



# V-Belt Drive Solutions for HVAC Applications





## TB WOOD'S BELTED DRIVES PROVIDE UNMATCHED PERFORMANCE

To meet the ever changing yet very defined specific needs of the HVAC industry, TB Wood's has continued to innovate its products and services in order to provide added value to their HVAC customers by offering the following:

- Breadth of product offering: FHP, Integral and Variable Drives
- A proven installation system that eliminates fretting, corrosion, freezing, or sticking
- Application engineer expertise
- Significant inventory in place to cover most applications
- Easy to use, customized drive selection program
- Part models available in the most popular CAD formats
- Lower total acquisition cost by providing:
  - A drive kit (sheaves, bushings and belts) ready for delivery direct to factory floor
  - Custom labeling
  - B to B

### V-BELT DRIVES



#### Light Duty (FHP)

- Durable cast iron sheaves with light duty V-belts for long lasting and quiet operation
- Available in two types, with either 1 or 2 grooves:
  - "A" sheaves for 4L belts
  - "B" sheaves for A(4L) or B(5L) belts
- Can be equipped with either fixed bore (bored to size) or TB Wood's "QT" Sure-Grip® QD type bushings (quick detachable tapered bushings that have a split through flange and tapered surface)
- Capacities up to 15 HP
- Bore sizes from 1/2 to 1-1/2 inches
- Utilized with 3L, 4L, 5L, A or B belts
- Efficient, lightweight, and economical



#### Variable Pitch

- All cast iron construction
- Capacities from fractional to over 600 HP
- Will not freeze or stick
- Easy, accurate speed changes
- Utilizes light duty, classical and narrow V-belts



#### Classic and Narrow

- Carefully engineered to assure maximum performance over a long life span
- Constructed of fine grain, high tensile cast iron
- Capacities up to 600 HP from stock, even higher HP with special belts, sheaves, and materials
- Bore sizes from 1/2 to 8-1/2 inches
- Utilizes single or banded V-belts with either wrapped or cog construction



A full array of long-lasting V-belts and quality bushings are also available.



## APPLICATIONS

### Light Duty Air Handling

Small air conditioning units, agricultural and poultry fans, furnace blowers, etc.

### CASE STUDY

#### **Situation**

An exhaust fan OEM was looking to improve their process efficiency. As part of the process, they designed, ordered, received and picked components to meet weekly production schedules. The process was lengthy and consumed valuable resources.

#### **Solution**

TB Wood's and the OEM reviewed the process and determined that automation was possible. The OEM would furnish the application requirements via EDI and leave the rest to the experts. TB Wood's would design the drive, kit the drive components and deliver it Just-In-Time. Once received, the OEM can drop the kit directly to shop floor. Among the benefits were a quicker turn around time and lower inventory levels.

### Commercial Air Handling

Roof mounted HVAC units, centrifugal exhaust fans, air curtains, axial fans, etc.

### CASE STUDY

#### **Situation**

An OEM was testing a 15 HP filtration blower application for clean room use. Their test uncovered micro particles in their filters. At first, the particles were thought to be from V-belt wear. Upon closer examination, the particles were iron so the focus turned to the sheaves.

#### **Solution**

The OEM replaced all of the non-TB Wood's V-belt drives with only TB Wood's drive components. TB Wood's products are constructed of fine grain, high tensile cast iron that meets or exceeds ASTM A48 material specification.

### Industrial Air Handling

Cooling towers, utility fans, blowers, evaporative air conditioners, etc.

### CASE STUDY

#### **Situation**

A mining company needed to increase the airflow from their 500 horsepower large surface mining fan. However, their drive was designed to operate at constant speed.

#### **Solution**

They downloaded TB Wood's Belted Drive Selector Program and entered their new requirements. They determined a stock sheave would not provide the desired speed; so, they used the Made-To-Order functionality to specify a part. Once TB Wood's saw the selection, we recommended that they purchase a high capacity Ultra-V adjustable driver sheave. The adjustable drive would allow future CFM requirements. TB Wood's designed, manufactured and shipped the drive to the mine. The entire process, including installation, took three weeks. The company was able to increase the CFM and has the right drive for growth and increased production.

Do you require a custom drive solution?

TB Wood's has been manufacturing products in our own foundry for over 150 years. Contact us for a copy of our foundry capabilities brochure (P-1791-TBW).



## 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 Couplings*

#### 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

#### Canada

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Edmonton, AB T6E 5V8 - Canada  
+1 780-439-7979

6305 Danville Road  
Mississauga, ON L5T 2H7 - Canada  
1-800-829-6631

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

#### Mexico

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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 Couplings*

## The Brands of Altra Industrial Motion

### Couplings

**Ameridrives**  
[www.ameridrives.com](http://www.ameridrives.com)

**Bibby Turboflex**  
[www.bibbyturboflex.com](http://www.bibbyturboflex.com)

**Guardian Couplings**  
[www.guardiancouplings.com](http://www.guardiancouplings.com)

**Huco**  
[www.huco.com](http://www.huco.com)

**Lamiflex Couplings**  
[www.lamiflexcouplings.com](http://www.lamiflexcouplings.com)

**Stromag**  
[www.stromag.com](http://www.stromag.com)

**TB Wood's**  
[www.tbwoods.com](http://www.tbwoods.com)

### Gear Cam Limit Switches

**Stromag**  
[www.stromag.com](http://www.stromag.com)

### Electric Clutches & Brakes

**Inertia Dynamics**  
[www.idicb.com](http://www.idicb.com)

**Matrix**  
[www.matrix-international.com](http://www.matrix-international.com)

**Stromag**  
[www.stromag.com](http://www.stromag.com)

**Warner Electric**  
[www.warnerelectric.com](http://www.warnerelectric.com)

### Linear Products

**Warner Linear**  
[www.warnerlinear.com](http://www.warnerlinear.com)

### Engineered Bearing Assemblies

**Kilian**  
[www.kilianbearings.com](http://www.kilianbearings.com)

### Heavy Duty Clutches & Brakes

**Industrial Clutch**  
[www.indclutch.com](http://www.indclutch.com)

**Twiflex**  
[www.twiflex.com](http://www.twiflex.com)

**Stromag**  
[www.stromag.com](http://www.stromag.com)

**Svendborg Brakes**  
[www.svendborg-brakes.com](http://www.svendborg-brakes.com)

**Wichita Clutch**  
[www.wichitaclutch.com](http://www.wichitaclutch.com)

### Belted Drives

**TB Wood's**  
[www.tbwoods.com](http://www.tbwoods.com)

### Gearing

**Bauer Gear Motor**  
[www.bauergears.com](http://www.bauergears.com)

**Boston Gear**  
[www.bostongear.com](http://www.bostongear.com)

**Delroyd Worm Gear**  
[www.delroyd.com](http://www.delroyd.com)

**Nuttall Gear**  
[www.nuttallgear.com](http://www.nuttallgear.com)

### Overrunning Clutches

**Formsprag Clutch**  
[www.formsprag.com](http://www.formsprag.com)

**Marland Clutch**  
[www.marland.com](http://www.marland.com)

**Stieber**  
[www.stieberclutch.com](http://www.stieberclutch.com)

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