

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 Slite. It is where the Swedish company CEMENTA, 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 CEMENTA 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:



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.

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



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.

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POWER TRANSMISSION CEMENT INDUSTRY



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

wartungsfrei



HIGH PERFORMANCE WEDGE BELTS AND KRAFTBANDS



DIMENSIONS

SPZ	1202–3550 mm
SPA	1207–4000 mm
SPB	1250–8000 mm
SPC	2000–10000 mm
3V/9N	47,5–140 inch
5V/15N	53–315 inch
5V/15N	100–475 inch

Further sizes upon request



DIMENSIONS

SPB	2000–8000 mm
SPC	3000–10000 mm
3V/9J	50–140 inch
5V/15J	56–315 inch
8V/25J	100–475 inch



V-GROOVED AND KRAFTBANDPULLEYS
All standard pulleys
Special pulleys on request.

The new generation of RED POWER 3 V-belts and kraftbands produce results that are very impressive: Up to 50% greater capacity with simultaneous cost savings of up to 35%. The excellent results are created from optimal production processes and continuous improvements to the raw materials.

ADVANTAGES

- Up to 50% improved performance
- Maintenance-free, optimum tension over the entire lifespan
- Homogeneous interaction:
Belt - flank - V-grooved-pulleys

optibelt BLUE POWER

HIGH PERFORMANCE WEDGE BELTS AND KRAFTBANDS

with Aramid cords



DIMENSIONS

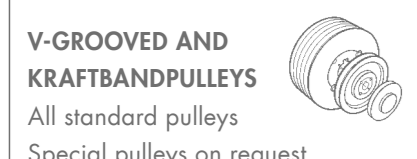
SPB	1500–8000 mm
SPC	2000–9000 mm
8V/25N	160–355 inch

Further sizes upon request



DIMENSIONS

SPB	2000–8000 mm
SPC	3000–10000 mm
5V/15J	80–315 inch
8V/25J	100–475 inch



V-GROOVED AND KRAFTBANDPULLEYS
All standard pulleys
Special pulleys on request.

The new sheathed high performance wedge-groove belts BLUE POWER have a high tensile Aramid cord and can be used as individual belts, in sets or as kraftbands particularly for large drives operating under heavy loads..

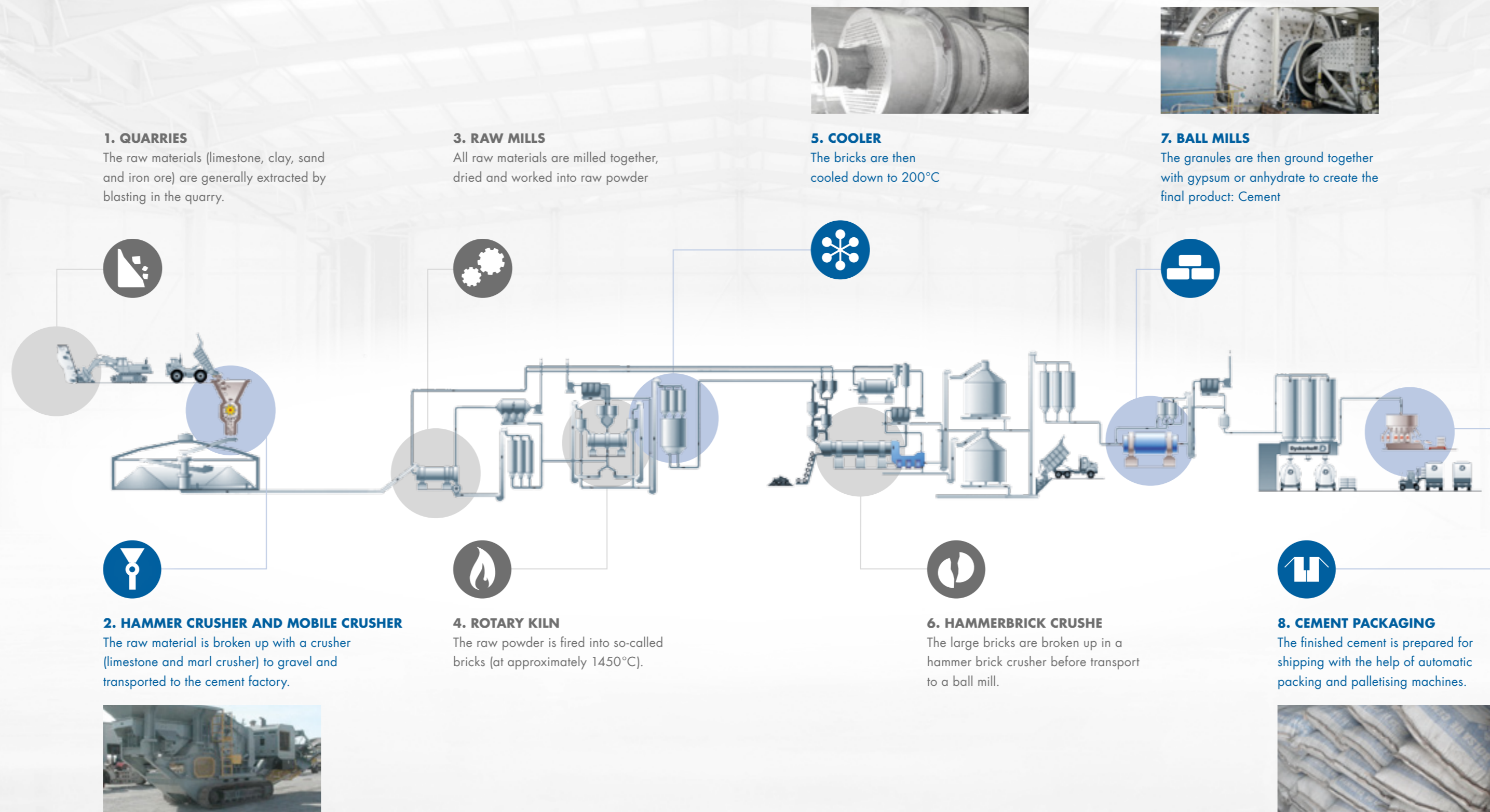
ADVANTAGES

- New version: the most compact, affordable structure compared to drives with conventional wedge groove belts.
- 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 influences

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 machinery. Crushing hard stone, the use of sand and the enormous amounts of dust are only some of the conditions in cement production that generate enormous amounts of wear. High-performance drives are needed and they need to be high quality and low-maintenance.



1. QUARRIES

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

3. RAW MILLS

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

5. COOLER

The bricks are then cooled down to 200°C

7. BALL MILLS

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



2. HAMMER CRUSHER AND MOBILE CRUSHER

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



4. ROTARY KILN

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



6. HAMMERBRICK CRUSHE

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



8. CEMENT PACKAGING

The finished cement is prepared for shipping with the help of automatic packing and palletising machines.



optibelt SUPER X-POWER M=S

HIGH PERFORMANCE WEDGE BELTS



DIMENSIONS

XPZ	587–3550 mm
XPA	707–3550 mm
XPB	1250–3550 mm
XPC	2000–3550 mm
3VX/9NX	25–140 inch
5VX/15NX	50–140 inch

V-GROOVED PULLEYS
All standard pulleys
Special pulleys on request.



ADVANTAGES

- High performance, very little stretching
- Optimised running characteristics
- Excellent resistance to oil and heat
- M=S Set Constant, unmeasured applicable to sets
- Low maintenance

optibelt VB S=C Plus

CLASSIC V-BELTS



Also available as kraftband

DIMENSIONS

5	200–610 mm
Y/6	295–865 mm
8	335–1270 mm
Z/10	312–2522 mm
A/13	437–5030 mm
B/17	610–7140 mm
20	950–6050 mm
C/22	1148–8058 mm
25	1460–9060 mm
D32	2075–11275 mm
E/40	3080–12580 mm

V-GROOVED PULLEYS
All standard pulleys
Special pulleys on request.



Classic V belts optibelt VB may be used as S=C Plus and thus unmeasured 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
- Optimal running characteristics
- Friction-resistant cover-weav
- Numerous special versions

optibelt SK S=C Plus

WEDGE-GROOVED BELTS



Also available as kraftband

DIMENSIONS

SPZ	487–3550 mm
SPA	732–4500 mm
SPB	1250–8000 mm
SPC	2000–12500 mm
3V/9N	25–140 inch
5V/15N	53–355 inch
8V/25N	100–500 inch

V-GROOVED PULLEYS
All standard pulleys
Special pulleys on request.



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

- Wrapped wedge-groove belts in accordance with DIN/ISO/BS
- Higher efficiency