lipment life mpens shock loading

- aggressive applications ts as mechanical fuse
- protect gearboxes
- motors

- Pulleys available from stock as individual components or complete assemblies
- Standard and proprietary lagging options to extend the life of your pulley and conveyor belt
- Robust offering with durable construction for application versatility
- Variety of bushing options for guick installation and removal

# **OPTIFY**<sup>TM</sup>

#### Connected technologies to work smarter, not harder

OPTIFY, the Dodge portfolio of Industrial Internet of Things (IIoT) solutions, you can 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	Performance Sensor	Intelli-Lube®	Breather	Gateway
Description	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.	Built on the proven success of Dodge sensors, the specialized wireless sensor remotely captures temperature, vibration, and speed measurements in your mounted bearings, gear reducers, and motors for complete powertrain condition monitoring.	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.	The connect breather solution is engineered to eliminate gearbox contamination and allows you to tap into the power of the OPTIFY platform for remotely monitoring breather health—enhancing gearbox reliability and simplifying on- site maintenance.	Our gateways enable routine, hands-off collection of sensor data, unlocking the true condition monitoring potential for your operations and maximizing on-site safety.

# **System1** Trusted conveyor design partner

For larger projects, our System1 team specializes in customized conveyor drive solutions. Equipped with unmatched design engineering and in-depth industry and product knowledge, the System1 team delivers packaged solutions in the mining, aggregate, cement, grain, wastewater, and other industries with bulk material handling applications. With capabilities from project optimization, to shipping preassembled drive packages and complete pulley assemblies, Dodge System1 is the one-stop shop to meet all of your needs.

## **Field services** Your partner for the life of your products

Factory-trained service technicians with proven experience in the field are Dodge product experts and are available for on-site assistance with installation, commissioning, maintenance, and more for your Dodge mechanical and digital solutions.

Backed by 145 years of industry leadership, our field services are the ideal solution to support increasing reliability and keeping your operations running smoothly to maximize uptime and minimize ongoing maintenance costs.

# **eCommerce and selection tools** Two elite platforms, one seamless experience

Dodge combines the power of PT Wizard and PT Place to create a seamless selection and ordering experience that helps you save time and stay within budget.

PT Wizard guides users through product selections, system design, and part number interchanges. PT Wizard delivers pricing through the seamless connection to PT Place, the Dodge eCommerce platform, where customers can select and buy Dodge products through single, packaged, or bulk orders.





Dodge Industrial, Inc. 1061 Holland Road, Simpsonville, SC 29681 +1 864 297 4800

#### dodgeindustrial.com

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