



Power Transmission Products

Capabilities

Our Guiding Principle - ContiTech Engineering Next Level

In today's industries, the need for safer, consistent and dependable power transmission drives is more important than ever. A leading specialist for rubber and plastics technology, ContiTech develops and produces only the highest quality functional parts, components and systems to meet the needs of today's diversified industries. With facilities, equipment, training and knowledge, we are taking distribution to the next level by setting new standards and offering exclusive services to our worldwide distributor network.

Thanks to our wealth of expertise in materials and processes, we have grown to become an innovation leader in synthetic rubber and polyurethane products. We remain a major driving force behind the future viability of our partners. By keeping a close eye on changes and trends in society and technology, we are able to adapt appropriately to provide market-focused solutions for the benefit of our customers.

ContiTech North America

NAFTA Headquarters
703 S. Cleveland-Massillon Road
Fairlawn, OH 44333
1-800-235-4632

Lincoln, NE Technology Center
4021 N 56th Street
Lincoln, NE 68504
402-467-8311

Moberly, MO
1957 Highway Dd
Moberly, MO 65270
660-269-9532



Infinite Possibilities

Get more out of your drive systems than you ever thought possible. Our improved and expanded line of power transmission belts delivers the latest advancements in form and function.

Conti® Synchrochain Carbon

Intelligent design for maximum power output and reduced space requirements.

SilentSync®

A powerful innovation in synchronous drive systems that provides more power capacity and quieter operation.

Falcon Pd®

Soar with the latest drive system innovation that offers long-lasting, maintenance-free performance in low-speed, high-torque drives.



Conti® Synchrochain Carbon

Intelligent design for maximum output

The ContiTech Power Transmission Group is a developer, manufacturer and supplier of power transmission belts, components and complete belt drive systems. The company is once again demonstrating its market- and customer-focused expertise, this time with the new Conti® Synchrochain Carbon. The new polyurethane heavy-duty timing belt with a carbon tension member offers several advantages over other timing belts.

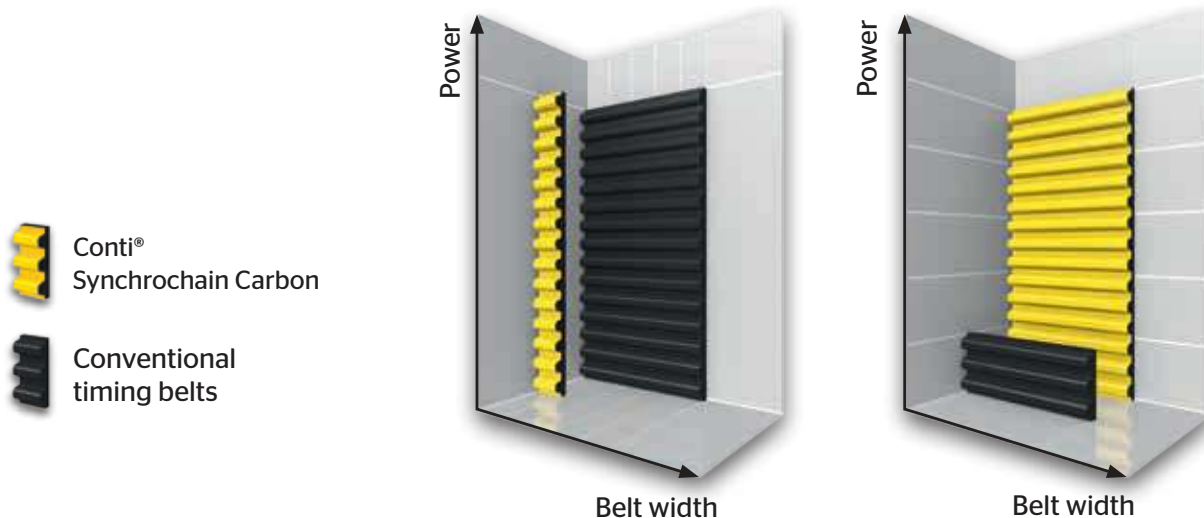


Conti® Synchrochain Carbon can transmit up to 5 times more power than conventional timing belts with the same overall width. **Belt width can be reduced by up to 80%.** This means overall system costs can be reduced by using Conti® Synchrochain Carbon.

Conti® Synchrochain Carbon is extremely wear-resistant, abrasion-resistant and maintenance-free. Service life is increased by up to 100% compared with competitive heavy-duty timing belts.

The great stiffness of the cord in Conti® Synchrochain Carbon means **initial tension loss is cut almost to zero.** Over the lifetime of the belt, this represents a further enhancement in drive efficiency.

Elongation of the high-tensile carbon tension member is 50% lower compared with aramid. This makes Conti® Synchrochain Carbon suitable for maximum torque and offers longitudinally stable operation over its entire lifetime.



Light but durable polyurethane for teeth and backing. High-tensile and, at the same time, longitudinally stable carbon for the tension member. Plus a specially coated, wear-resistant face fabric. The intelligent design and especially high-quality materials are defining features of Conti® Synchrochain Carbon. They ensure clean, smooth and particularly reliable power transmission both at high torques or dynamic loads.

Conti® Synchrochain Carbon is constructed in the following way:

Polyurethane teeth

Specially treated fabric

Carbon tension member

Polyurethane backing

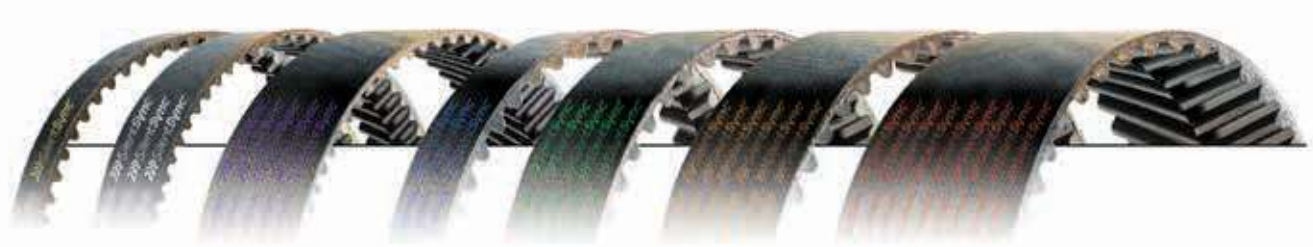
Properties:

- › Temperature range, depending on application, from -67°F to +176°F (-55°C to +80°C). For temperatures lower than -40°F, please contact ContiTech)
- › Suitable for tropical climates
- › Resistant to aging and ozone
- › Withstands reverse flexing
- › Resistant to oils, grease and fuel
- › Conditionally resistant to acid and lye
- › Raw materials and production are silicone-free
- › Maintenance-free
- › Belt speeds up to 7800 f/m
- › Increased power output
- › Longitudinally stable throughout its lifetime



SilentSync®

A powerful innovation in synchronous drive systems



Static conductive* and engineered to deliver up to 98% energy efficiency, SilentSync belts and sprockets offer:

- › Up to 19dB less sound than straight-tooth belts
- › Over 1,500 possible sprocket combinations
- › Exceptional high-temperature operation of 200°F (93°C)
- › Continuous rolling tooth engagement
- › Up to 25% more power capacity**

*Drive conditions and service variables in combination with time in operation can result in loss of static conductivity. It is recommended that a conductivity check be added to drive prevention maintenance programs where belt static conductivity is a requirement.

**When compared to previous generation product.



The Benefits Add Up

Reduced noise - Improve workforce conditions and eliminate the extra costs associated with making drives meet OSHA regulations.

Less vibration - Rolling tooth engagement with the patented Helical Offset Tooth (H.O.T.) design for a smoother, more precise power transmission.

Narrower drive - Reduce overall face width and weight without compromising belt strength and durability.

Eliminate flanges - The belt's self-tracking feature eliminates the need for flanges and allows width and weight reduction.

Energy savings - A powerful 98% efficiency rating - an impressive 5% higher than typical V-belt drives.

Belt strength - Strong aramid tensile member provides optimal resistance to flex fatigue, elongation and shock loads.



Advantages over V-belts

- › Reduced downtime and maintenance costs
- › Eliminates retensioning
- › Lower belt tension/reduced bearing loads
- › High mechanical efficiency
- › No slippage

Advantages over chain

- › Reduced noise
- › Reduced downtime and maintenance costs
- › Eliminates lubrication system
- › Wider speed range
- › Longer service life
- › Greater precision



Engineered for energy efficiency

The construction of SilentSync® belts and sprockets makes them extremely adaptable to the needs of design engineers and cost-efficient for the end user.

Falcon Pd[®]

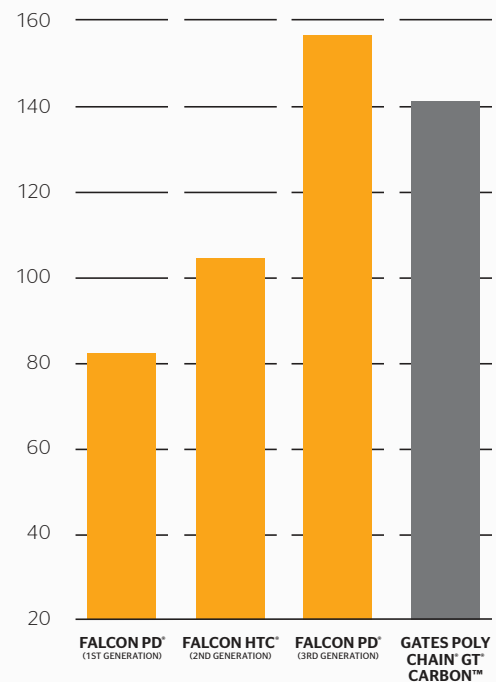
Pushing technology to new heights

Demand more from your drive systems. With Falcon Pd[®] you can expect the same long-lasting, maintenance-free performance in your low-speed, high-torque drives that you get with the rest of your drive systems.

Our advanced rubber compounding research results in a synchronous belt with distinct advantages. Falcon Pd[®] has exceptional tensile strength and greater flexibility than polyurethane, improved backside idler capabilities** and resistance to chemical and oil breakdown. Plus, the system is specifically designed to accommodate today's high-efficiency motors, with a heightened power transfer.

When compared to conventional polyurethane synchronous belts, Falcon Pd[®] matches competitive HP tables and offers numerous benefits, including quieter operation and better resistance to both flex fatigue and higher operating temperatures.

High Speed 1750 RPM 14MM



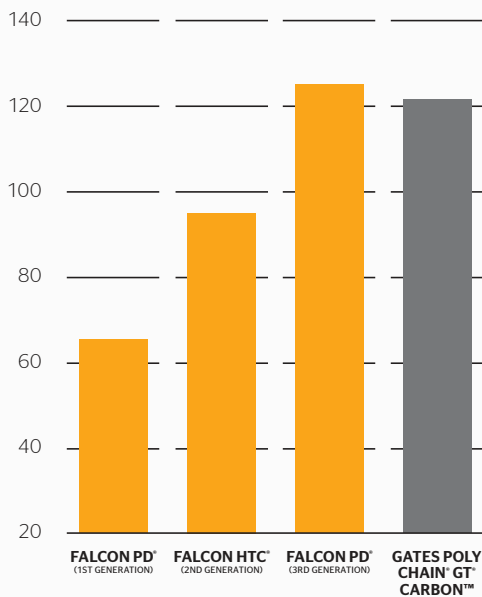
*Drive conditions and service variables in combination with time in operation can result in loss of static conductivity. It is recommended that a conductivity check be added to drive preventative maintenance programs where belt static conductivity is a requirement. For more information on static conductivity, visit us at www.contitech.us.

**A drive analysis is encouraged to help ensure optimal performance when the use of a backside idler pulley is contemplated.

Soar with the latest drive system innovation

For more than 100 years, our rubber compounding technology has produced the most versatile, durable and dependable power transmission belts possible.

Low Speed 100 RPM 14MM



The HNBR rubber compound in Falcon Pd® produces a clean, quiet belt that delivers exceptional performance and 36% horsepower improvement compared to the previous generation product.

- › Increased power capacity to accommodate a wider range of challenging drive requirements
- › Highly adaptable and suitable for high-torque, lower-speed applications
- › Up to 6dB quieter operation when compared to conventional polyurethane synchronous belts
- › Static conductivity* for increased peace of mind
- › Backside idler capability for use in a wide range of applications
- › Exceptional tensile strength and greater flexibility for superior flex fatigue resistance in demanding applications for longer life
- › Rated for continuous service at high temperatures to provide versatility in a wide range of operating environments

Don't get grounded by your maintenance routine

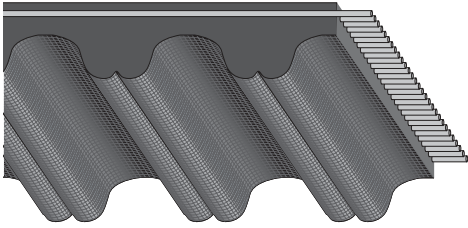
Many mechanical chain drives are noisy and greasy, requiring near-constant maintenance to keep them running adequately. Worst yet, chains run, they can elongate or break - affecting the output of your entire facility.

A re-engineered Falcon Pd® drive is designed to be a near maintenance-free drive system alternative. With its increased horsepower capacity and quiet-running rubber compounding, Falcon Pd® can be a welcome relief from daily upkeep while delivering ongoing energy savings.



Other Synchronous Belts

Hawk Pd®

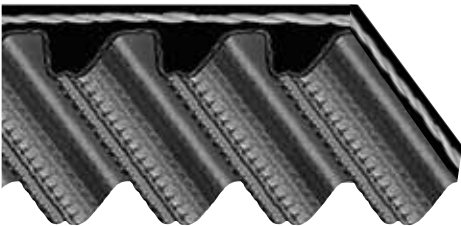


A premium universal tooth profile belt made of molded high-performance rubber composite, offering greater horsepower capacity and performance and a superior MRO retrofit to many existing drives.

- › Available in 5mm, 8mm, 14mm and 20mm sizes, for greater productivity and efficiency
- › Sprocket compatibility with Gates HTD,^{®*} Power Grip GT^{®**} and GT^{®2,*} Carlisle RPP and RPP Plus^{™**} and TB Wood's Synchronous QD^{®*}
- › Enhanced compound affords greater flexibility, less flex fatigue and longer life
- › Improved tooth facing for greater abrasion resistance
- › 100% greater life expectancy than previous belt
- › Industry-compatible nomenclature for easy part number interchange

*Gates, Poly Chain and GT are trademarks of the Gates Corporation.

Blackhawk Pd®

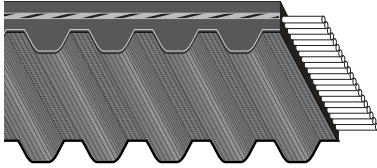


A high-performance synchronous belt with aramid cords for use in rigorous synchronous drives requiring premium performance and made with quality materials and construction. Designed to outperform traditional drive systems and reduce unnecessary downtime.

- › **Universal tooth profile** - Designed and manufactured to fit many high-capacity synchronous applications and can perform in: Dayco[®] RPP[™] Panther[®], Browning[®] RPP Panther and TB Wood's QT Power Chain[®] sprocket profiles
- › **High-capacity performance** - Exceeds the traditional speed limitations of chain and performance limitations of belt drives with higher horsepower rating and notably longer life
- › **Tooth profile** - Resists ratcheting and provides accurate positioning for synchronous drive applications. Upgraded Hibrex[®] materials and Plioguard[®] tooth facing enable the teeth to engage the sprocket smoothly
- › **Aramid tensile members** - Provides excellent dimensional stability and high-impact strength requiring little retensioning and less drive maintenance

Synchronous Belts

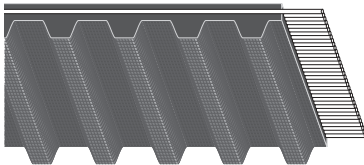
Super Torque Pd[®]



High in power capacity and an excellent alternative to chain. Uses include conveyors, milling machines, lathes, shapers, mixers, timers or controllers, wood chippers, debarkers, compressors, cam drives and ICEs.

- › Long belt life
- › Low noise levels
- › No lubrication problems
- › No corrosion problems
- › Less vibration
- › Much quieter than chain

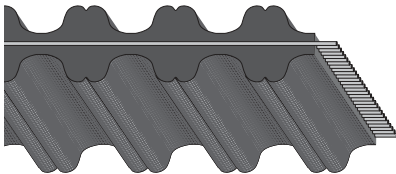
Positive Drive Pd[®]



A traditional trapezoid tooth profile synchronous for drives requiring exact timing and high speed. An excellent lightweight and compact alternative to V-belt and chain drives.

- › Reduces cost compared to chain and gears
- › Fiberglass tension cords for dimensional stability
- › Nylon facing provides the most durable tooth wear facing available

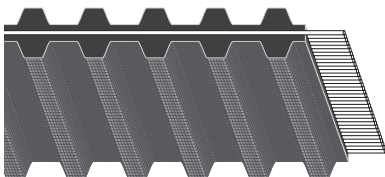
Dual Hi-Performance Pd[®]



A dual round tooth synchronous belt transmitting power from both sides of the belt allows for changing the direction of synchronized pulleys with a single belt. Wide applications include printing presses and business machines.

- › Saves space
- › Reduces drive weight
- › Reduces drive component costs
- › Universal drop-in replacement

Dual Positive Drive Pd[®]



A dual trapezoidal tooth synchronous belt that transmits power from both sides of the belt. For use in applications such as printing presses and business machines.

- › Saves space
- › Reduces drive weight
- › Reduces drive component costs

Wedge V-Belts

Wedge TLP™



Designed to resist elongation over three times better than competitors. Maintenance-free with longer life, its static conductive double envelope construction uses two rubber impregnated wraps to enhance durability and abrasion resistance.

- › Homogenous design uses a fiber-rich rubber compound to prevent cord distortion
- › Higher horsepower capacity conveys more power in a smaller package
- › Enhanced compound affords greater flexibility, less flex fatigue and longer life
- › Offers reduced risk of tension decay in power heavy-duty industrial markets
- › Available in the standard 3V, 5V and 8V sizes covering a wide variety of applications for today's specialized industrial demands

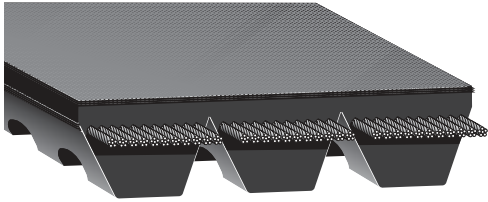
HY-T® Wedge



A narrow cross-section V-belt that distributes stresses more uniformly over tension members delivering more consistent and reliable power transmission.

- › Equal horsepower can be generated with smaller, lighter belts (compared to classical style belts) which means sheaves can be smaller and lighter
- › Deeper wedge profile creates more contact with sheaves (compared to classical style belts) resulting in increased horsepower
- › Cut edge cogged belts feature EPDM construction.
- › Vytacord® tension members provide strength and dimensional stability for Matchmaker® performance
- › Available in a raw edge construction with cogs for increased horsepower or envelope construction where pulsation, shock loads, high tension and long centers are involved
- › Temperature range -40°F to 230°F (-40° to 110°C)

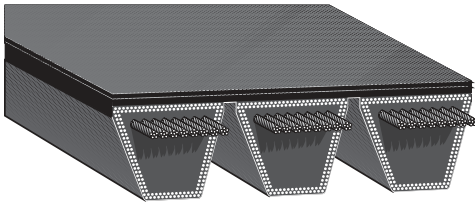
HY-T® Wedge Torque Team®



A narrow cross-section joined belt for higher performance and shock load applications ideal for pulsating loads, high capacity drives and/or short center heavy-duty drives.

- › Individual belts are joined by tough backing fabric so all ribs pull together
- › Each rib wedges in the sheave groove for maximum traction and efficiency
- › Vytacord® tension members provide predictable performance over the life of the belt
- › Cushion rubber is a fiber-reinforced compound contributing heat and oil resistance and exceptional cord support

Torque Team Plus®



A narrow cross-section joined belt with aramid cords made for the industry's toughest high horsepower drives requiring higher tension and increased resistance to shock loads. Up to 50% more horsepower capacity than standard belts.

- › Perfectly matched belts within a banded set
- › Less maintenance required due to low stretch means less downtime
- › Reduced drive component size
- › Aramid fiber treated with enhanced cord-to-rubber adhesions provides 5x greater horsepower capacity
- › Resists deterioration due to environmental conditions

Metric Belts



Superior performance under the toughest conditions.

- › Strong and flexible
- › Operating under one of the widest temperature ranges in the industry from -40°F to 230°F (-40°C to 110°C)
- › Universal fit for metric precision
- › Wedge profile for small drive
- › Cut edge cogged belt construction features EPDM compound

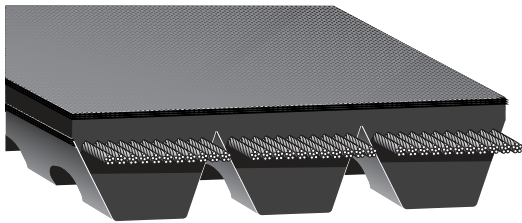
Classical V-Belts HY-T® Plus



Designed for operating at higher speeds over small diameter pulleys and short center distances. Ideal for use in multiple V-belt drives where high shock load and heavy-duty loads are encountered.

- › Engineered heat- and oil-resistant rubber compound impregnated envelope fabric provides positive traction, maximum flexibility and extended wear resistance
- › Vytacord® tensile members control stretch so that it is minimal, predictable and uniform

HY-T® Torque Team®



A classical cross-section joined belt for shock load applications ideal for pulsating loads, high-capacity drives and/or short center heavy-duty drives.

- › Individual belts are joined together by tough backing fabric so all the ribs pull together
- › Each rib wedges in the sheave groove for maximum traction and efficiency
- › Banded belts that solve the problem of pulsation, vibration, shock loading and misalignment
- › Vytacord tension members are treated with the 3T process which removes excessive stretch and improves dimensional stability to provide predictable performance over the life of the belt
- › Fiber-based cushion contributes heat and oil resistance and core support

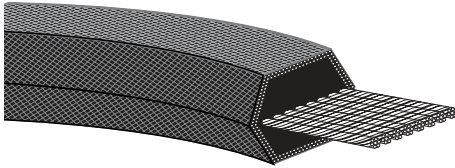
Torque Flex®



A premium classical-profile belt with fully molded cogs designed for tough, small-sheave diameter and high-tension drives increasing horsepower over traditional classical belts.

- › Raw rubber edges contact the sheaves for increased horsepower ratings
- › Cut edge cogged belt construction features EPDM compound
- › Cogs allow for greater flexibility and heat dissipation
- › Temperature range -40°F to 230°F (-40°C to 110°C)*

Hex Belt



Double-sided classical cross-section belts (a.k.a. double V-belts) used on drives with one or more reverse bends used when power is transmitted to/or from the belt in both standard and reversing positions.

- › Vytacord® tension members for maximum strength and minimum stretch while transmitting power from both sides of the belt
- › Features our engineered rubber compound and envelope designed for maximum performance and long service life

Insta-Power® with Aramid



Insta-Power with aramid are dual-banded, high-performance classical V-belts built for strength and endurance including lawn and garden and other heavy-duty industrial applications.

- › High abuse resistance where reverse bend idlers, misalignment and quarter turn drives cause ordinary belts to fail
- › Protective envelope resists damaging effects of oil and dust
- › Aramid cords carry load demands of high stress drives
- › Specially compounded compression section enhances flexibility

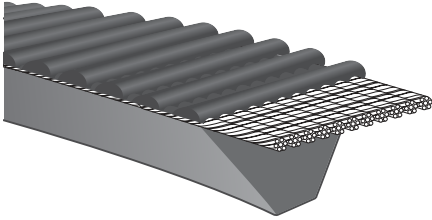
FHP Belt



Quality construction with improved performance, classical profile light-duty V-belts are designed for light machinery, home appliances, farm machinery and shop equipment. FHP belts include a complete selection of sizes and types for all fractional horsepower motors.

- › High-tensile Vytacord improves dimensional stability
- › Backing is oil, ozone and abrasion resistant
- › Molded cogs improve flexibility and heat dissipation (4L & 5L only)

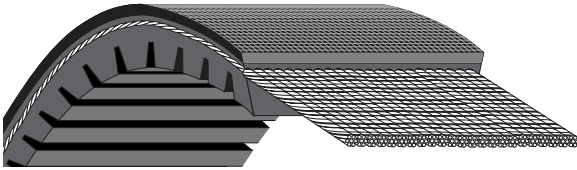
Specialty Belts Neothane®



Provides a different approach to V-belt power transmission for appliances and light-duty machinery.

- › Ribbed top for transverse rigidity, flexibility and cool running conditions
- › Narrow top width for use on narrow, small diameter sheaves and exceptional flexibility on short centers
- › Cords are resistant to elongation or shrinkage providing great strength and long flex life
- › Polyurethane compounding for firmer grip, greater strength and high resistance

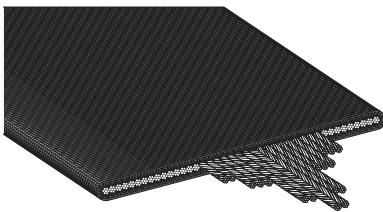
Variable Speed



For use on variable speed sheave drives that require exact speed control and maximum range of speed changes. Ideal for recreational equipment, agricultural applications and machine tools.

- › Excellent transverse rigidity and flexibility to prevent buckling at minimum diameter settings
- › Firm gripping action providing positive traction for precise, immediate response
- › Reliable, predictable transmission of power over the drive's full operating range
- › Precision molded

Flat



Extremely flexible, long lasting and lightweight, even when operating over small pulleys. Made in four different weights to handle a range of horsepower and speeds in both industrial and agricultural drives.

- › Uniform belt surface with no splicing
- › Available with synthetic cords, multiple ply or steel cord reinforcements
- › Can be supplied with oil resistant covers, friction surface or bareback
- › Complete line of Truly Endless and multiple ply belts to regulator strap for the health and fitness industry

Acculinear Belts Polyurethane Belts



Often used in linear motion drives and manufactured in open-end rolls with a standard roll length of 300 feet. Clamping plates are available for open-end Acculinear belts to mechanically join the belt's ends. Belts may also be thermetically spliced to obtain any continuous length of endless belting. These spliced Acculinear belts are primarily used in light conveyor applications where long endless belts are required.

- › Polyurethane material resists flaking, has higher dimensional stability and superior wear resistance
- › A variety of application-specific backings available
- › Superior abrasion resistance
- › Self-tracking design eliminates belt wander
- › Flangeless for more compact design
- › Tooth geometry reduces drive vibration

ELATECH® Polyurethane Belts

Featuring iSync and custom solutions for truly endless possibilities



Created for power transmission drives in difficult environments where high precision is needed and cleanliness is critical, as well as heavy-duty conveying drives with special backing or cleats. Composed of high-performance, thermo-set resin, and reinforced with steel (standard) or aramid fiber reinforcement (on demand) tensile members.

- › High power-transmission capabilities
- › A variety of application-specific backings available
- › Superior abrasion resistance
- › Maintenance-free

Endless ELA-flex SD™

Truly endless belts constructed with high-strength steel tension cords and high-abrasion-resistance polyurethane. Ideal for high-speed power transmission and high-load conveying applications.

Open End ELATECH® M

Open-ended belts with excellent precision and dimensional stability, in addition to high abrasion resistance. Ideal for linear-motion applications.

Spliced ELATECH® V

Highly flexible spliced belts with unique precision positioning. Ideal for all conveying applications where synchronization is required.



Drive Change™

Drive Change maximizes efficiencies, reduces maintenance costs and increases productivity. To improve drive efficiency, we have developed easy-to-use software programs including MaximizerPro. Drive Change involves upgrading drives to the latest innovative belt technologies.



MaximizerPro™

Maximize your energy savings and satisfaction



Scan to download or visit
www.contitech.us/maxpro

Our exclusive drive selection analysis software helps you design efficient power transmission belt drives for your drive system. Enter your drive specifications to show belt options to deliver maximum energy savings for your application. Access with mobile devices, use online or download to your desktop. The choice is yours.

TensionRite® Frequency Meter



Proper tension is essential for maximum belt life and efficiency. Using advanced optical technology with a simple, repeatable and reliable method for tensioning belts, TensionRite Frequency Meter displays the natural vibration frequency of the belt strand to closely monitor belt tension. The device works with all industrial transmission belts.

Laser Alignment Tool



Fast, convenient and attaches in seconds, the Laser Alignment Tool affixes to most pulley and sprocket types, delivering a highly visible sight line.

- › Detects both radial and axial misalignment
- › Easier to use than conventional methods of misalignment detection
- › Suitable for nonmagnetic pulleys and sprockets
- › Single operator friendly

The E's of Efficiency for Mechanical Drive Systems

Evaluate - Empower - Educate

A commitment to helping improve efficiency and your bottom line

With maintenance tools, specialized training, a wide range of products and a team of drive system specialists, we will help ensure your mechanical drive systems run as efficiently as possible. Three simple steps can help you save energy, increase productivity and keep your systems operating at their best:

Evaluate. Empower. Educate.



Evaluate

Competence for facility-wide improvement

By thoroughly examining your mechanical drives, we can offer several ways to enhance their performance as well as:

- › Increase productivity by boosting the performance of all your drives
- › Create operational savings by reducing routine maintenance
- › Optimize drive efficiency up to 98% with up to 19dB less noise emission
- › Lower energy cost with savings up to 5% on the operational cost of each drive with user-friendly MaximizerPro™ drive analysis software



Empower

Recommendations that deliver value

Continental ContiTech has a rich heritage of manufacturing innovative power transmission belting and drive systems, making your choice for drive upgrade easier.

- › Connect with the brand that performs
- › Large inventory selection allows you to choose the best value package for all your belt drive systems
- › Power transmission products can help you reduce energy consumption and maximize efficiencies



Educate

Hands-on training to ensure longevity

Our E's of Efficiency program does not end with the installation of your drive components. We have the tools and training to maximize efficiency throughout the life of your mechanical belt drives, while helping to ensure they continue to operate at peak performance. Continental ContiTech offers sponsored training programs for you to receive the latest in installation and maintenance best practices.

The proof is in the performance

Our E's of Efficiency program can deliver real results for your operation, saving thousands by:

- › Reducing energy consumption and maximizing efficiency
- › Reducing maintenance and cutting labor costs
- › Decreasing downtime and increasing productivity
- › Quieting operations and reducing belt slippage

ContiTech



Contact

ContiTech

NAFTA Headquarters

703 S. Cleveland Massillon Road

Fairlawn, OH 44333-3023 U.S.A.

1-800-235-4632

Canada

1-888-275-4397

FAX 1-888-464-4397

Mexico

1-800-439-7373

FAX 1-800-062-0918

Germany

+49 (0)511 938 02

mailservice@contitech.de

www.contitech.us

ContiTech. Engineering Next Level

As a division of the Continental Group, ContiTech is a recognized innovation and technology leader in natural rubber and plastics. As an industry partner with a firm future ahead of us, we engineer solutions both with and for our customers around the world.

Our bespoke solutions are specially tailored to meet the needs of the market. With extensive expertise in materials and processes, we are able to develop cutting-edge technologies while ensuring we make responsible use of resources. We are quick to respond to important technological trends, such as function integration, lightweight engineering and the reduction of complexity, and offer a range of relevant products and services. That way, when you need us, you'll find we're already there.