

FOR CEMENT

OPTIBELT SUCCESS STORY
CEMENTA AB – OPTIBELT V-BELTS IN INTERNATIONAL USE

The Swedish island of Gotland, 90 kilometres off the coast in the middle of the Baltic Sea, is the home to one of the largest stone crushing systems in the whole of Europe in the small town of Sjöbo. It is where the Swedish company Cemente, a Heidelberg Cement subsidiary, operates a huge cement production plant.

68 S-C Plus V-belts in sizes 8V 5230/13280 mm from OPTIBELT drive the Swedish stone crushing system. They allow Cemente to produce 2,000 tons of stone an hour.

OPTIBELT SUCCESS STORY
YAMAMA CEMENT – SAUDI ARABIA

The crusher is equipped with two sets of 20 8V 4250 belts. The belt tension is a problem and the maximum life is only six months. The necessary maintenance then shuts everything down and production is lost for two to three hours.

The switch to maintenance-free **optibelt RED POWER 3** high-performance belts means that production is also possible at high temperatures, generating annual cost savings of 5,114 US dollars.

OUR PARTNERS:

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THE OPTIBELT TEAM FOR DEVELOPMENT, APPLICATIONS AND SERVICE

SOFTWARE TOOLS AND SPECIALIST CONSULTING

The OPTIBELT CAP software allows for quick and clear drive design and calculation. The OPTIBELT website has several tools available from simple capacity calculations using CAP Standard to detailed variable calculations using CAP Professional. The efficiency calculator compares the available drives with those already optimized.

TECHNICAL SUPPORT

To make sure that all machines run reliably, OPTIBELT also offers personal support in assembly, maintenance and service on site around the world. OPTIBELT's broad range of numerous tools, measuring devices and service tools allow for independent drive optimization, maintenance and repairs. Minor jobs are thus completed quickly and efficiently.

CUSTOM MADE FROM OPTIBELT

OPTIBELT offers individual high-performance products for all applications. Customized products designed to precisely meet customer requests, requirements and applications. OPTIBELT engineers develop tailored drive solutions for greater efficiency and safety.

The OPTIBELT application engineers personally provide advice in customer operations around the world. They also can recommend the optimum drive for every machine.

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ALWAYS AT YOUR SERVICE

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ROYSE
rodamientos y servicios
Desde 1979

**POWER TRANSMISSION
CEMENT INDUSTRY**

EDITION 1 / 2013

SPECIALISTS

“For strong cohesion.”
Norbert, 42, foreman

IN GLOBAL USE

As strong partner for the cement industry, OPTIBELT has the right solution for every specification. The solutions are specifically designed to meet customer specifications for the extreme conditions encountered in quarries. The reliability of maintenance-free high performance belts from OPTIBELT has become common knowledge and they are now used all over the world.

optibelt RED POWER 3 S=C Plus

HIGH PERFORMANCE WEDGE BELTS AND KRAFTBELTS



| DIMENSIONS |
|---------------------|
| SPZ 1202-3350 mm |
| SFA 1207-4000 mm |
| SPB 1202-8000 mm |
| SPC 1202-10000 mm |
| SV/15N 67-315 inch |
| SV/15N 51-315 inch |
| SV/15N 101-475 inch |

Further sizes upon request



| DIMENSIONS |
|---------------------|
| SPB 1202-8000 mm |
| SPC 1202-10000 mm |
| SV/15N 51-315 inch |
| SV/15N 101-475 inch |



V-GROOVED AND KRAFTBELTS
All standard pulleys
Special pulleys on request

The new generation of RED POWER 3 V-belts and kraftbelts produce results that are very impressive. Up to 50% greater capacity with enormous cost savings of up to 35%. The excellent performance of RED POWER 3 is due to its production process and continuous improvements to the raw materials.

- ADVANTAGES**
- Up to 50% improved performance
 - Minimum noise, optimum tension over the entire lifespan
 - Highly generous traction:
 - Belts: "Hank" V-grooved pulleys

optibelt BLUE POWER

HIGH PERFORMANCE WEDGE BELTS AND KRAFTBELTS



| DIMENSIONS |
|---------------------|
| SPB 1202-8000 mm |
| SPC 1202-10000 mm |
| SV/15N 51-315 inch |
| SV/15N 101-475 inch |

Further sizes upon request



| DIMENSIONS |
|---------------------|
| SPB 1202-8000 mm |
| SPC 1202-10000 mm |
| SV/15N 51-315 inch |
| SV/15N 101-475 inch |



V-GROOVED AND KRAFTBELTS
All standard pulleys
Special pulleys on request

The new classified high performance wedge groove belts BLUE POWER have been developed for use in all applications where high torque and high speed can be used on individual belts, in sets or as kraftbelts particularly for large drives operating under heavy loads.

- ADVANTAGES**
- New version: the most compact, affordable structure compared to drives with conventional wedge
 - High performance - performance improvements of 100% compared to an OPTIBELT standard wedge-grooved belt
 - Temperature resistance of up to 100°C and increased resistance to chemical substances

A STRONG PARTNERSHIP

The cement industry demands strength and endurance.

Cement production is characterized by complex and challenging production processes which require enormous amounts of energy and extremely robust drive systems. Cement plants are characterized by high temperatures and enormous amounts of wear. High-performance drives are needed and they need to be high quality and low-maintenance.



5. COOLER

The bricks are then cooled down to 200°C

3. RAW MILLS

All raw materials are milled together, dried and worked into raw powder

1. QUARRIES

The raw materials (limestone, clay, sand and iron ore) are generally extracted by blasting in the quarry.

2. HAMMER CRUSHER AND MOBILE CRUSHER

The raw material is broken up with a crusher (limestone and coal crusher) for gravel and transported to the cement factory.

4. ROTARY KILN

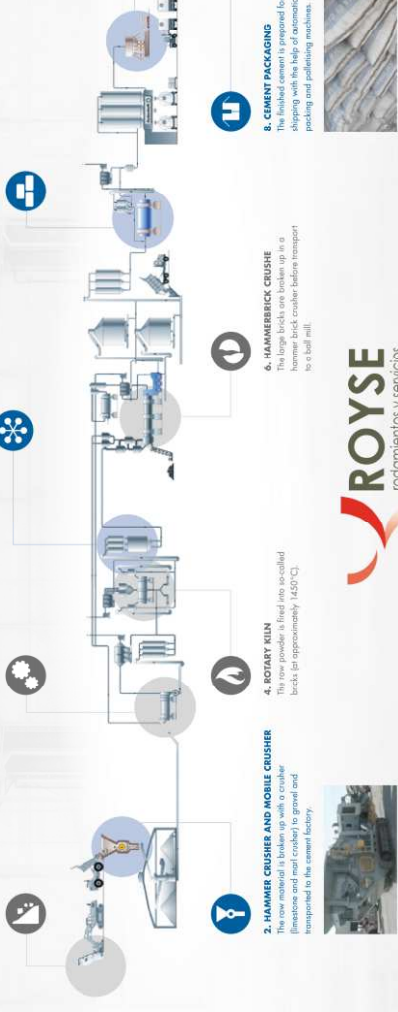
This raw powder is fired into so-called bricks (at approximately 1450°C)

6. HAMMERBRICK CRUSHER

The large bricks are broken up in a hammer brick crusher before transport to a ball mill.

7. BALL MILLS

The granules are then ground together with gypsum or anhydrite to create the final product: Cement



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Desde 1979

optibelt SUPER X-POWER M=S

HIGH PERFORMANCE WEDGE BELTS



| DIMENSIONS |
|---------------------|
| XPZ 387-3350 mm |
| XPB 387-3350 mm |
| XPB 1202-8000 mm |
| XPB 1202-10000 mm |
| SV/15N 25-140 inch |
| SV/15N 51-315 inch |
| SV/15N 101-475 inch |

Further sizes upon request



V-GROOVED PULLEYS
All standard pulleys
Special pulleys on request

optibelt VB S=C Plus

CLASSIC V-BELTS



| DIMENSIONS |
|--------------------|
| S 200-810 mm |
| Y/6 200-810 mm |
| Z/10 312-2572 mm |
| A/13 387-5030 mm |
| B/17 610-7160 mm |
| D/20 500-6000 mm |
| E/25 1400-9060 mm |
| D/22 2075-11275 mm |
| E/40 1080-12580 mm |

Further sizes on request



V-GROOVED PULLEYS
All standard pulleys
Special pulleys on request

optibelt SK S=C Plus

WEDGE-GROOVED BELTS



| DIMENSIONS |
|---------------------|
| SPZ 487-3350 mm |
| SPB 725-4500 mm |
| SPB 1202-8000 mm |
| SPC 1202-10000 mm |
| SV/15N 25-140 inch |
| SV/15N 51-315 inch |
| SV/25N 101-500 inch |

Further sizes on request



V-GROOVED PULLEYS
All standard pulleys
Special pulleys on request



Classic V-belt optibelt VB may be used on S=C Plus and thus measured in sets. The VB is a classic V-belt and is often used in general mechanical engineering as well as in special drives.

- ADVANTAGES**
- Excellent operational reliability
 - High torque capacity
 - High efficiency
 - Proven material
 - Numerous special versions



The coated wedge groove belt optibelt SK S=C Plus has an efficiency of almost 97% and can be used in a set with no further measurements.

- ADVANTAGES**
- Coated wedge groove belt in accordance with DIN/ISO 95
 - Higher efficiency