Products and Applications





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Drive solutions with Optibelt

PCP pumps

Patagonia is an Argentine region that is located at the southernmost tip of South America. The elevated land to the East and the Andes to the West are the causes of the predominantly tough climate and scant vegetation that can be found here. The two most important oil sources in the country can be found in this region. Aside from the typical drilling instruments, PCP pumps ("Processing Cavity Pump") are also used here to extract oil. These pumps place a huge amount of strain upon the V-belts due to the small diameter of the pulley and the high level of power.

Optibelt RED POWER II

First choice on the oil fields in Argentina

n Patagonia, S. Uffenheimer S.A. – an Optibelt partner – has identified an important sales opportunity with PCP pumps that will be used by large companies such as Petrobas, Repsol YPF, Capsa-Capex as well as by others in order to tap oil fields that are low in pressure or fields where sand can be found.

During the course of co-operation, the RED POWER II V-belts appeared to be a particular innovative solution for the challenging requirements. Due to the fact that the reduced operational life of the 5VX V-Belts which had previously been used was well known, this type of situation lent itself to carrying out test runs with the Optibelt RED POWER II V-belts with the PCPs at the Weatherford, Netzsch and PCP Oil Tools Companies. The end result was as follows:

The RED POWER II belts are extremely applicable for this planned intended use.

Here are some examples:

Where standard V-belts were used under normal conditions on oil fields, they had a life span of 9,580 hours. However more could be tested with the RED POWER II V-belts as they had a life span of 23,000 hours and more. This equates to almost triple the original life span. When used in oil fields under extreme conditions, the standard V-belts had a life span of between 1,000 and 2,200 hours. However the Optibelt RED POWER II managed a life span of over 16,000 hours. This equates to eight times the life span. The positive results lead to many companies changing their equipment so that Optibelt RED POWER II V-belts are now the standard V-belts which they now use in their oil pumps.







Drilling rigs

he oceans and seas of the world, whose water surfaces cover almost 71% of the surface of the planet, play a decisive role in the search for raw materials, especially crude oil and natural gas. The construction of platforms for offshore use has benefited with the development of technology that has taken place since 1950. The most famous type of platform is the so-called drilling rig/oil rig.

The biggest production platform ever constructed is the Norwegian Sea Troll that belongs to the crude oil company Statoil. This construction can displace a million tonnes of water. From the base of the foundation to the top of the gas torch mast, this construction is 472 metres tall and stands on the sea floor at a depth of 303 metres. If a direct comparison with the Eiffel Tower in Paris was made, the Sea Troll would stand a full 172 metres taller.



Power Transmission



optibelt RED POWER II

High power wedge belts, maintenance-free

The 2nd generation of RED POWER II V-belts and kraftbands are producing results that can be seen for themselves: An increase of power amounting to up to 42% whilst at the same time making a cost saving of up to 20%.

Improved production procedures and the consistent further development of the base products have lead to this great result. The cost savings can be explained as follows:

Less belt + more narrow pulleys + saving of installation space



optibelt 5K 5=C PLU5High power wedge belts DIN/ISO

The wrapped Optibelt SK was primarily developed for machine construction. The belt transfers substantially more power than classical V-belts that have a comparable upper width, e.g. SPB and B/17 sections.

The wrapped V-belt has the famous Optibelt S=C PLUS quality with an efficiency of 97% and is unmeasured and can be used in sets.

Sections: SPZ; SPA; SPB; SPC





optibelt VB **5=C** PLU**5**Classical V-belts DIN 2215

in machine construction.

Due to its multitude of application possibilities, the Optibelt VB is the classical model amongst the drive belts. The qualities of this product come into their own when dealing with difficult drives in agricultural machines just as well as when dealing with extraordinary drive solutions, for example with V-flat drives

Optibelt VB classical V-belts are S=C PLUS and are therefore unmeasured and can be used in sets.

Sections: 5; Y/6; Z/10; A/13; B/17; 20; C/22; 25; D/32; E/40

optibelt *Super X-POWER* Raw edge, moulded cogged V-belts

Consistent further development of the production technique, improved materials, low-stretch polyester cords and an optimal moulded cog form the basis of this new generation of belt.

Optibelt Super X-POWER M=S enables complex drive solutions in the whole machine construction sector in the most difficult of conditions and extreme operational demands.

Sections: XPZ; XPA; XPB; XPC; 3VX/9NX; 5VX/15NX





optibelt TT3

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 5

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 //

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.

The belt 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.









Lieferprogramm Product Range



14 optibelt *DMEGA HL*

optibelt OMEGA HP optibelt OMEGA FanPower

optibelt OMEGA linear

Zahnriemen aus Chloropren

15 optibelt ALPHA Power optibelt ALPHA
optibelt ALPHA linear / V

optibelt ALPHAflex Zahnriemen aus Polyurethan

Polyurethane timing belts

Doppelkeilriemen
Double section V-belts

Endliche Keilriemen

DIN 2216, gelocht Open-ended V-belting,

Kunststoffrundriemen

Kunststoffkeilriemen

Plastic round section belting

17 optibelt *DK*

18 optimat *DE*

punched

Chloroprene timing belts

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 5K optibelt KB 5K

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, formaezahnt Variable speed belts, raw edge, moulded cogged

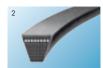
12 optibelt SUPER DVX

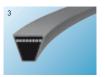
Doppel-Breitkeilriemen, flankenoffen, formgezahnt Double section variable speed belts, raw edge, moulded cogged

13 optibelt ZR optibelt ZR linear

Zahnriemen aus Chloropren Chloroprene timing belts

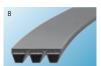




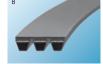












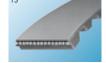






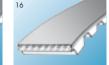


Rippenbänder Ribbed belts

















20 optibelt KK

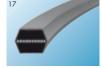
Plastic V-belting

Keilrillenscheiben

Timing belt pulleys

23 optibelt RB5 Rippenbandscheiben Ribbed belt pulleys

24 optibelt SERVICE KIT











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