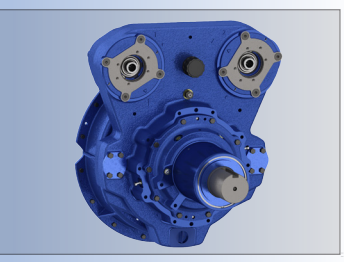
PTTECH®
BY TIMKEN



PT Tech Products & Services

PT Tech was established in 1978 when we designed the first tamper-proof torque limiter for underground mining equipment. Today, we are recognized worldwide as a leader in developing innovative Diesel Engine Clutches, Brakes and Torque Protection Equipment. We understand the extreme conditions your equipment faces and have the engineering and service expertise to help solve your toughest problems.

PRODUCTS

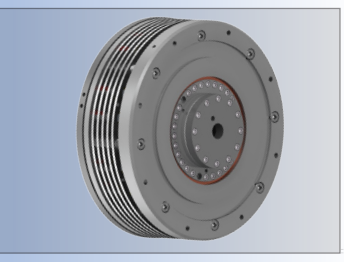


Hydraulic Power Take-Off Clutches

Key Features
- Hydraulically applied friction clutches designed for diesel engines with dry and wet disc pack configurations ranging from 80hp to 1600hp, with option for live pump drives.
- Our patented electronic controls monitor and adjust to real-time operating conditions, preventing machine damage while minimizing downtime.
- Compatible with both direct and transverse drive systems.

Benefits
- Low maintenance.
- Patented microprocessor technology helps start equipment, even in harsh conditions.
- Real-time data logging.
- Patented Energy Management Logic extends disc pack life.

Markets Served
Wood waste grinding, rock crushing, marine, dredges, mud pumps, snow blowing, air compressors and agriculture.

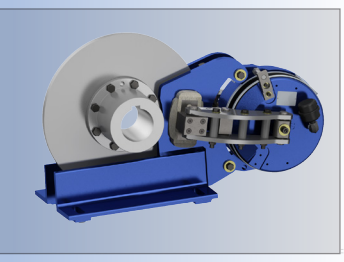


Torque Limiters

Key Features
- Continuously engaged friction torque limiters with a wide variety of drive line configurations, available from 100 to 100,000 lb-ft of torque.
- Reliable and accurate torque settings reduce fatigue and component breakage due to drive line shock loads.
- Tamper-resistant torque setting needs no maintenance throughout the life of the torque limiter.

Benefits
- Protects your drive line or spindles from damage and downtime.
- No resetting is required after a slip event.
- Operator cannot adjust torque.

Markets Served
Mining, shredding/grinding, road paving, processing lines, rolling mills and metals/minerals.

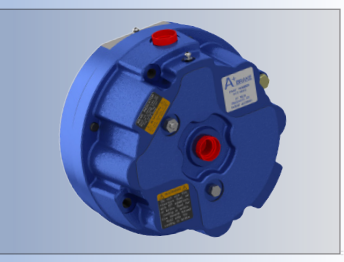


Caliper Disc Brakes

Key Features
- Drop-in replacements for drum-style brakes ranging from 100 to 4,000 lb-ft of holding torque.
- Greater thermal capacity and more heat-resistant than drum brakes.
- Meets AIST #11 specification, allowing for the same footprint as the drum brake it replaces.
- Available in both series and shunt coil models.

Benefits
- Wear adjustments and friction puck replacements can be performed in five minutes or less.
- Unique caliper arm design easily accommodates 3/16 - inch axial movement of DC mill motors.

Markets Served
Metal/material handling, heavy lifting, overhead cranes and trolley drives.

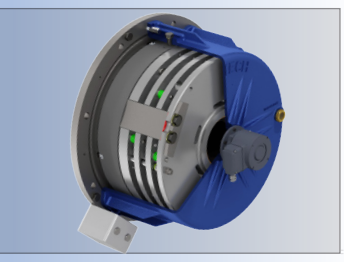


Wet Brakes

Key Features
- Offers both a service brake and parking brake integrated into one design.
- Parking brake is spring set with a separate circuit to release for increased safety.
- Designed for high speed with low drag.
- Flow-through cooling for high thermal capacity and increased life.
- Available in both market and customizable products.

Benefits
- Integrated design improves safety and performance.
- Easy maintenance and rebuildable for a long service life.
- Design has been perfected over 30 years of developing wet brakes for challenging environments.

Markets Served
Mining, shuttle cars and conveyors.

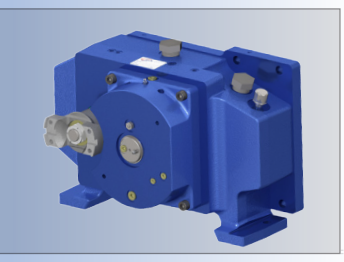


Motor Mounted Brakes

Key Features
- Spring-applied, electrically released brakes designed for extreme duty.
- Optimized for high-dynamic torque, improved stopping power and thermal capacity.
- Multiple-plate design allows for a wide product range.

Benefits
- Easy wear monitoring allows for predictive preventative maintenance.
- Designed for reduced wear adjustment and simplified maintenance.
- Easily rebuildable for increased life.
- Backup dynamic braking for VFD drives.

Markets Served
Mining and marine.



Gearboxes

Key Features
- Custom designed for a wide variety of applications.
- Integrated hydraulically applied brakes and/or clutches.
- Available with single- or dual-axle output shafts.
- Variable ratios available with standard brake packages.
- Excellent thermal capacity with flow-through cooling.

Benefits
- Separate standalone clutch or brake not needed.
- Brake or clutch can be rebuilt without complete disassembly.
- Saves on component cost.
- Can be remotely actuated.
- Helical gearing available for smooth, quiet operation.

Markets Served
Mining, wood waste grinding, dredging and agriculture.

Our Services

Certified Rebuilds
- Complete teardown, rebuild and certification testing is available for all PT Tech products.

Field Service
- We quickly respond to your needs by sending expert product-trained technicians to the field.

Testing
- Servo-hydraulic load-frame, torque/energy testing, FFT vibration/noise, dynamometer, high-speed video, infra-red thermal imaging video, environmental and life-cycle testing services are available.

PT TECH BY TIMKEN

PT Tech, LLC | 330.239.4933 | www.pttech.com | 1441 Wolf Creek Trail, Wadsworth, OH 44281 U.S.A. | Shanghai, China | Plymouth, UK.

04-19 :29 Order No.11214 | Timken® is a registered trademark of The Timken Company. | © 2019 The Timken Company | Printed in U.S.A.