

Products & Applications

Textile Industry

www.optibelt.com
optibelt

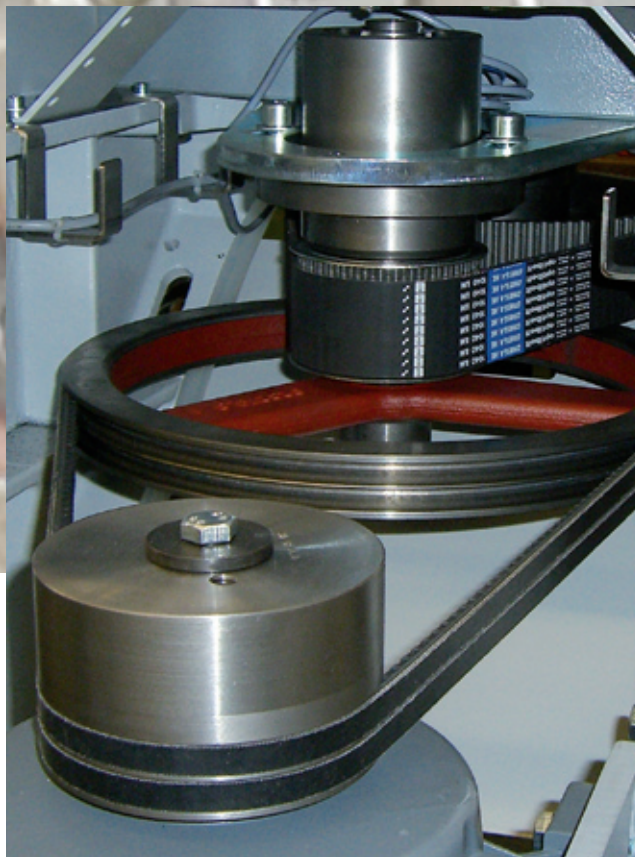
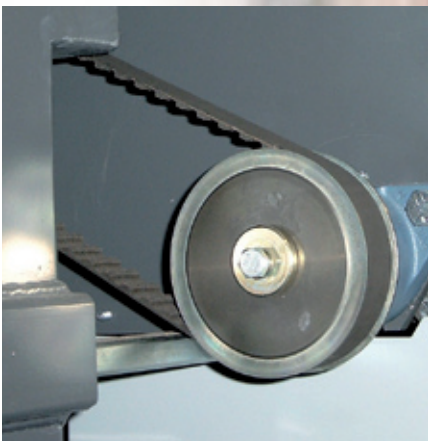


Drive solutions with Optibelt



Timing belts in different designs and sections are used in the textile industry. Whether it be small chloroprene timing belts used for spindle drives in texturing machines or high power timing belts in large sections used for main drives right up to polyurethane timing belts, e.g. metre goods welded in circular knitting machines. The product range is extremely versatile and the applications are almost unlimited.

Optibelt timing belts



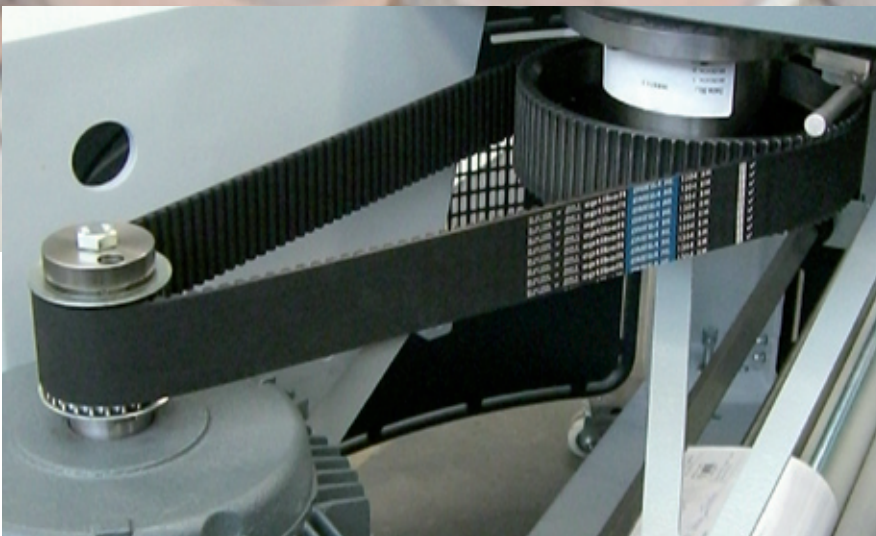
The Mayer & Cie. Company –
worldwide leading manufacturer
of circular knitting machine uses, amongst other items,
the Optibelt OMEGA HL 1040 8M 50 high power timing belt
in their knitting machines and open width machines.

The knitting machines are available in both single and double jersey design. Single jersey is knitted right/left and the double jersey is either left/left or right/right. The size and quantity of the needles are decisive with regards to the quality of the work, the speed and diameter is decisive for the quantity of the work. Inside a knitting machine up to 3000 knitting needles are moved that only measure around 0.3 mm. Circular knitting machines are used for the manufacture of clothing right through to the manufacture of automobile and technical textiles. The timing belt serves as a main drive and has replaced the planetary gear train. This reduces costs with regards to maintenance, but also mainly with regards to the construction costs of the gear train.

In addition to this, the timing belt offers a quieter drive. Depending on the version of the machine, a V-belt drive with two grooves is connected upstream of the timing belts for reduction purposes. Here two Optibelt Super X-POWER 1537 XPZ units carry out their work.

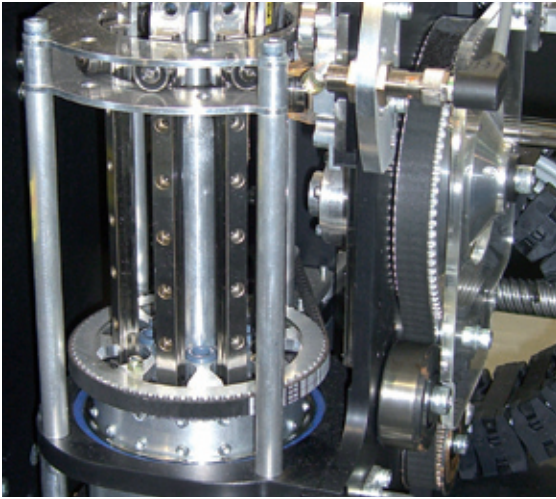
Smaller timing belts, such as the Optibelt Hi Flex 70262 x 8 (Optibelt 153 2.8MHP 8) are used in the form of a spindle drive in the texturing machine. Texturing machines refine the yarns. At this point, flat and endless chemical yarns will be crinkled and bagged (crinkled yarn) in order to – for example – increase the stretching properties of the product. Therefore it is attempted to give the synthetic fibres a characteristic that is similar to natural fibres.

**in use
in the textile industry**





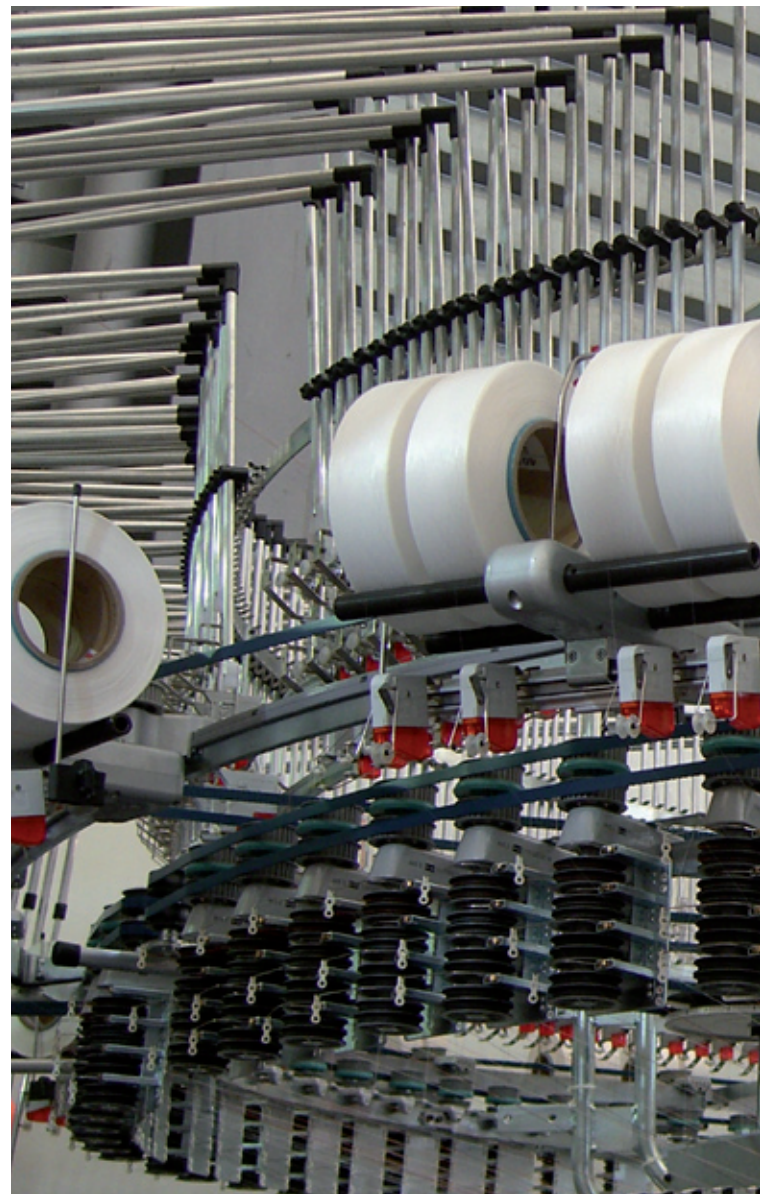
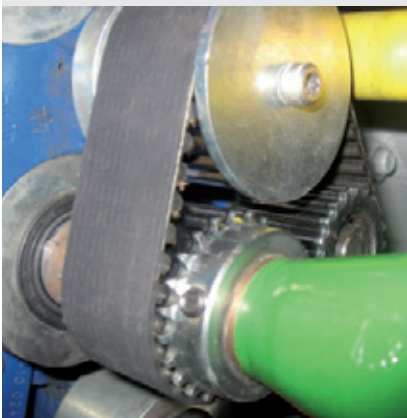
Premium products for premium te



The Padma Group prefers OMEGA HP and HL

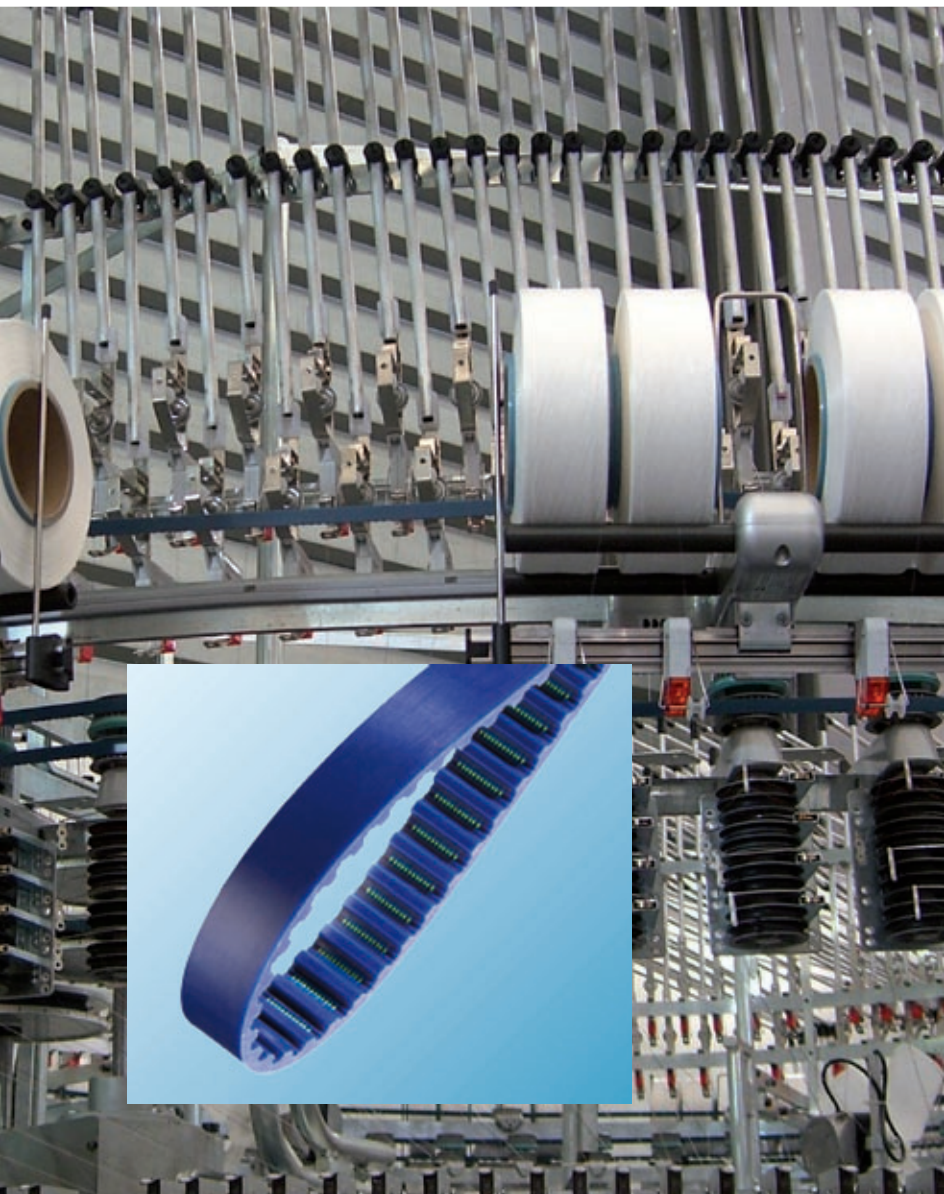
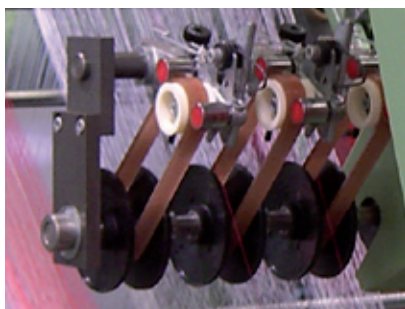
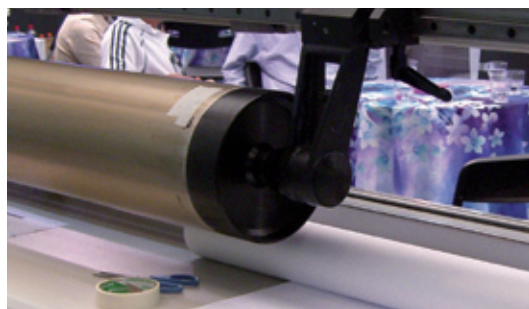
As one of the largest exporters of textiles that are sold with the most famous of labels in both the USA and Europe, the company pays particular attention to the excellent goods that are manufactured by their machines. Recently, the Managing Director – Mr. Khan Mohammed Ameer – spoke to Optibelt at Textech in Dhaka about a new machine that was experiencing problems: The belts that were used with the machine were lasting for a maximum of two weeks and then had to be replaced. As is always the case in such circumstances, the negative consequences were substantial: high maintenance costs and the stoppage of planned production. However, the Optibelt experts on location were ready with good suggestions for a solution. By adjusting the idler, the angle could be arranged in a more favourable manner so that the Optibelt OMEGA HP and HL belts that were now installed could provide ideal performance. Since this took place, the belts have been running for six months without any breakdowns.

The feedback from the responsible manager from Bangladesh was also positive. The objective is now to equip the respective machines with Optibelt drive belts – proof of the unique quality of Optibelt products.





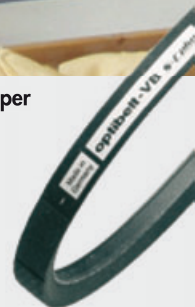
Technologies



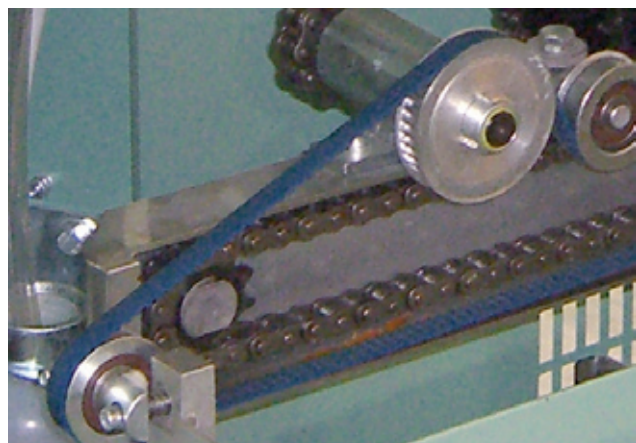
Only the **best**
for the **bears**



In Grieskirchen, a town located in Upper Austria, 300,000 top quality plush animals are manufactured on an annual basis for the Steiff brand. When driving the high power sewing machines, quality products from Optibelt are relied upon.



For over 100 years, Steiff teddy bears have found a place in people's hearts. Even Optibelt plays some part in the manufacture of these top quality animals. Richard Steiff, the nephew of Margarete Steiff, the founder of the company, was the person who brought the first toy teddy complete with moving body parts on to the market in 1902. Now over 1.5 million plush animals of all types leave the Margarete Steiff GmbH plants on an annual basis. The sewing of these animals is of particular importance. It is marvellous to see the precision and dexterity with which the sewing staff go about their art. They can always rely upon their most important tool – the sewing machines that rattle with breath-taking speed. This is due to the fact that the wrapped VB V-belts from Optibelt take care of the long-term and maintenance-free drive of the machines.





optibelt **RED POWER II**

High power wedge belts, maintenance-free

RED POWER II V-belts and kraftbands achieve an increase of power amounting to up to 42% whilst at the same time making a cost saving of up to 20%. The cost savings can be explained as follows:

**Less belt + more narrow pulleys
+ saving of installation space = lower costs**

optibelt **SK + VB S=C PLUS**

Wrapped V-belts

The wrapped Optibelt SK high power wedge belt is primarily used for machine construction. Due to its multitude of application possibilities, the Optibelt VB S=C PLUS is the classical model amongst the drive belts.

optibelt **OMEGA/OMEGA linear**

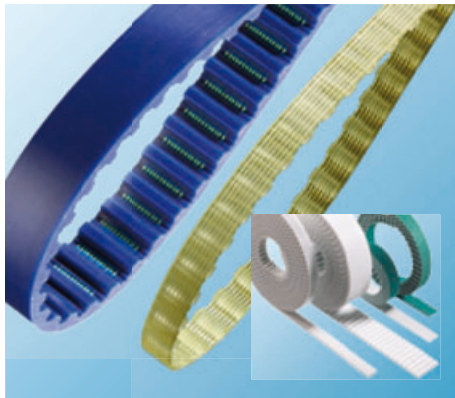
Chloroprene timing belts, maintenance-free

The versatile experiences with the Optibelt ZR and the Optibelt HTD® have been implemented in this belt generation. Endless Optibelt OMEGA timing belts set the priorities for synchronous power and positioning drives.

optibelt **STD®**

Timing belts, maintenance-free

The optibelt STD® possess semi-circular teeth that are particularly shear resistant. The shape of the tooth in combination with the belt construction leads to a uniform load distribution and an ideal engagement of the belt teeth into the timing belt pulleys.



optibelt **ALPHA**

Polyurethane timing belts, metric

Optibelt ALPHA timing belts are manufactured in moulds and are made from a high-strength, flexible tension cord and abrasion resistant polyurethane. This product is also available with a toothed top surface. Advantages: high pitch accuracy and low tolerances, belt lengths up to 2350 mm, nominal sleeve width up to 380 mm.

optibelt **ALPHA linear**

Polyurethane open-ended timing belts

Optibelt ALPHA linear are extruded, open-ended timing belts with tension cords parallel to the belt edges. These belts are primarily used in linear technology. Advantages: high amounts of tensile forces can be transferred, lengths measuring more than 100,000 mm are available as roll goods, fabric on tooth face and belt top surface possible, reinforced designs for linear technology, high level of positioning accuracy.

optibelt **Super VX**

Variable speed belts - raw edge, moulded cogged

The high quality and extremely low-stretch polyester/aramid tension cord is embedded into a rubber compound. The tension cord is effectively supported by an outer surface and carcass. Optibelt SUPER VX variable speed belts are primarily used for variable speed regulation. The special belt construction enables high dynamic loads, secure pulling capability and good control characteristics: Application areas: machine construction, transmission manufacture, printing machines, agricultural machines, machine tools, adjustable speed drive, textile machines.





optibelt TT 3

Frequency tension tester for the universal measurement of the belt tension of V-belts, timing belts and ribbed belts

The Optibelt TT 3 frequency tension tester provides safety for your drives. The consistent further development of frequency tension testing technology enables an individual data recording of all belt drives. The display is in Hertz [Hz] and is given in Newton [N] when the belt parameters have been inputted.

optibelt TT mini S

The new, compact frequency tension tester with a flexible swan neck for trouble-free measuring at spots

The Optibelt TT mini S frequency tension tester is an appliance that is used to check the tension of drive belts by means of measuring frequency. The Optibelt TT mini S can even be used in difficult-to-reach places. V-belts, ribbed belts and timing belts can be simply and quickly reached in order to check their tension values.

optibelt Service-Box

... for quick on-site help

The service box from Optibelt is meant to support many application areas on site. Centre distances, belt lengths and pulley diameters can be established quickly and without problems by means of the flexible measuring tape.

V-belts and pulleys can be identified quickly and effortlessly with the V-belt and pulley groove gauges. In particular, the pulley groove flanks of V-grooved pulleys can be checked for angular deviation and wear.

Where necessary, marks may be made on the belts such as measurements, reference marks etc. which are clearly readable using the special ball point pen with silver refill.

The obligatory magic thumb method for setting belt tension is made redundant thanks to the Optikrik belt tension gauge.

The application and control of belt tension with the Optikrik facilitates the maintenance work of the fitter and increases the safety of drives.



optibelt laser pointer II

An indispensable aid for belt drives

The simple to use Optibelt laser pointer II is a device which particularly proves its value in daily usage. The Optibelt laser pointer II facilitates the alignment of belt drives.

It helps in recognising the three most common causes of drive problems:

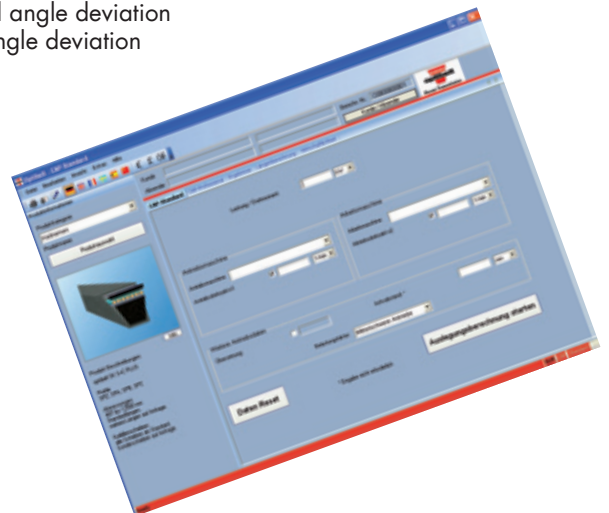
- the axial offset of the pulleys
- the horizontal angle deviation
- the vertical angle deviation

optibelt CAP 6.0

Drive calculation program in new form

The Optibelt CAP drive calculation program has been used for many years on a worldwide basis for the calculation and design of belt drives. Now Optibelt would like to present the next generation: CAP 6.0.

The new visual appearance displays the drive design in a clear illustration and facilitates a quick and well laid out drive design/drive calculation.



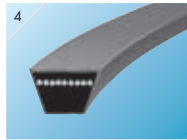
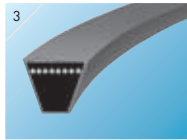
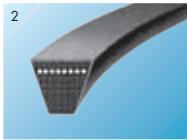
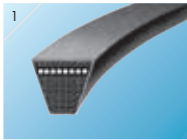
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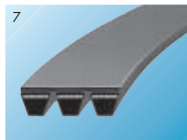
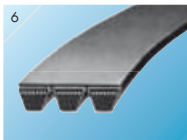
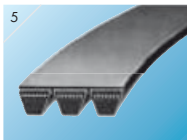
Lieferprogramm Product Range



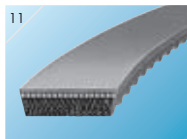
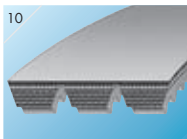
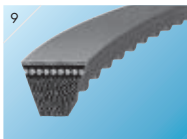
1 **optibelt RED POWER II**
5 **optibelt KB RED POWER II**
Hochleistungs-Schmalkeilriemen,
wartungsfrei
*High performance wedge belts,
maintenance-free*



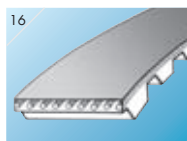
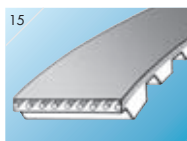
2 **optibelt BLUE POWER**
6 **optibelt KB BLUE POWER**
Hochleistungs-Schmalkeilriemen
High performance wedge belts



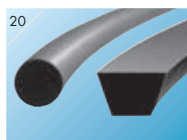
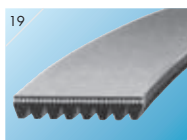
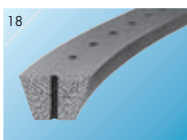
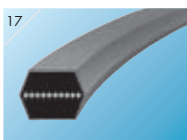
3 **optibelt SK**
7 **optibelt KB SK**
Schmalkeilriemen
Wedge belts



4 **optibelt VB**
8 **optibelt KB VB**
Klassische Keilriemen
Classical V-belts



9 **optibelt SUPER X-POWER M-5**
Keilriemen, flankenoffen,
formgezahnt
*V-belts, raw edge,
moulded cogged*



10 **optibelt SUPER KBX-POWER**
Kraftbänder, flankenoffen
Kraftbands, raw edge

11 **optibelt SUPER VX**
Breitkeilriemen, flankenoffen,
formgezahnt
*Variable speed belts,
raw edge, moulded cogged*

12 **optibelt SUPER DVX**
Doppel-Breitkeilriemen,
flankenoffen, formgezahnt
*Double section variable speed belts,
raw edge, moulded cogged*

13 **optibelt ZR**
optibelt ZR linear
Zahnriemen aus Chloropren
Chloroprene timing belts



14 **optibelt OMEGA HL**
optibelt OMEGA HP
optibelt OMEGA FanPower
optibelt OMEGA linear
Zahnriemen aus Chloropren
Chloroprene timing belts

15 **optibelt ALPHA Power**
16 **optibelt ALPHA**
optibelt ALPHA linear / V
optibelt ALPHA flex
Zahnriemen aus Polyurethan
Polyurethane timing belts

17 **optibelt DK**
Doppelkeilriemen
Double section V-belts

18 **optimat OE**
Endliche Keilriemen
DIN 2216, gelocht
*Open-ended V-belt,
punched*

19 **optibelt RB**
Rippenbänder
Ribbed belts

20 **optibelt RR / RR PLUS**
Kunststoffrundriemen
Plastic round section belting

20 **optibelt KK**
Kunststoffkeilriemen
Plastic V-belt

21 **optibelt KS**
Keilrillenscheiben
V-grooved pulleys

22 **optibelt ZRS**
Zahnriemenscheiben
Timing belt pulleys

23 **optibelt RBS**
Rippenbandscheiben
Ribbed belt pulleys

24 **optibelt SERVICE KIT**