METAL SOLUTIONS

COUPLINGS, SHEAVES & PULLEYS

METAL PRODUCTS

Optibelt has a long history of manufacturing high quality power transmission belts. This engineering expertise and application excellence has lead Optibelt to develop key products and partnerships for metal drive components. Optibelt can engineer customer's complete drive systems for standard or custom drive solutions.

COUPLINGS

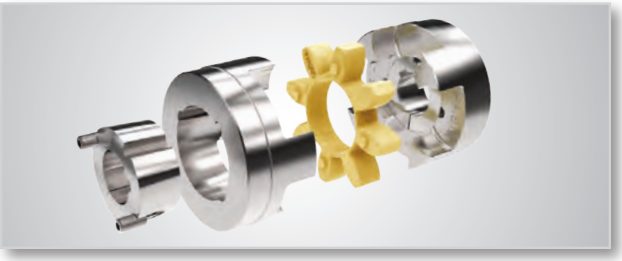
Tecnamic, formally known as Desch DPC, has a long history providing standard and custom coupling solutions to the power transmission industry.

PULLEYS, SHEAVES & BUSHINGS

Optibelt can provide almost any size of pulley, sheave or bushing. We stock metric and Imperial sizes. Our mission is to exceed our customer's expectation in design, performance and value. Custom engineered products are available.

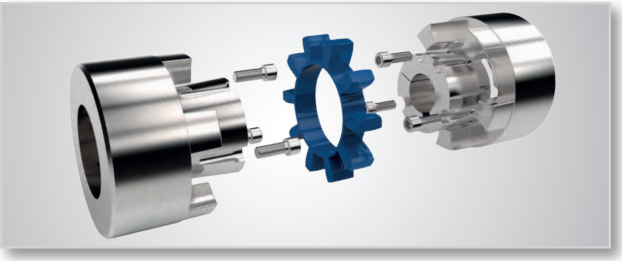
FLEXIBLE COUPLINGS

Tecnamic couplings feature flexible dampening elements that protect your machines from unforeseen drive line spikes, accommodates misalignment and absorb harmful vibrations to keep your machines safe and business running.



HABIX®

- Fail-safe plug-in / jaw coupling with flexible element (spider)
- **Max. Bore:** 100mm **Nominal Torque up to:** 3,600 Nm
- **Types:** HWN (pre-drilled), HWT (for taper bushings), Plus (backlash-free type, pre-drilled or with finish bore)
- Standard applications with normal requirements regarding torque and damping capabilities



HADEFLEX®

- Fail-safe plug-in / jaw coupling with flexible element (spider)
- **Max. Bore:** 160mm **Nominal Torque up to:** 15,000 Nm
- **Types:** XW (pre-drilled), TX (for taper bushings), F (two and three-part version)
- Standard applications with normal requirements regarding torque moment and damping capabilities

HRC

- Fail-safe enclosed plug-in / jaw coupling with flexible element (spider)
- **Max. Bore:** 115mm **Nominal Torque up to:** 3,150 Nm
- **Types:** B (pre-drilled), F and H (for taper bushings)
- Applications with increased requirements on torque and damping capabilities

PEX

- Fail-safe plug-in / jaw coupling with flexible elements
- **Max. Bore:** 100mm **Nominal Torque up to:** 2,800 Nm
- **Types:** A (three-part), B (two-part)
- Applications with increased requirements on torque and damping capabilities

ORPEX®

- Fail-safe pin coupling with flexible elements
- **Max. Bore:** 640mm **Nominal Torque up to:** 1,300,000 Nm
- **Types:** WN (grey cast iron), WS (steel)
- Applications with high requirements on transmitted torque and damping capabilities

FLEX

- Highly flexible tire coupling
- **Max. Bore:** 190mm **Nominal Torque up to:** 14,675 Nm
- **Types:** B (pre-drilled), F and H (for taper bushings)
- Applications with increased requirements on damping capabilities and shaft compensation values

RIGID COUPLINGS

Tecnamic rigid couplings securely link your drive shafts together. These couplings provide the assurance to protect your expensive machinery from unforeseen drive line spikes, accommodate misalignment and transfers high torque through the drive line.

MINI COUPLINGS

- Slotted backlash-free clamp coupling
- **Max. Bore:** 40mm **Nominal Torque up to:** 220 Nm
- **Types:** MWK (clamp hub slotted), MWH (half-shells)
- Applications with low requirements on transmitted torque and damping capabilities
- Ideal for limited installation spaces

CLAMP COUPLING

- Easy-to-assemble shaft connection
- **Max. Bore:** 50mm **Nominal Torque up to:** 2,250 Nm
- **Types:** Slotted 1-piece and split 2-piece design in steel and stainless steel
- Simple and easy-to-assemble shaft connections

CLAMP COUPLING DIN 115

- Simple shaft connections with no specific requirements on damping capabilities
- **Max. Bore:** 220mm **Nominal Torque up to:** 80,000 Nm
- Simple and easy-to-assemble shaft connections with no specific requirements on damping capabilities

NG DIN 116

- Easy-to-assemble shaft connection
- **Max. Bore:** 500mm **Nominal Torque up to:** 1,425,000 Nm
- Simple and particularly robust shaft connections with no specific requirements on damping capabilities

FERROFLEX® N

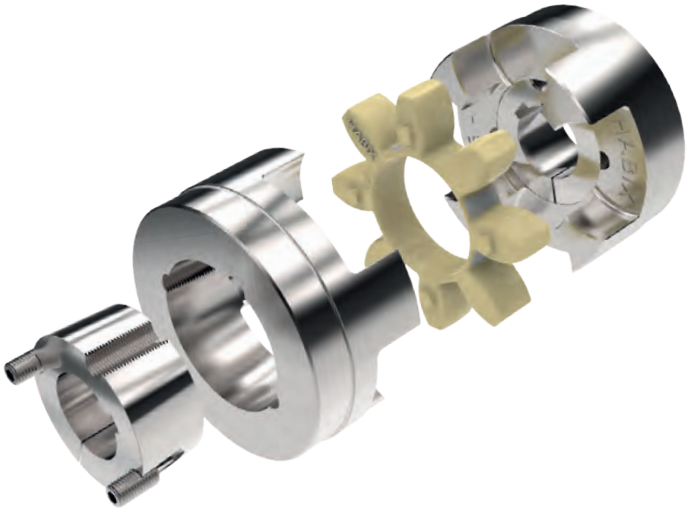
- Backlash-free, bending elastic & maintenance-free
- **Max. Bore:** 140mm **Nominal Torque up to:** 12,000 Nm
- High torsional stiffness
- Temperature resistance from –30 °C to +280 °C

GEAR COUPLING GC

- Crowned toothed and greased gear
- **Max. Bore:** 1,000mm **Nominal Torque up to:** 8,000,000 Nm
- Suitable for horizontal and vertical applications
- Standard designs available as well as custom engineered for your application requirements

SUCCESS STORIES

CUSTOMER: OEM
APPLICATION: SCREW COMPRESSOR
PRODUCT: HABIX PLUS

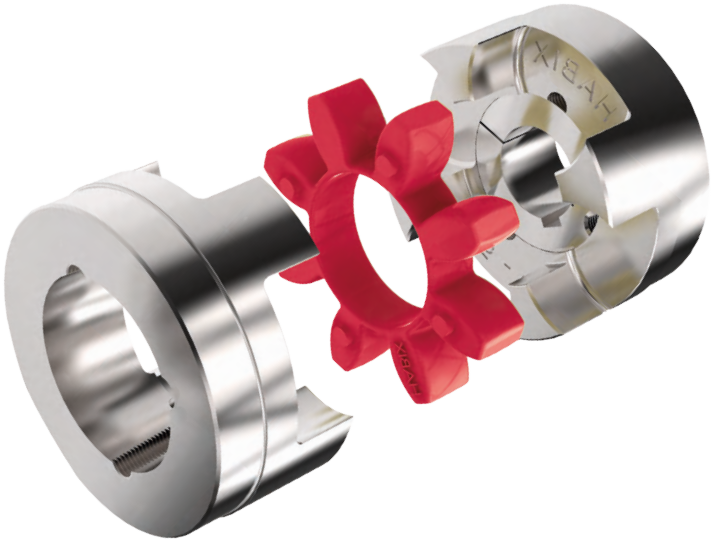


An OEM of screw compressors was having problems with their units automatically being shut down from the safety monitoring sensors measuring higher than expected vibrations during normal operation.

The Habix Plus coupling features a no-backlash dampening element (spider) insert, which smooths out peak torques and dampens torsional vibrations - resulting in a smoother running drive line. The Habix Plus design utilizes a secure clamp mechanism that accurately aligns the coupling hub with the shaft axis, which increases the balance of the drive line. A higher balanced drive line produces less misalignment, less stress and vibrations. Since the Habix Plus is a precisely fully machined component, this too increases drive line balancing and reduces coupling variability to levels that are above our competitors.

The Habix Plus coupling was installed and resolved the issue, allowing the customer and OEM to continue safely running their machines.

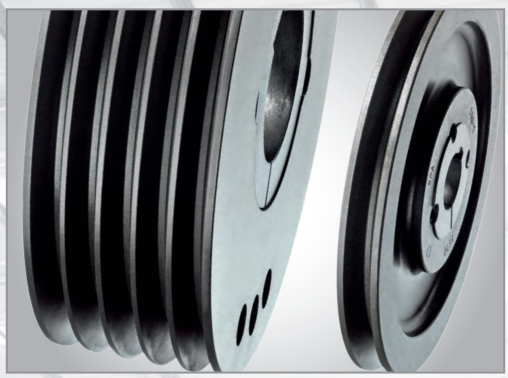
INDUSTRY: AGRICULTURE
APPLICATION: HARVESTER
PRODUCT: HABIX PLUS



An agricultural manufacturer wanted to utilize the features of the jaw coupling in the corn head attachment that harvests the crops. An off-the-shelf coupling would not work due to the limited space and required torque.

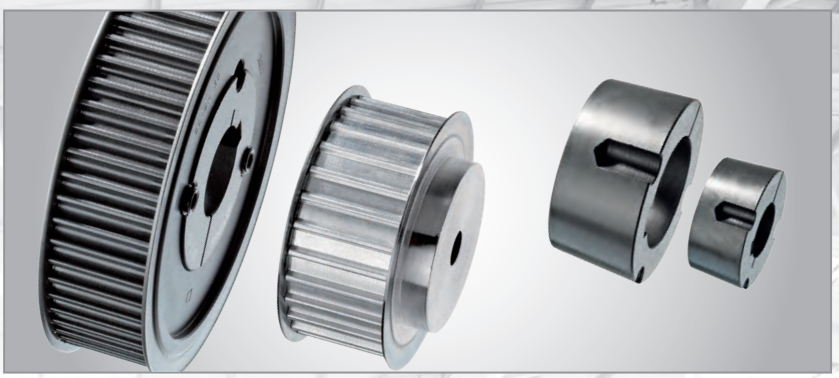
An innovative solution was provided by customizing the Habix Plus coupling. Both hubs were reduced in length to satisfy the harvester space constraints. One hub was composed of a flange connection with a through bore, while the second hub had an integrated splined bore. The element provided misalignment, dampening and protection for the harvester's corn head drive.

PULLEYS, SHEAVES & BUSHINGS



V-BELT SHEAVES

- Single & Multi-Groove V-Belt
- QD, Taper-Lock and Minimum Plain Bore
- Taper-Lock Bushings



TIMING PULLEYS

- Delta Chain Pulleys with Taper-Lock Bushings
- HTD pulleys with Taper-Lock Bushings or Minimum Plain Bore
- Pulleys for ZR belts (L, H, XH, XL) Taper-Lock Bushings or Minimum Plain Bore
- Metric Minimum Plain Bore pulleys for polyurethane timing belts (T2.5, T5, T10, AT5, AT10)

ADDITIONAL CAPABILITIES

SPECIALIZED / ENGINEERED SOLUTIONS

- Custom engineered to reduce weight for V-belt, timing belt, flat belt pulleys, flywheels, or special pulleys.
- Support for OEM in-house product design teams, to provide additional engineering resources/expertise.

OTHER DRIVE COMPONENTS

- Steel motor bases
- Cast iron & steel motor slide rails
- Screw-on or weld-on hubs
- Custom solutions

OPTIBELT: YOUR COMPLETE DRIVE SOLUTION PARTNER

Optibelt began as a belt manufacturer and has been rapidly expanding ever since. Today the Optibelt Group is a complete global supplier of high quality, precision drive components. If you have a drive, Optibelt can be your solutions partner.

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