

G-Flex
and
Dura-Flex
Couplings
for
Paper
and Metal
Processing
Applications

TB Wood's

Altra Industrial Motion

# TB WOOD'S G-FLEX AND DURA-FLEX COUPLINGS

# ARE DESIGNED FOR LONG-LASTING PERFORMANCE IN PAPER MILLS, STEEL MILLS, METAL PROCESSING FACILITIES, AND MORE.

G-Flex and Dura-Flex couplings are built to withstand harsh environments, which makes them ideal for use in tough paper and metal processing plant applications. Cranes, cooling beds, shears, rolling and other metal processing applications demand the heavy torques and rugged construction of these couplings, while paper processing pumps, dryer rolls, suction rolls and winders require the ease of maintenance and long life these couplings provide. That's why today you can find G-Flex and Dura-Flex couplings widely used by both paper and metal processors.

# **G-FLEX COUPLINGS**



### Up to 169 kNm; 1,500,000 in.lbs.

TB Wood's G-Flex couplings are the ORIGINAL grid couplings designed by Bibby Transmission, also an Altra Industrial Motion company, back in 1917. Bibby has continually refined the design to meet the increasing application demands in today's market. G-Flex grid couplings incorporate the very latest Bibby technology, ensuring long life and high performance that you expect from TB Wood's.

G-Flex 1000 Series is an all-metal coupling that provides positive protection against the damaging effects of shock loads and vibration. Aluminum horizontal cover (T10), and all-steel vertical cover (T20) designs are available. G-Flex tapered grid couplings are an excellent choice where torsional flexibility/vibration damping are primary concerns.

- Easy to assemble/replace
- 100%, part-for-part interchangeable with all major tapered grid coupling designs on the market
- Coupling sizes 1020 through 1140 in-stock in a range of standard bore sizes
- Coupling sizes 1150 through 1200 available by special order
- A range of T31/T35 half and full spacer couplings available
- Shot-peened tapered grid flex element for long life

# **DURA-FLEX® COUPLINGS**



## Up to 4.50 kNm; 39,500 in.lbs.

The Dura-Flex coupling was designed from the ground up, using finite element analysis to maximize flex life. The unique design utilizes a "split-in-half" element for easy element installation/replacement without moving connected equipment or disturbing the shaft connection. Spacer design can accommodate a large range of shaft spacing with few parts.

The patented design of the urethane bond to the leading edge of the steel shoe bolted to the hub, and the high quality of the urethane element itself, provide excellent heat, moisture, and chemical resistance. Patented design minimizes bond stress for long coupling life. Units are highly flexible and able to accommodate shaft misalignment of up to 4° angular or 1/16" parallel, while minimizing vibration and preventing damage to connected equipment.

- Easy to assemble/replace
- High misalignment ratings
- No maintenance/lubrication
- Part-for-part interchangeable with industry standard designs
- In-stock versatile spacer design can accommodate many configurations with few parts

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# **Grid Couplings Rating Comparison**

|       | TB Wood's<br>G-Flex  |           |       | Kop-Flex<br>Kop-Grid® |           |       | Dodge<br>Grid-Lign®  |           |      | Lovejoy<br>Grid      |           |
|-------|----------------------|-----------|-------|-----------------------|-----------|-------|----------------------|-----------|------|----------------------|-----------|
| Size  | Torque<br>(in. lbs.) | Max. Bore | Size  | Torque<br>(in. lbs.)  | Max. Bore | Size  | Torque<br>(in. lbs.) | Max. Bore | Size | Torque<br>(in. lbs.) | Max. Bore |
| 1020T | 460                  | 1.125     | 1020T | 422                   | 1.125     | 1020T | 422                  | 1.125     | 1020 | 460                  | 1.125     |
| 1030T | 1,319                | 1.375     | 1030T | 1,200                 | 1.375     | 1030T | 1,200                | 1.375     | 1030 | 1,320                | 1.375     |
| 1040T | 2,204                | 1.687     | 1040T | 2,000                 | 1.625     | 1040T | 2,000                | 1.625     | 1040 | 2,200                | 1.625     |
| 1050T | 3,850                | 1.875     | 1050T | 3,500                 | 1.875     | 1050T | 3,500                | 1.875     | 1050 | 3,850                | 1.875     |
| 1060T | 6,054                | 2.125     | 1060T | 5,500                 | 2.125     | 1060T | 5,500                | 2.125     | 1060 | 6,050                | 2.125     |
| 1070T | 8,798                | 2.500     | 1070T | 8,000                 | 2.500     | 1070T | 8,000                | 2.500     | 1070 | 8,800                | 2.500     |
| 1080T | 18,144               | 3.000     | 1080T | 16,500                | 3.000     | 1080T | 16,500               | 3.000     | 1080 | 18,150               | 3.000     |
| 1090T | 33,013               | 3.500     | 1090T | 30,000                | 3.500     | 1090T | 30,000               | 3.500     | 1090 | 33,000               | 3.500     |
| 1100T | 55,582               | 4.000     | 1100T | 50,500                | 4.000     | 1100T | 50,500               | 4.000     | 1100 | 55,550               | 4.000     |
| 1110T | 82,489               | 4.500     | 1110T | 75,000                | 4.500     | 1110T | 75,000               | 4.500     | 1110 | 82,500               | 4.500     |
| 1120T | 121,255              | 5.000     | 1120T | 110,000               | 5.000     | 1120T | 110,000              | 5.000     | 1120 | 121,000              | 5.000     |
| 1130T | 176,129              | 6.000     | 1130T | 160,000               | 6.000     | 1130T | 160,000              | 6.000     | 1130 | 176,000              | 6.000     |
| 1140T | 253,130              | 7.250     | 1140T | 230,000               | 7.250     | 1140T | 230,000              | 7.000     | 1140 | 253,000              | 7.000     |

| Type Designation       | TB Wood's | Kop-Grid | Dodge | Lovejoy     |  |  |
|------------------------|-----------|----------|-------|-------------|--|--|
| Horizontal Split Cover | T10       | T10      | T10   | Н           |  |  |
| Vertical Split Cover   | T20       | T20      | T20   | V           |  |  |
| Spacer (full) Coupling | T31       | T31      | T31   | Full Spacer |  |  |
| Spacer (half) Coupling | T35       | T35      | T35   | Half Spacer |  |  |

# **Dura-Flex Couplings Rating Comparison**

|      | TB Wood's<br>Dura-Flex |           |      | Rexnord<br>Omega     |           |       | Dodge<br>Para-Flex   |           |      | Falk<br>Wrapflex     |           |
|------|------------------------|-----------|------|----------------------|-----------|-------|----------------------|-----------|------|----------------------|-----------|
| Size | Torque<br>(in. lbs.)   | Max. Bore | Size | Torque<br>(in. lbs.) | Max. Bore | Size  | Torque<br>(in. lbs.) | Max. Bore | Size | Torque<br>(in. lbs.) | Max. Bore |
| WE2  | 190                    | 1.125     | E2   | 190                  | 1.125     | _     | _                    | _         | _    | _                    | _         |
| WE3  | 365                    | 1.375     | E3   | 365                  | 1.375     | _     | _                    | _         | _    | _                    | _         |
| WE4  | 550                    | 1.687     | E4   | 550                  | 1.625     | _     | _                    | _         | 5R   | 540                  | 1.375     |
| WE5  | 925                    | 1.875     | E5   | 925                  | 1.875     | PX50  | 900                  | 1.875     | 10R  | 1,070                | 1.625     |
| WE10 | 1,450                  | 2.125     | E10  | 1,450                | 2.125     | PX60  | 1,800                | 2.187     | _    | _                    | _         |
| WE20 | 2,300                  | 2.375     | E20  | 2,300                | 2.375     | PX70  | 2,200                | 2.375     | 20R  | 2,700                | 2.125     |
| WE30 | 3,650                  | 2.875     | E30  | 3,650                | 2.875     | PX80  | 3,605                | 2.875     | 30R  | 4,400                | 2.375     |
| WE40 | 5,500                  | 3.375     | E40  | 5,500                | 3.375     | PX100 | 5,402                | 3.375     | _    | _                    | _         |
| WE50 | 7,650                  | 3.625     | E50  | 7,650                | 3.625     | PX110 | 7,750                | 3.937     | 40R  | 8,800                | 3.000     |
| WE60 | 12,500                 | 4.000     | E60  | 12,500               | 4.000     | PX120 | 12,540               | 4.000     | _    | _                    | _         |
| WE70 | 22,125                 | 4.500     | E70  | 22,125               | 4.500     | PX140 | 27,590               | 4.500     | 50R  | 22,100               | 4.000     |
| WE80 | 39,500                 | 6.000     | E80  | 39,500               | 6.000     | PX160 | 37,800               | 6.000     | _    | _                    | _         |

Note: Dura-Flex elements are available in spacer design.

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#### TB Wood's Facilities

#### **North America**

#### USA

440 North Fifth Avenue Chambersburg, PA 17201 - USA 888-829-6637 \* 717-264-7161 Belted Drives and Elastomeric Couplinas

**Customer Service** 1-888-829-6637 (Press #5)

For Application Support 1-888-829-6637 (Press #7)

2000 Clovis Barker Road San Marcos, TX 78666 - USA 1-888-449-9439 General Purpose Disc Couplings

**Customer Service** 1-888-449-9439

4970 Joule St Reno, NV 89502 - USA 775-857-1800

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1073 Rue Bégin Saint-Laurent, QC H4R 1V8 - Canada +1 514-332-4812

#### Mexico

Comisión Federal de Electricidad 850. Industrial San Luis. San Luis, S.L.P., 78395 - Mexico +52 444 137 1500

#### **Europe**

Merchant Drive, Hertford Hertfordshire SG13 7BL - England +44(0)1992 501900 Elastomeric Couplinas

### The Brands of Altra Industrial Motion

#### Couplings

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www.bibbyturboflex.com

**Guardian Couplings** www.guardiancouplings.com

Huco

www.huco.com

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Stromag

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### **Electric Clutches & Brakes**

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