POWER TRANSMISSION

CEMENT

OPTIBELT CUSTOM PRODUCTS

OPTIBELT offers custom high performance products for all applications: Customised products are designed to precisely meet customer's drive application requirements. OPTIBELT engineers develop tailored drive solutions for superior efficiency and safety.

SOFTWARE TOOLS AND SPECIALIST CONSULTING

OPTIBELT's free CAP software allows users to quickly and easily calculate their specific drives. For more complex drive systems, CAP Professional gives users the ability to perform detailed variable calculations. CAP's efficiency calculator will also compare available drives with those already optimised.

OPTIBELT application engineers are always available to provide advice to customer's operations around the world. They can assist in optimising the drives for entire plant operations.

SERVICE SUPPORT

To make sure that all machines run reliably, OPTIBELT also offers personal support in drive assembly, maintenance and service on site around the world. OPTIBELT's broad range of tools, measuring devices and service tools allow for easy drive optimisation, maintenance and repair.
IN GLOBAL USE

As a strong partner for the cement industry, OPTIBELT has the proper solution for every application. Customer drive solutions are engineered to meet the drive’s specifications and to improve performance in the conditions required. The reliability of OPTIBELT’s maintenance-free high performance belts has become the new world standard.

“OPTIBELT is a strong ally to have.”
Norbert, 42, foreman

OPTIBELT SUCCESS STORY
CEMENTA AB – SWEDEN

In the small Swedish town of Slite, 90 km off the coast of the Baltic Sea, resides one of the largest rock crushing operations in Europe. This is where Cementa, a Heidelberg Cement subsidiary, is located.

The crushing system uses 68 OPTIBELT S=C Plus BV sections in lengths of 5230 to 13,280 mm. They ensure that Cementa can crush 2,000 tons of stones per hour.

YAMAMA CEMENT – SAUDI ARABIA

Yamama Cement’s crusher uses two sets of 20 BV 4250 belts. The standard belts used had a maximum life of only 6 months, before maintenance was needed, which shut down operations.

The switch to the high performance and maintenance-free optibelt RED POWER saved the company over $ 5,114 USD annually.
A STRONG PARTNERSHIP

The cement industry demands strength and endurance.

1. QUARRIES
The raw materials (limestone, clay, sand and iron ore) are extracted from the quarry.

2. HAMMER CRUSHER AND MOBILE CRUSHER
The raw material is broken up (limestone and marl crusher) to gravel and transported to the cement factory.

3. RAW MILLS
All raw materials are milled together, dried and worked into raw powder.

4. ROTARY KILN
The raw powder is fired into bricks (at approximately 1450 °C).

5. COOLER
The bricks are cooled down to 200 °C.

6. HAMMER BRICK CRUSHER
The large bricks are broken up before being transported to a ball mill.

7. BALL MILLS
The granules are ground together with gypsum or anhydrate to create the final product: cement.

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

Cement production is a complex and challenging process, that requires enormous amounts of energy and extremely strong machinery. Stone crushing creates large amounts of sand, dust and dirt that strains machinery and drives. High performance power transmission belts capable of withstanding these conditions are essential to reducing maintenance costs.
The new generation of optibelt RED POWER 3 V-belts and kraftbands delivers impressive results: Up to 50% greater power transmission capacity and cost savings of up to 35%. These performance improvements are the result of OPTIBELT's superior engineered materials and manufacturing processes.

**ADVANTAGES AND CHARACTERISTICS**
- up to 50% improved performance
- maintenance-free, keeps the belt tensioned throughout its lifespan
- also available as profile B

**optibelt BLUE POWER**'s high tensile strength aramid cord and durable dual layered fabric wrap are ideal for industrial power applications. They are available individually, in sets, or as kraftbands.

**ADVANTAGES AND CHARACTERISTICS**
- the highest strength capacity offered for heavy industry use
- offers twice the power capacity of standard wedge belts
- temperature resistant up to 100°C (212°F) and increased resistance to chemicals

**DIMENSIONS**
- **SPB** 1500 – 8000 mm
- **SPC** 2000 – 9000 mm
- **8V/25J** 100 – 475 inches

**DIMENSIONS**
- **SPB** 2000 – 8000 mm
- **SPC** 3000 – 10000 mm
- **5V/15J** 80 – 315 inches
- **8V/25J** 100 – 475 inches

**DIMENSIONS**
- **SPZ** 1202 – 3550 mm
- **SPA** 1207 – 4000 mm
- **SPB** 1250 – 8000 mm
- **SPC** 2000 – 10000 mm
- **5V/9N** 47.5 – 140 inches
- **5V/15N** 53 – 315 inches
- **8V/25N** 100 – 475 inches

**DIMENSIONS**
- **SPZ** 1202 – 3550 mm
- **SPA** 1207 – 4000 mm
- **SPB** 1250 – 8000 mm
- **SPC** 2000 – 10000 mm
- **3V/9J** 50 – 140 inches
- **5V/15J** 56 – 315 inches
- **8V/25J** 100 – 475 inches

**Additional sizes available**

**V-GROOVED AND KRAFTBAND PULLEYS**
- all standard pulleys, special pulleys on request

**optibelt SK S=C Plus** HIGH PERFORMANCE WEDGE BELTS

The optibelt SK can transfer power at a rate of almost 97% efficiency. The S=C Plus tolerances ensure minimal installation maintenance.

**ADVANTAGES AND CHARACTERISTICS**
- manufactured to DIN/ISO/BS standards
- higher efficiency rate compared to other standard wedge belts

**DIMENSIONS**
- **SPZ** 487 – 3550 mm
- **SPA** 732 – 4500 mm
- **SPB** 1250 – 8000 mm
- **SPC** 2000 – 12 500 mm
- **3V/9N** 25 – 140 inches
- **5V/15N** 53 – 355 inches
- **8V/25N** 100 – 500 inches

**DIMENSIONS**
- **SPZ** 487 – 3550 mm
- **SPA** 732 – 4500 mm
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