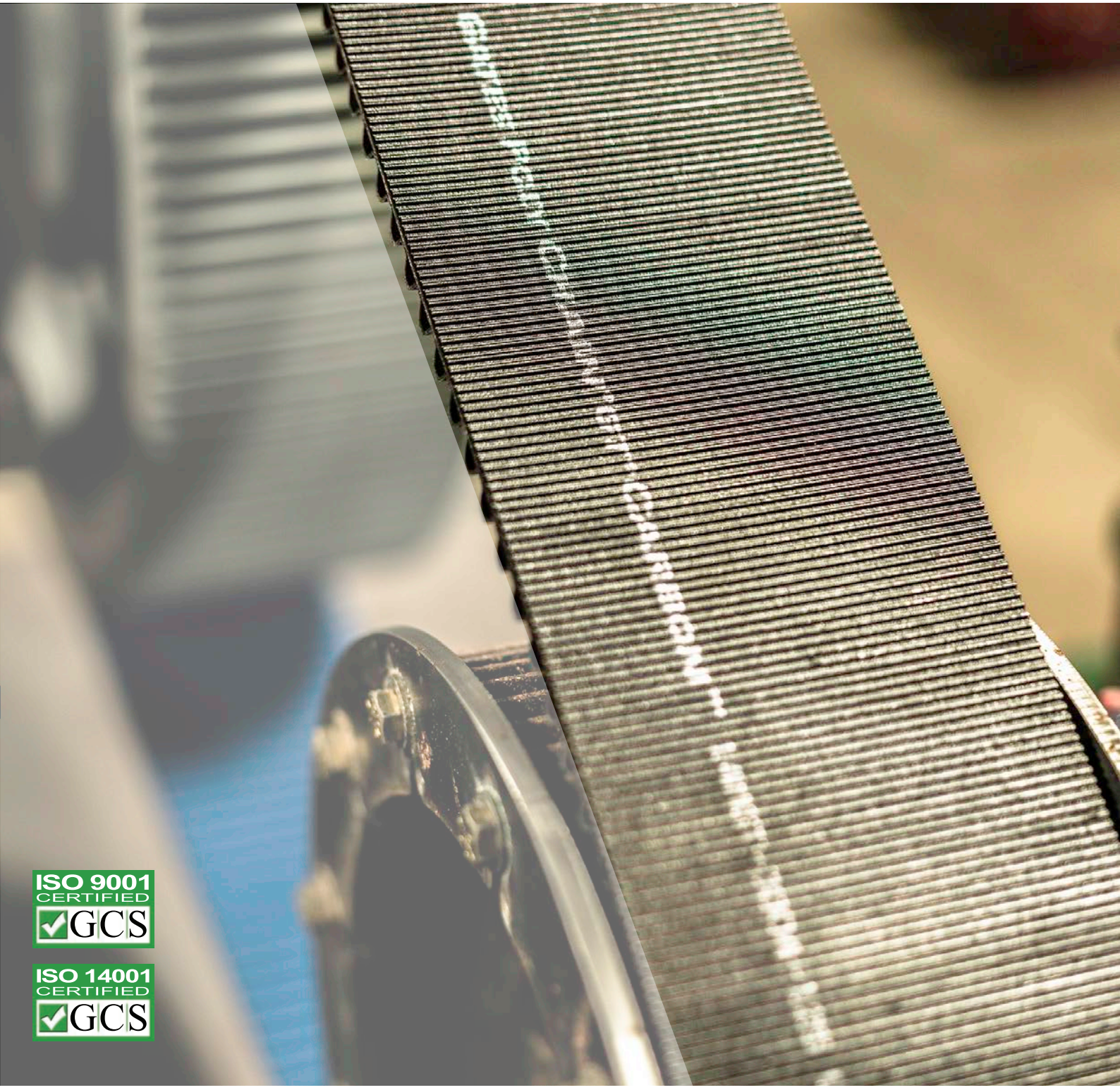
SAECOWilson

Bearings | Power Transmission | Engineering Supplies



ISO 9001 CERTIFIED GCS

ISO 14001 CERTIFIED GCS

INDUSTRIAL BELT DRIVES

Gates®

0800 338 833

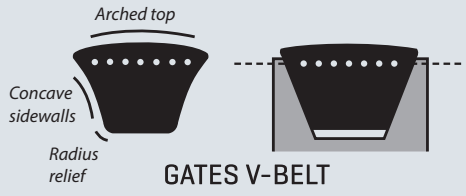
www.saecowilson.co.nz

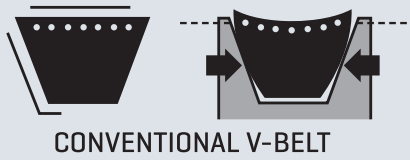
FEATURES GUIDE

SAECO Wilson
Powering Performance

While two V-belts may look similar to the casual observer, engineering design processes and materials can vary greatly, leading to vast differences in performance. With nearly 100 years of experience, Gates advanced V- belt systems are constructed to out-perform and outlast all other competitive products.

V-belt Curves



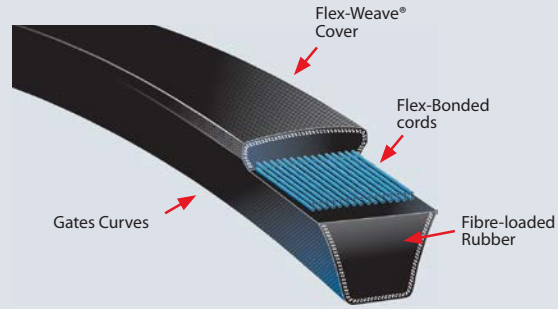


V-belt Curves

When V-belts are under tension and running in a pulley they change shape. Gates V-belts are designed with the exclusive Gates Curves feature that consists of three key components: Concave sidewalls, Radius relief corners and an Arched top.

Concave sidewalls assure even contact with the pulley. Radius relief reduces corner wear and works in conjunction with the concave sidewalls for uniform tensile loading. The Arched top provides strength, preventing the "dishing" effect that is found in other belts not engineered for shape change. The superior Gates Curves work to evenly distribute wear and offer uniform cord support creating more efficient drives and increased service life.

Flex-Bonded Cords & Flex-Weave® Cover



Flex-Bonded Cords

A strong chemical bond is used between the tensile cord and the belt's rubber body, allowing all of the belt materials to function as one unit. The Flex-Bonded cords result in less stretch. The cords cannot creep inside the belt, often the case with low quality belts.

Flex-Weave® Cover

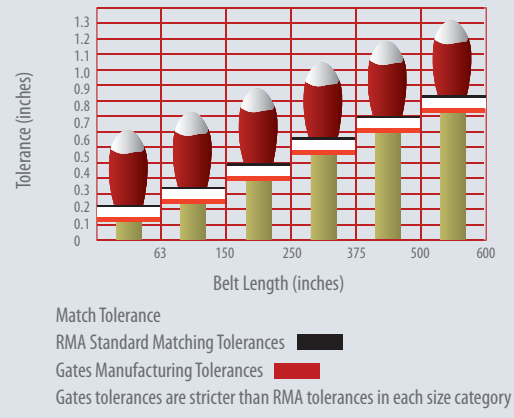
Belt covers should shield the belt core from destructive forces such as oil, dirt and heat. Gates patented Flex-Weave® cover takes that protection to the next level. Made out of a flexible fabric, treated to maintain a strong chemical bond to the belt core, the Flex-Weave® cover can withstand the stress of constant bending over an extended period of time, offering longer cover life and greater protection of the belt. Other belts are typically made with bias-cut fabric which has a mechanical bond to the belt core that isn't as flexible, making them more likely to split. Gates Flex-Weave® cover is engineered to keep belts running longer for less downtime.

Traverse Rigidity

Fibre Loaded Rubber

Every V-belt must have a high level of rigidity across its width so that load is equally transferred by all of the tensile cords. It is equally important that there is a high level of flexibility along the length of the belt to reduce heat build-up and bending stresses. Gates belts are constructed with fibre loaded rubber so that the fibres are aligned in one direction allowing the belt to easily bend around a pulley but have a high level of traverse (sideways) stability. The transverse rigidity of Gates V-belts is engineered to allow for better load life capacity and maximum efficiency from the belt.

Match-Free Belts



Match-Free Belts Since 1980

To prevent users from going through the cumbersome task of matching their V-belts, Gates has applied proven statistical process control (SPC) methods to material and assembly processes, creating the V80 and UNISET series of belts, which are built to tight tolerances in each size category (Est. 1980).

Each V80 and UNISET belt is manufactured with a finite length tolerance so that any Gates belt will match and perform with any other V80 or UNISET belt of the same size and type. Made with high-modulus polyester tensile cords, Gates V80 and UNISET belts exhibit extremely low stretch, saving maintenance time and money.

> Gates V-belts are constructed with the most advanced technology available today. With features like the patented Flex-Weave® cover, Gates Curves and exclusive EPDM construction.

> Gates belts are designed for longer service life, eliminating costly downtime for retensioning, repair and replacement.

> From cords to cover, Gates is continuously innovating new ways to keep your applications up and running.

FIELD SERVICES, SOFTWARE & TRAINING

SAECOWilson
Powering Performance

Our aim is to provide you with the right technical support, tools and training to ensure that you get the best performance from your equipment. SAECOWilson and GATES offer a range of services to ensure you get maximum reliability, reduced downtime and lower maintenance costs.

Engineering Technical Services

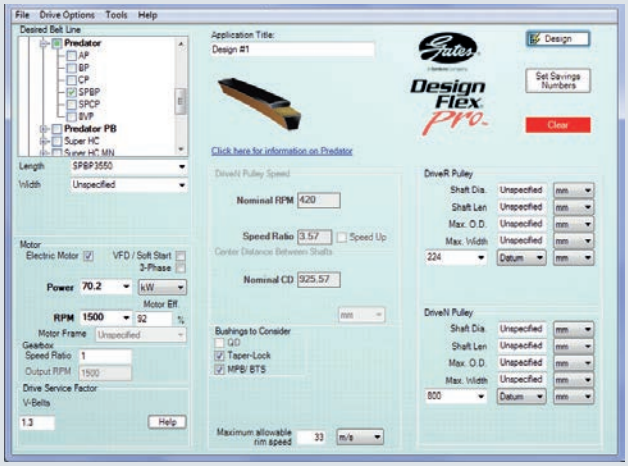
SAECOWilson and Gates field team members are available to work with you on site to provide solutions for any new drives or belt drive problems you are currently experiencing.

SAECOWilson and Gates can visit and survey your entire site/plant, offering:

> Drive design expertise
> On-site drive performance evaluations
> Laser alignment
> Belt tensioning
> Drive operating condition analysis
> Belt failure analysis
> Solutions for special application requirements
> Recommendations and solutions

Belt Drive Design Software

Design Flex® Pro™



Gates Design Flex® Pro™ software is the ideal tool for checking existing belt drives and designing new belt drives.

Fast and Easy

With as little as 6 pieces of data you can instantly generate a report providing you with the capacity and accurate tensioning details for your belt drive.
If you are trying to modify an existing drive, or design a completely new one, then just select the desired belt types, enter in the required parameters and you will have a list of all possible drive options. All you need to do then is select the solution that best suits your requirements.

The detailed design reports generated can easily be printed or saved as a PDF for future reference. **www.gates.com/designflex**

Preventive Maintenance Training Course

Gates offers certified Preventive Maintenance Training to assist in achieving the best performance from your belt drives and keeping downtime and maintenance to a minimum.

The most common causes of poor belt life are improper maintenance and improper installation. The course aims to ensure that these causes are illustrated to provide trouble free drives and increased uptime.

THE COURSE COVERS THE FOLLOWING:

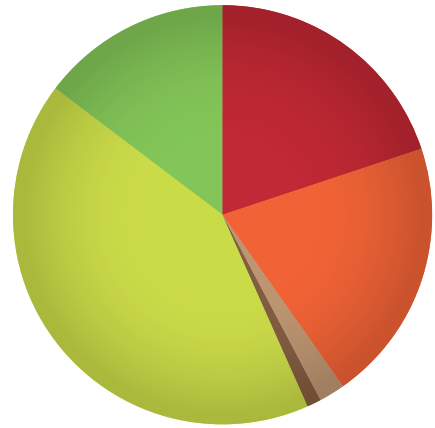
> Belt identification
> Belt construction
> Belt matching
> Belt drive problems
> Pulley and belt inspection
> Guard maintenance
> Shutdown procedures
> Drive installation and alignment
> Belt tensioning techniques
> Re-tension periods
> Training on the use of tension and laser alignment tools
> Troubleshooting failure modes

Duration of course = 3 – 4 hrs.
Max 12 per class.
Cost: Dependent on group size.

Increase Uptime With Proper Maintenance

An effective preventive maintenance program keeps your facility running safely and at optimum capacity.

Properly maintained belt drives can be your most cost-effective and reliable power transmission solution. Industrial belt drive performance is negatively impacted by many factors:



IMPROPER DRIVE MAINTENANCE 42%
ENVIRONMENTAL FACTORS 15%
IMPROPER INSTALLATION 20%
POOR DESIGN 20%
IMPROPER HANDLING 2%
DEFECTIVE COMPONENTS 1%

Eliminating any of these factors has an impact on your productivity!

Attend the Gates Preventive Maintenance Seminar.

SOURCE:
Gates Industrial Belt and Drive Preventive Maintenance Manual

THE COMBINED FORCE OF SAECOWilson & GATES

The Unique Combination of Innovation and Tradition

SAECOWilson has been servicing NZ industry in one form or another since 1919. We specialise in the distribution of premium international brands of bearing, power transmission and engineering supplies throughout our national branch network of 22 sites.

Our team, of about 200 nationally, are supported by our qualified in-house engineers that provide the technical support for a wide variety of complex industrial applications. SAECOWilson is ISO 9001 & ISO 14001 certified for services provided by our National Support Office and Distribution Centre.

Over the years, the Gates Rubber Company has played a lead role in the development of engineered rubber products. It all began in 1917 when John Gates invented the V-belt which revolutionised the methods of power transmission in industrial and automotive machinery. Then, in 1946, Gates developed the first rubber synchronous belt to synchronise the needle and bobbin movement of the Singer sewing machine.

Since these two major events, Gates has introduced numerous innovative products, including Predator® and Poly Chain® GT Carbon™. With each new product advancement, Gates has helped industry overcome problem belt applications and minimise maintenance downtime.

Gates advanced manufacturing and research facilities are committed to improving the features of industrial belt products in anticipation of customers' future needs.

SAECOWilson & Gates:

SAECOWilson and Gates have been in partnership for over 30 years and bring together the power of Gates world class products and SAECOWilson's longstanding commitment to servicing NZ industry.

> Gates innovative and advanced product range

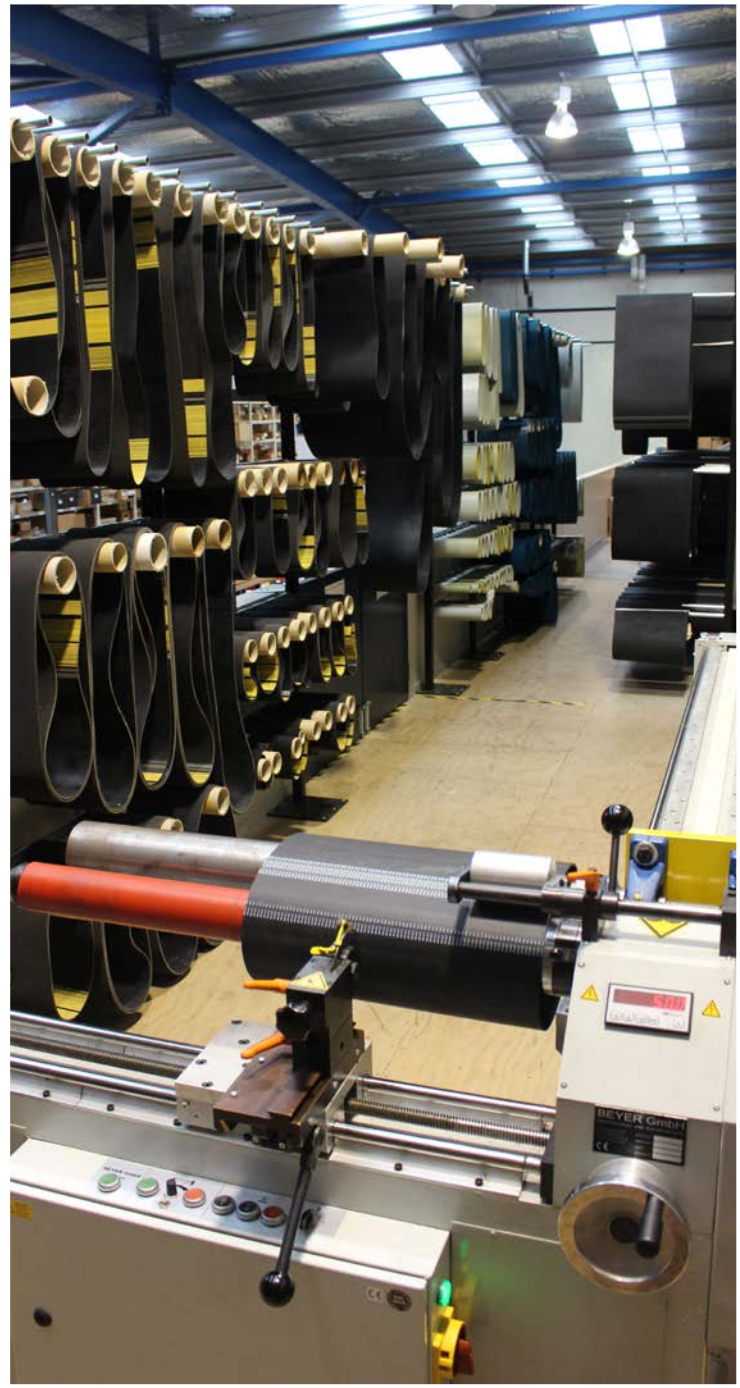
> SAECOWilson's multiple distribution points across NZ

> Large Inventory available nationally

> Full in-house technical and engineering support

> National field support to help you optimise your plant

No matter your industry, you can expect the best from the combined force of two market leaders.



V-BELTS

SAECO Wilson
Powering Performance

Gates invented the V-belt in 1917 and since then have come up with innovative high quality belts to increase belt life. From the space saving Super HC® and Quad-Power®III to the downtime killing Predator®, Gates have a premium construction v-belt for every application.

Hi–Power® II

Z, A, B, C, D, E

A concaved sidewall, arched top to prevent dishing and rounded bottom corners to relieve internal stress help make Hi-Power® II the best performing classical section, heavy duty V-belt on the market.

CONSTRUCTION	
Wrapped	
COVER	
Flex-Weave polychloroprene	
TENSILE MEMBER	
Polyester blend	
TEMPERATURE RANGE	
-35 to + 60	
CAPACITY	
100%	

Super HC®

SPZ/3V, SPA, SPB/5V, SPC, 8V

Pioneered by Gates, Super HC belts are a narrow cross section construction that can transmit up to 3 x the power of a classical belt. Suitable for all heavy duty industrial applications, particularly where space, weight and power capacity are critical.

CONSTRUCTION	
Wrapped	
COVER	
Flex-Weave polychloroprene	
TENSILE MEMBER	
Polyester blend	
TEMPERATURE RANGE	
-35 to + 80	
CAPACITY	
150%	

Quad-Power® 4

XPZ/3VX, XPA, XPB/5VX, XPC, 8VX

Top of the range narrow section raw edge belt with the highest power capacity in its class, compact design and improved resistance to back idlers. Designed for extreme temperatures and service free operation.

NEW!
Patented Construction.

CONSTRUCTION	
Raw Edge	
COVER	
Double Flex-Weave textile backing	
TENSILE MEMBER	
Polyester blend (minimal elongation)	
TEMPERATURE RANGE	
-50 to +130	
CAPACITY	
215%	

Predator™

AP, BP, CP, SPBP/5VP, SPCP, 8VP

Designed for the toughest, dirtiest and most aggressive applications with unparalleled shock and stretch resistance. Designed to withstand debris, punctures and slippage.

No stronger V-belt available anywhere!

CONSTRUCTION	
Double Ply Wrapped	
COVER	
Specially treated bare back fabric (non-rubber)	
TENSILE MEMBER	
Aramid	
TEMPERATURE RANGE	
-20 to + 80	
CAPACITY	
250%	

Tri-Power®

AX, BX, CX

Gates Tri-Power® is a raw edge, moulded notch, classical section V-belt suitable for very high temperatures.

NEW!
Patented EPDM Construction.

PowerBand®

PowerBand® belts consist of several belts joined together by a tie band running across the back of the belts. The solution for drives where single belts vibrate, turnover or jump out of the pulley. Available in all sections including Predator®.

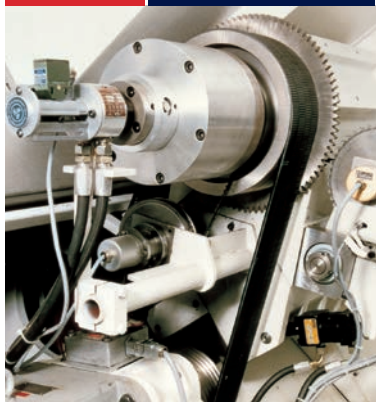
Micro-V®

J, L, M

Outstanding performance at higher speeds on small diameter pulleys. Micro-V® offers extremely smooth running in a compact drive package.

Polyflex®

3M, 5M, 7M, 11M



Ideal for use on machine tools requiring high performance and smooth operation in limited space. Suitable for high speeds and extremely small pulley diameters.

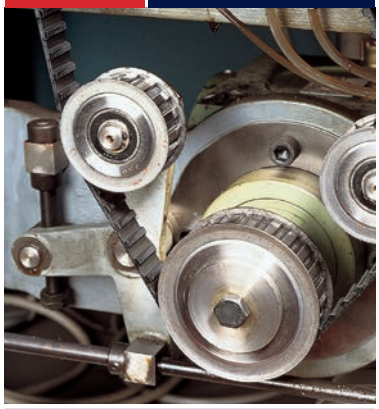
SYNCHRONOUS BELTS

SAECO Wilson
Powering Performance

Since the invention of the trapezoidal synchronous belt in 1946 for the Singer® sewing machine, Gates have developed their product to be unrivalled in performance and power capacity. Whether it is for high precision or huge torque, Gates have a synchronous belt to suit.

PowerGrip®

XL, L, H, XH, XXH

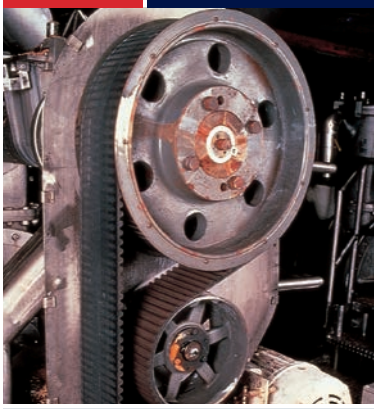


Classical synchronous belt, often referred to as a trapezoidal belt due to the tooth profile, offers a maintenance free and economical alternative to conventional drives like chain and gears.

TOOTH SHAPE	
Trapezoidal	
TOOTH & BODY MATERIAL	
Poly-Chloroprene rubber	
TOOTH FACING	
Nylon	
TENSILE MEMBER	
Helically wound fiberglass	
TEMPERATURE RANGE	
-35 to +100	
POSITIONING	
Fairly good	
CAPACITY	
80%	

PowerGrip® HTD®

3M, 5M, 8M, 14M, 20M



HTD curvilinear tooth profile guarantees high power transmission in low speed high torque applications.

TOOTH SHAPE	
Curvilinear	
TOOTH & BODY MATERIAL	
Poly-Chloroprene rubber	
TOOTH FACING	
Nylon	
TENSILE MEMBER	
Helically wound fiberglass	
TEMPERATURE RANGE	
-35 to +100	
POSITIONING	
Not recommended	
CAPACITY	
100%	

PowerGrip® GT4®

8MGT, 14MGT

NEW!
Patented Construction.

Larger temperature range capability. Higher power-carrying capacity giving you the option to use a narrower belt.

TOOTH SHAPE	
Modified Curvilinear GT4 (HTD compatible)	
TOOTH & BODY MATERIAL	
Ethylene Elastomer	
TOOTH FACING	
Nylon	
TENSILE MEMBER	
Helically wound and chemically treated fiberglass	
TEMPERATURE RANGE	
-40 to +140	
POSITIONING	
Excellent	
CAPACITY	
240%	

Poly Chain® GT Carbon®

8MGTC, 14MGTC

The most powerful synchronous belt in the world, virtually immune to abrasion and chemical attack. Maintenance free running makes it an excellent alternative to roller chain and can replace up to 1" pitch triplex chain in capacity.

TOOTH SHAPE	
Modified Curvilinear	
TOOTH & BODY MATERIAL	
Polyurethane	
TOOTH FACING	
Nylon	
TENSILE MEMBER	
Helically wound carbon fibre	
TEMPERATURE RANGE	
-35 to +85	
POSITIONING	
Excellent	
CAPACITY	
500%	

Poly Chain® Carbon™ VOLT®

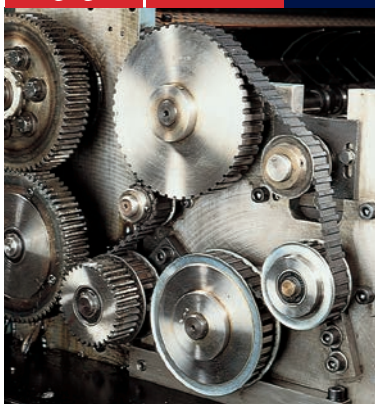
8MGTV, 14MGTV

Static Conductive

Poly Chain® Carbon™ Volt® belts deliver unmatched antistatic performance. Flex fatigue life of carbon is exceptional and its high impact strength withstands shocks and surge loading.

Twin Power®

TP



Twin Power® belts are available in a number of different sections and are suitable for drives that require smooth running contra-rotating shafts.

Synchro-Power®

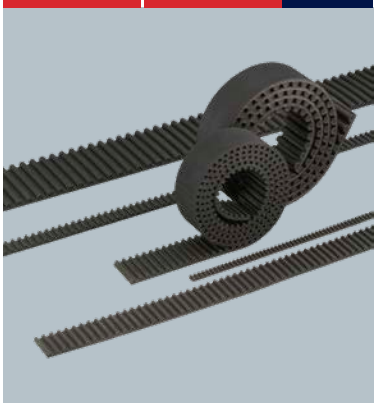
T2.5, T5, T10, AT5, AT10

For drives generally of a European origin requiring maximum power transmission combined with tight and accurate tolerances.

Extensive range now ex-stock.

Long Length

LL, ULL



Open end synchronous belting especially suitable for linear movement. Available in rubber and polyurethane and with glass and steel tensile cords.

Special tooth coatings and backings are also available from Gates TPU Division.

TPU BELTS

ESSENTIAL MAINTENANCE TOOLS

SAECO Wilson
Powering Performance

For optimum belt drive performance you need the right tools for the job. Gates offer a range of tools to help achieve the best result every time. Combined with the Gates Design Flex Pro software it is fast and easy to accurately align and tension any belt drive.

Maintenance Kits

Optimum belt drive performance is not achieved via guess work. You need the right tools for the job.

Gates' most popular Maintenance Tool Kit [GIBMAINT-3] allows any belt drive to be accurately installed and maintained. It includes Gates premium 508C Sonic Tension Meter and EZ Align® Green laser alignment tool. The Belt Wear Gauges allow for quick V-belt pulley inspections.

The aluminium tension plates can be installed on the drive or guard to ensure belt details and tensioning data are always on hand.

Three other kit versions are available with slightly different components included to suit your requirements and budget.

508C - Sonic Tension Meter

The 508C Sonic Tension Meter (7420-0508) allows for fast, accurate readings on all types of synchronous and V-belt drive systems. Use the standard cord sensor to reach inside cramped compartments where conventional methods would be impossible.

This small, light and user friendly meter features:

> Output readings measurable in Hertz, pounds, kilograms and Newtons.
> Improved frequency range from 10-5000 hertz.
> Variable frequency range filters.
> Auto gain control automatically adjusts meter sensitivity.
> 20 memory registers for belt contents.
> LCD screen with back light.

508C - Sonic Tension Meter Accessories

Gates offer a range of additional accessories suitable for difficult environments.

1. Standard Cord Sensor (7420-0206) (Included with 7420-0508).
2. Flat Flexible Sensor (7420-0205) Bend to required shape for convenient, one-hand operation. (Replaces 7420-0204)
3. Inductive Sensor (7420-0212) (Magnets included)
4. Replacement Magnet (7420-1212)

EZ Align® Green - Laser Alignment Tool

Gates EZ Align® Green precision laser alignment device allows a single person to quickly and easily align a belt drive.

The green laser is 10x brighter than the previous red laser design allowing for much easier use in bright areas.

Gates EZ Align® Green tool uses powerful laser line technology for maximum angular accuracy on belt drives up to 7.6 metres in centre distance (7420-3000).

AT-1 Laser Alignment Tool

The Gates AT-1 laser alignment tool can be used to align both V-belt and synchronous belt drives. It can show both parallel and angular misalignment between the pulleys.

Entry level laser suitable for most applications.

V-Belt & Pulley Gauges

Gates colour coded V-belt and pulley gauges provide a simple solution for detecting worn pulleys and identifying V-belt cross sections. The pulley wear gauges fit standard industrial grooves, identifying excessive wear before it leads to premature belt failure.

Tension Testers

Gates has available two tension testing tools for use in the servicing of belt drives.
The single barrel (15kg) and the double barrel (30kg) tester can be used to accurately measure the tension of individual or joined belts upon installation or during maintenance.
Using the tension tester ensures that correct tension is maintained and is repeatable. This will yield a longer service life.

Tension Plates & Stickers

No more guessing tensions or wondering what the correct belt should be. Gates can supply adhesive backed aluminium plates or stickers that can be attached right onto the machine.

All your critical drive information can be on the plate or sticker specifying which belt, how many and the tensioning data, ensuring incorrect belt installation is avoided.

BRAND PARTNERS

+ INDUSTRIAL & AUTOMOTIVE BEARINGS	NSK, TIMKEN, COOPER, NTN, McGILL, INA FAG, DODGE
+ LINEAR MOTION BEARINGS	THK, ROLLON LinearEvolution, WON
+ SLEWING RINGS	Rothe Erde, ROLLIX, Rotek Incorporated
+ SCREWJACKS ACTUATORS & GEARS	ZIMM Screw Jack Systems, KHK, LINAK WE IMPROVE YOUR LIFE, Duff-Norton
+ PLAIN BUSHES & ROD ENDS	CSB, FK, SBS, SB, LS
+ BELTS & PULLEYS	Gates, PIX, Martin, optibelt SI, Fenner
+ CHAIN & SPROCKETS	REXNORD, S.Y, RENOLD Superior Chain Technology, JWIS, DIAMOND, Martin, OCM ORIENTAL CHAIN MFG. CO., LTD., Fenner
+ COUPLINGS	Lovejoy, Martin, RENOLD Superior Chain Technology, FALK
+ GEARBOXES	Bonfiglioli power, control and green solutions, DODGE
+ MOTION CONTROL	TRIO, TECNOINGRANAGGI, KHK, BONFIGLIOLI VECTRON
+ OTHER POWER TRANSMISSION AGENCIES	mayr, TOLLOK, ROSTA, TECO, TRANSFLUID
+ LUBRICATION EQUIPMENT	GROZ, PULSARLUBE, Alemlube, macnaught, perma, simalube smart lubrication
+ LUBRICANTS	ROCOL, TIMKEN, INA FAG, KLÜBER LUBRICATION, MOLYBOND Specialised Lubricants, Castrol
+ ENGINEERING CONSUMABLES	LOCTITE, KLÜBER LUBRICATION, inox, CRC, ROCOL, SANDVIK Coromant, GALMET, Devcon, TITON, morrisflex, DOW CORNING, Evacut, suttontools, MOLYKOTE
+ MAINTENANCE & MEASURING TOOLS	Mitutoyo, Lufkin, GROZ, Sykes-Pickavant, FAMOUS TOLEDO EXCELLENCE BY DESIGN, KOMELON, Starrett, CUPLA
+ HAND TOOLS	KINCROME, POWERBUILT, Koken, AmPro, BAHCO, HIT, CRESCENT, BONDHUS, TRIDON, GROZ
+ POWER TOOLS	HiKOKI, melabo, Air COMMAND, Makita, Nilfisk, TOOLINE, Milwaukee, EUROBOOR, GYS POWER
+ ABRASIVES	KLINGSPOR, flexovit, NORTON, 3M
+ CHEMICALS & ADHESIVES	simple green, LOCTITE, inox, GALMET, ROCOL, LPS, DOW CORNING, CRC, ados, MOLYKOTE, Devcon
+ LIFTING & MATERIALS HANDLING	BEAVER, Pacific Hoists, R, NINJA
+ SAFETY	FRONTIER, esko, BEAVER, STEEL BLUE, MACK, 3M, Master Lock, STOKO
+ WELDING EQUIPMENT & CONSUMABLES	WELDWELL, euroquip empowering industries, ARCOWELD, MIG, Miller, LINCOLN ELECTRIC

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