



# Huco Dynatork Flexible Couplings



 **Huco**<sup>®</sup>  
Dynatork  
An Altra Industrial Motion Company



## HUCO DYNATORK OFFERS A WIDE VARIETY OF COUPLINGS FOR PRECISION INDUSTRIAL AND COMMERCIAL APPLICATIONS WORLDWIDE.

### Introduction to Couplings...

In the simplest of terms a coupling's purpose is to transfer rotational movement from one shaft to another. Reality is somewhat more complicated as flexible shaft couplings have also to compensate for misalignment between two shafts. This ability must be balanced with the need to be pliable in the planes of misalignment while still having the torsional strength to carry out the coupling's main function. This is known as the Compliance mechanism where compliance is the capacity for allowing relative displacement.

Several factors should always be taken into consideration when looking to specify flexible shaft couplings. These are torsional stiffness, backlash, torque, life and attachment system. All of these have bearing on coupling selection.

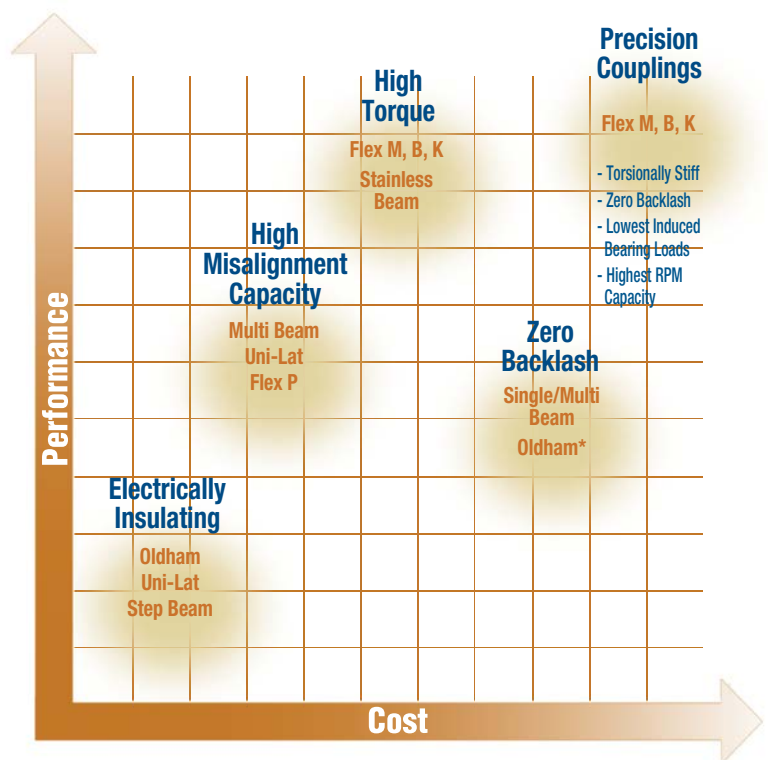
### Selecting the Ideal Coupling

The choice of couplings available to today's engineers can be daunting, but follow our guidelines and you will arrive at the optimum coupling for your particular application.

- Does the coupling provide adequate misalignment protection?
- Can it transmit the required torque?
- Do I need axial motion or axial stiffness?
- Can it fit within the available space envelope?
- Can it operate at the designated ambient temperature?
- Does it provide torsional stiffness required for positional accuracy?
- Does it provide electrical isolation between the shafts?
- Will it have the required life expectancy?

### Select the Coupling that Meets your Application Requirements Precisely

Huco Dynatork offers a wide variety of couplings including precision, beam and general purpose. Use the graph below as a quick reference guide to determine which type of coupling fits your performance and cost design envelope.







## Product Overview



### Precision Couplings

#### Flex B Bellows

Precision Bellows coupling with excellent kinematic properties. Two types offer differing combinations of stiffness, misalignment and axial motion.

#### Flex K Large Bellows

Large Precision Bellows coupling with excellent kinematic properties. Two types offer differing combinations of stiffness, misalignment and axial motion.

#### Flex M Disc

Precision Disc coupling with excellent kinematic properties. Dynamically balanced construction. Single-stage versions make up into 'whirl' free Cardans. Two-stage versions offer short envelopes and low bearing loads.

#### Typical Applications

- High-End Servo Drives
- Pulse Generators
- Scanners
- Positioning Slides
- High Speed Dynamometers
- Unsupported Drive Shafts
- Metering Valves



### Beam Couplings

#### Multi Beam

Zero backlash single-piece couplings. Single stage (3-beam); two stage (6-beam). Material options available for moisture and corrosion resistance.

#### Single Beam

Zero backlash single-piece couplings. More flexible than Multi-Beam but less torsionally rigid.

#### Step Beam

Unique plastic coupling design provides an excellent combination of radial flexibility with torsional stiffness.

#### Typical Applications

- Stepper and Servo Drives
- Encoders
- General Purpose
- Tachometers
- Small Pumps
- Motors and Drives
- Light-Duty Power Transmission Applications



### General

#### Oldham

Zero/low backlash couplings, robust design. Easy to use 3-part couplings with replaceable wear elements. Pull-apart re-engage facility for blind assemblies.

#### Uni-Lat

Unique, light-duty couplings with generous angular and radial misalignment compensation. Resists axial motion, can anchor unrestricted shafts and perform light push/pull duties.

#### Flex P

Exceptional flexibility in all three directions: radial, angular and axial.

#### Typical Applications

- Stepper drives
- Encoders
- Resolvers
- Tachometers
- Potentiometer Drives
- Small Positioning Slides
- Dosing Pumps
- Light power drives
- Small Generators



### Friction Clutches

#### Vari-Tork™

Allow slippage when the torque being transmitted reaches a pre-determined threshold. Used in all types of small drives to help protect personnel and equipment.

Small, user-adjustable torque limiters for concentric or in-line mounting. Operates by friction using interleaved clutch plates.

Friction clutches interrupt rotation when the load being transmitted reaches a pre-determined threshold. Clutches help protect personnel and equipment.

#### Typical Applications

- All types of small drives

**Belted Drives and Sheaves**

**TB Wood's**

*Belted Drives*  
Chambersburg, PA - USA  
**1-888-829-6637** – Press #5  
*For application assistance:*  
1-888-829-6637 – Press #7

**Couplings**

**Ameridrives Couplings**

*Mill Spindles, Ameriflex, Ameridisc*  
Erie, PA - USA  
**1-814-480-5000**  
*Gear Couplings*  
San Marcos, TX - USA  
**1-800-458-0887**

**Ameridrives Power Transmission**

*Universal Joints, Drive Shafts, Mill Gear Couplings*  
Green Bay, WI - USA  
**1-920-593-2444**

**Bibby Turboflex**

*Disc, Gear, Grid Couplings, Overload Clutches*  
Dewsbury, England  
**+44 (0) 1924 460801**  
Boksburg, South Africa  
**+27(0) 11 918 4270**

**Guardian Couplings**

*Engineered Flywheel Couplings, Engine Housings and Pump Mounts, Flexible Shaft Couplings*  
Michigan City, IN - USA  
**1-219-874-5248**

**Huco Dynatork**

*Precision Couplings and Air Motors*  
Hertford, England  
**+44 (0) 1992 501900**  
Chambersburg, PA - USA  
**1-888-829-6637**

**Couplings Cont.**

**Lamiflex Couplings**

*Flexible Couplings, Bearing Isolators, and Coupling Guards*  
Cotia, SP - Brasil  
**+55 (11) 4615-6300**

**TB Wood's**

*Elastomeric Couplings*  
Chambersburg, PA - USA  
**1-888-829-6637** – Press #5  
*For application assistance:*  
1-888-829-6637 – Press #7  
*General Purpose Disc Couplings*  
San Marcos, TX - USA  
**1-888-449-9439**

**Electromagnetic Clutches and Brakes**

**Inertia Dynamics**

*Spring Set Brakes; Power On and Wrap Spring Clutch/Brakes*  
New Hartford, CT - USA  
**1-800-800-6445**

**Matrix International**

*Electromagnetic Clutches and Brakes, Pressure Operated Clutches and Brakes*  
Brechin, Scotland  
**+44 (0) 1356 602000**  
New Hartford, CT - USA  
**1-800-825-6544**

**Warner Electric**

*Electromagnetic Clutches and Brakes*  
New Hartford, CT - USA  
**1-800-825-6544**  
*For application assistance:*  
1-800-825-9050  
Saint Barthélemy d'Anjou, France  
**+33 (0)2 41 21 24 24**  
*Precision Electric Coils and Electromagnetic Clutches and Brakes*  
Columbia City, IN - USA  
**1-260-244-6183**

**Engineered Bearing Assemblies**

**Kilian Manufacturing**

*Engineered Bearing Assemblies*  
Syracuse, NY - USA  
**1-315-432-0700**

**Gearing**

**Bauer Gear Motor**

*Geared Motors*  
Esslingen, Germany  
**+49 (711) 3518-0**  
Somerset, NJ - USA  
**1-732-469-8770**

**Boston Gear**

*Enclosed and Open Gearing, Electrical and Mechanical P.T. Components*  
Charlotte, NC - USA  
**1-800-825-6544**  
*For application assistance:*  
1-800-816-5608

**Nuttall Gear and Delroyd Worm Gear**

*Worm Gear and Helical Speed Reducers*  
Niagara Falls, NY - USA  
**1-716-298-4100**

**Heavy Duty Clutches and Brakes**

**Industrial Clutch**

*Pneumatic and Oil Immersed Clutches and Brakes*  
Waukesha, WI - USA  
**1-262-547-3357**

**Svendborg Brakes**

*Industrial Brakes and Brake Systems*  
Vejestrup, Denmark  
**+45 63 255 255**

**Twiflex Limited**

*Caliper Brakes and Thrusters*  
Wichita Falls, TX - USA  
**1-844-723-3483**  
Twickenham, England  
**+44 (0) 20 8894 1161**

**Heavy Duty Clutches and Brakes Cont.**

**Wichita Clutch**

*Pneumatic Clutches and Brakes*  
Wichita Falls, TX - USA  
**1-800-964-3262**  
Bedford, England  
**+44 (0) 1234 350311**

**Linear Products**

**Warner Linear**

*Linear Actuators*  
Belvidere, IL - USA  
**1-800-825-6544**  
*For application assistance:*  
1-800-825-9050  
Saint Barthélemy d'Anjou, France  
**+33 (0)2 41 21 24 24**

**Overrunning Clutches**

**Formsprag Clutch**

*Overrunning Clutches and Holdbacks*  
Warren, MI - USA  
**1-800-348-0881** – Press #1  
*For application assistance:*  
1-800-348-0881 – Press #2

**Marland Clutch**

*Roller Ramp and Sprag Type Overrunning Clutches and Backstops*  
South Beloit, IL - USA  
**1-800-216-3515**

**Stieber Clutch**

*Overrunning Clutches and Holdbacks*  
Heidelberg, Germany  
**+49 (0) 6221-30470**

For information concerning our sales offices in Asia Pacific check our website [www.altramotion.com.cn](http://www.altramotion.com.cn)



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