Power Transmission Group





HVAC Power Transmission Solutions



Continental worldwide. world-class. world-changing.

Continental is a global leader in creating and manufacturing advanced drive belt solutions for a wide range of industrial applications. We offer a comprehensive portfolio of individual belts as well as complete, tailor-made systems. Every belt and system increases your operation's energy efficiency and productivity.

We push the boundaries of what's possible, and we're constantly solving tomorrow's most challenging problems-today and every day.

It's Why We're Your Global Partner of Choice for Power Transmission Solutions.



HVAC V-Belts

When the job needs to be done right the first time, look to the Continental family of HVAC V-belts. From light-duty drives to your toughest applications, Continental V-belts offer the enhanced efficiency, longevity and performance that your customer wants. Their satisfaction will keep them coming back and help you grow your business. Your customers will appreciate the quality and precision offered by Continental through dependable operation and cost savings from using efficient drives.

HVAC/ACHE Industry Applications:

- Heating
 Air Conditioning
- > Ventilation > Fan Drive



FHP

The cogged design of our FHP belts provides a greater surface area for heat dissipation, allows increased air flow around the belt during operation and improves flexibility. Low cross section vibration in rubber-edged, cogged belts reduces noise generation.

- > Low vibration for low noise
- > Superior efficiency for improved performance
- > Designed for drives less than one horsepower

Hy-T® Plus

This V-belt has a classic profile and excels at operating at high speeds over small-diameter pulleys. Plus, its high-strength Vytacord[®] tensile members and engineered rubber insulation allow it to effectively transmit drive power.

- > Dual-branded (Classical and FHP) to reduce inventory costs
- ➤ FHP belts have lower horsepower capability than Hy-T[®] Plus. You can replace an FHP with a Hy-T[®] Plus, but you cannot replace a Hy-T[®] Plus with an FHP.
- > Minimal, controlled elongation for reliable performance
- > Exceptional dimensional stability improves performance and increases service life

Torque-Flex®

Designed for tough, small-sheave, high-tension drives, Torque-Flex's premium classical profile construction delivers the horsepower you want on the drives you need it on — all at a lower component cost and with lower energy costs. Get optimum performance with cut-edge or envelope design.

- > More horsepower with lower energy costs
- > Exacting precision and uniformity offer reduced downtime and belt maintenance
- > Added flexibility through fully cogged construction

Hy-T[®] Wedge

Featuring a narrow profile for compact, high-horsepower drives, this V-belt offers unmatched efficiency. And with a cut-edge or envelope construction, as well as high-grade rubber, Hy-T[®] Wedge provides maximum performance for minimum drive costs.

- > Optimum performance with cut-edge or envelope design
- > Reduced drive costs thanks to a narrower cross section
- > Increased efficiency with thinner, lighter sheaves
- Advanced construction results in an average 30% horsepower increase over standard V-belts



HVAC Synchronous Belts

Synchronous belts are well suited for HVAC applications and can offer energy savings over V-belt drives. Standard synchronous belts produce more noise than V-belts. Our SilentSync® drive system delivers the advantages of a synchronous belt without the noise. Other advantages of synchronous belts include higher efficiency, no re-tensioning required, lower hub/bearing loads and more compact drives.



Light but durable polyurethane for teeth and backing. High-tensile yet longitudinally stable carbon for the tension member. Plus, a specially coated, wear-resistant face fabric. The intelligent design and high-quality materials ensure clean, smooth and reliable power transmission both at high torques or dynamic loads.

- > Reduces drive width by up to 5 times
- > No lubrication needed operates clean and dry
- > Smooth engagement of teeth and reduced vibration
- > Quiet in operation
- > High-speed capability
- > 2-3x life expectancy



SilentSync[®]

This unique state-of-the-art alternative to straight-tooth belts and drive chains has been enhanced to improve the overall performance of your drive design – and help you save energy.

- > A patented Helical Offset Tooth (H.O.T) design
- > Self tracking, flangeless sprockets
- > Up to 19 dB quieter than straight-tooth belts
- > Exceptional tensile strength for lasting performance
- > Versatility in a wide range of operating temperatures
- > Static conductive



Falcon Pd®

Reinforced rubber timing belt developed for a variety of extremely demanding drives.

- > Increased horsepower for high torque applications
- > High-grade HNBR rubber construction
- > Lower noise than urethane belts
- > Exceptional tensile strength for premium performance



Hawk Pd[®]

A versatile belt designed to be compatible with many industry standard pulleys.

- > Optimum performance
- > Low elongation

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HVAC Torque Team® Belts

Banded V-belts are recommended for use where belt vibration causes unsatisfactory results. Another advantage of banded V-belts is the considerable degree of design flexibility.



Hy-T Wedge Torque Team®

The Hy-T Wedge Torque Team[®] line consists of raw edge, molded cog belts and wrapped belts depending on length. Anything shorter than 80" is going to be raw edge, molded cog. Belts from 80" to 139" could be either REMC or wrapped. Belts 140" or longer are wrapped. Wrapped belts will not be cogged.

- > Narrow profile ribs provide savings through improved efficiency
- > Joined belt construction for problem drives
- > Cogs provide increased flexibility

Torque Team® Plus

Torque Team® Plus belts are our highest capacity V-belts and are known for strength, durability and performance. They stand up to higher horsepower, high-tension drive requirements and abusive installations better than standard joined belts, multiple V-belt teams or chain and sprocket drives. Torque Team® Plus is available in 5V and 8V profiles. These are all wrapped construction; no raw edge, no cogs.

- > Reduced maintenance
- > Reduced vibration and turnover
- > Strong, flexible and efficient belt with extended service life
- > Lower costs involved in the drive medium (belts/chains)
- > Compact drive design

Hy-T Torque Team® (Classical)

Hy-T Torque Team[®] belts have a high-strength, high-horsepower rating capacity needed to effectively transmit drive power. Drive performance is consistent, reliable and predictable over the life of the belt. We top the belt off with a tough oil- and abrasion-resistant fabric backing to provide maximum longitudinal flexibility and lateral strength to withstand the dynamic forces acting within a joined belt. Reduced vibration and turn over.

- > Fiber-loaded cushion contributes to heat and oil resistance and strength
- A mix of cogged and non-cogged constructions, depending on the length restrictions stated above. (See Hy-T Wedge Torque Team[®] for length restrictions). The illustration only shows the REMC version.

Torque Team® Laminated

Torque Team[®] Laminated belts can resist slipping when a jam occurs. These belts help to avoid excessive heat buildup that can lead to belt failure and costly downtime.

- > Superior wear-resistant capabilities
- > High-strength and horsepower ratings
- > The belt will give under excess tension instead of snapping, leading to increased belt life







Best Practices

Wear Proper Clothing

- > Never wear loose or bulky clothes, such as neckties or lab coats around belt drives
- > Wear gloves while inspecting sheaves or sprockets to avoid injuries
- > Wear safety glasses to avoid eye injuries

Always Maintain Safe Access to Belt Drives

- > Keep area around drives free of obstructions
- > Floors should be clean to ensure good footing and balance while working
- Disconnect power supply to the machine before doing any work. Follow established lock-out/tag-out procedures

Drive Guards

- > Every belt drive must be properly guarded
- > Guards must be designed and installed according to OSHA standards

Belt Guard Guidelines

- > Encapsulates drive
- > Includes grills or vents for good ventilation
- > Allows access for belt inspection
- > Easily removed and replaced, if damaged
- > Should protect the drive from weather, debris and damage





- > Look and listen for any unusual vibration or sound while observing the guarded drive in operation. Drive should operate smoothly and quietly
- > Inspect guard for looseness or damage. Keep it free of buildup
- > Accumulation of material on the guard acts as insulation and could cause drive to run hotter
- > Temperature is a critical factor affecting belt life
- > If there is oil and grease dripping from the guard, it may indicate overlubricated bearings. If this material gets on the belt, it may lead to early belt failure
- > Check motor mounts for proper tightness. Take-up slots or rails should be clean and lightly lubricated

How Often to Inspect

- > Critical nature of equipment
 - Critical Drives A visual and hearing inspection may be needed every one to two weeks
 - Normal Drives With most drives, a quick visual and hearing inspection can be done once a month
- > Drive operating cycles
- > Environmental factors
- > Temperature extremes



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Maintenance Tools

Proper tension, installation and maintenance can extend belt life and reduce costly downtime. Continental's preventative maintenance tools include:







TensionRite® Belt Frequency Meter

The TensionRite® Belt Frequency Meter provides a simple, repeatable and reliable method for tensioning belts using optical technology. It displays the natural vibration frequency of a belt strand so you can closely monitor belt tension. The meter measures the belt vibration in hertz and calculates the strand tension force in units of newtons and pounds-force.

Tension Tester Plunger

When used with a straight edge or tight string, the deflection gauge is an aid in setting the proper belt tension for a drive system. The Tension Tester compares force measured with recommended values for your application. If values are not equal, adjust the belt tension and repeat force measurement until force matches target value.

Tension Tester Plunger

This unique Laser Alignment Tool quickly aligns drive components, improving efficiency while reducing costly maintenance.

- > Detects both parallel and angular misalignment
- > Easier to use than conventional methods of misalignment detection
- > Affixes to most pulley and sprocket types
- > Suitable for nonmagnetic pulleys and sprockets
- > Single-operator friendly



Sheave Gauge

A sheave gauge can be used to identify voids that indicate dishing or uneven sheave wear. Additionally, they can be used to identify the belt cross section when no branding is visible.



MaximizerPro[™]

Drive selection analysis software program for easy & accurate selection of energy saving belt solutions.



Power Transmission Group

Market segment
Power Transmission Products

Contact

Continental 703 S. Cleveland Massillon Road Fairlawn, OH 44333-3023 U.S.A. 1-800-235-4632 www.continental-industry.com

Canada 1-888-275-4397

Mexico 1-800-439-7373





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