



V-Belt Drive Solutions for **HVAC** Applications

 **TB Wood's**[®]
Incorporated

An Altra Industrial Motion Company

**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).



Electromagnetic Clutches and Brakes

Warner Electric

Electromagnetic Clutches and Brakes

New Hartford, CT - USA
1-800-825-6544

For application assistance:
1-800-825-9050

St Barthelemy 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

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

Inertia Dynamics

Spring Set Brakes; Power On and Wrap Spring Clutch/Brakes

New Hartford, CT - USA
1-800-800-6445

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

Burr Ridge, IL - USA
1-800-216-3515

Stieber Clutch

Overrunning Clutches and Holdbacks

Heidelberg, Germany
+49 (0) 6221 30 47 0

Engineered Couplings

Ameridrives Couplings

Mill Spindles, Ameriflex, Ameridisc

Erie, PA - USA
1-814-480-5000

Gear Couplings

San Marcos, TX - USA
1-512-353-4000

Bibby Transmissions

Disc, Gear, Grid Couplings, Overload Clutches

Dewsbury, England
+44 (0) 1924 460801

Boksburg, South Africa
+27 11 918 4270

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
1-512-353-4000

Ameridrives Power Transmission

Universal Joints, Drive Shafts, Mill Gear Couplings

Green Bay, WI - USA
1-920-593-2444

Huco Dynatork

Precision Couplings and Air Motors

Hertford, England
+44 (0) 1992 501900

Charlotte, NC - USA
1-800-825-6544

Linear Products

Warner Linear

Linear Actuators and Guideways

Belvidere, IL - USA
1-800-825-6544

For application assistance:
1-800-825-9050

Heavy Duty Clutches and Brakes

Wichita Clutch

Pneumatic Clutches and Brakes

Wichita Falls, TX - USA
1-800-964-3262

Bedford, England
+44 (0) 1234 350311

Twiflex Limited

Caliper Brakes and Thrusters

Twickenham, England
+44 (0) 20 8894 1161

Industrial Clutch

Pneumatic and Oil Immersed Clutches and Brakes

Waukesha, WI - USA
1-262-547-3357

Gearing

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

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

Engineered Bearing Assemblies

Kilian Manufacturing

Engineered Bearing Assemblies

Syracuse, NY - USA
1-315-432-0700

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