



TIMKEN

PRECISION
DRIVES

for CONSTRUCTION

RUGGED MOTION FOR HEAVY-DUTY EQUIPMENT

From cranes and aerial platforms to material handling and specialty equipment, Timken Precision Drives delivers robust motion technologies engineered to move, position, and support demanding loads.

Cranes **Aerial Platforms** **Utility Trucks** **Demolition Robotics** **Concrete Equipment** **Specialty Vehicles**

Designed to Meet Critical Requirements

- ✓ High torque capacity
- ✓ High radial, axial, and moment load capacity
- ✓ Shock and impact resistance
- ✓ Long service life
- ✓ Reliable operation in demanding environments

Timken Precision Drives combines **slew drives and bearings, worm, planetary, cycloidal, and custom gearing technologies** with **precision bearings and engineered motion solutions** for demanding construction and heavy-equipment applications.



Aerial Work Platforms

Built on Timken Capabilities

- ✓ Global manufacturing and support
- ✓ Collaborative application engineering
- ✓ Advanced engineering and R&D resources
- ✓ Decades of proven quality systems
- ✓ Standard, modified, and custom solutions
- ✓ Multiple motion technologies



Demolition Robotics



Utility Trucks

Precision motion. Global engineering and manufacturing. Timken quality.



TIMKEN

PRECISION DRIVES

**SPINEA****TIMKEN
ENCODERS**

ONE PARTNER. MULTIPLE MOTION TECHNOLOGIES.

Distinct technologies engineered for different motion challenges.
Together, they create one of the industry's most comprehensive precision motion portfolios.



STRAIN WAVE GEARING

Compact, zero-backlash precision

- ✓ Zero backlash
- ✓ High reduction ratios
- ✓ Exceptional positioning accuracy



CYCLOIDAL GEARING

High torque and exceptional rigidity

- ✓ High torque capacity
- ✓ Exceptional torsional stiffness
- ✓ DriveSpin® integrated actuators



WORM GEARING

Reliable right-angle motion

- ✓ High torque capacity
- ✓ Wide range of reduction ratios
- ✓ Flexible mounting configurations



PLANETARY GEARING

Compact, efficient power transmission

- ✓ High power density
- ✓ Low backlash options
- ✓ Efficient torque transmission



SLEW BEARINGS & DRIVES

Integrated rotary positioning

- ✓ High-capacity rotary positioning
- ✓ Smooth rotary positioning
- ✓ Bearing and drive configurations



MICRO GEARING

Miniature precision motion

- ✓ Extremely small package sizes
- ✓ Precision gearheads
- ✓ Custom configurations available



MAGNETIC ENCODERS

High-resolution motion feedback

- ✓ High-resolution position sensing
- ✓ Accurate speed feedback
- ✓ Compact, integrated design



ENGINEERED SOLUTIONS

Integrated motion solutions

Standard, modified, and custom solutions backed by application engineering expertise.

Why Timken Precision Drives?

- ✓ Multiple Motion Technologies
- ✓ Proven Quality & Reliability
- ✓ System-Level Engineering
- ✓ Global Support
- ✓ Standard, Modified, & Custom Solutions
- ✓ **125+ Years of Innovation**

One Partner. Every Motion Challenge.