V-BELTS SOLUTIONS
HEAVY INDUSTRY
HEAVY INDUSTRY

POWER SOLUTIONS FOR
MINE & AGGREGATE

OIL & NATURAL GAS

LUMBER & PAPER MILL

APPLICATIONS

- SHAKERS
- SCREENERS
- CRUSHERS
- LOADERS
- CEMENT MIXERS
- CRANES
- LOADERS
- ROAD PAVERS
- CONVEYORS
- DIESEL ENGINES
- PUMP JACKS
- MUD PUMPS
- GENERATORS
- VENT FANS
- AIR HANDLERS
- EVAP. UNITS
- TUB GRINDERS
- DEBARKERS
- AGITATORS
- RAGGERS
- WASHERS
- FOURDRINIERS
- PRESSES
- DRYERS

ENGINEERING SUPPORT & ON-SITE CONSULTATION

OPTIBELT can assist your operations with a full site review, expert engineering services, and custom manufactured products.
OPTIBELT V-BELT ADVANTAGES

OPTIBELT manufactures the highest quality v-belts in the industry. That means your heavy machinery will run more efficiently, require less maintenance, and have fewer instances of downtime saving your operations thousands of dollars every year.

ROTARY VULCANIZATION

Most manufacturers utilize a step-cure process which vulcanizes belts in sections. This process is easier but can produce overlapping cured sections that can cause performance issues and failures.

OPTIBELT’s rotary vulcanization continually rotates the belt as it is being cured. This has the following benefits:

- Smooth profile side-walls for superior sheave contact
- Consistent cured rubber improves performance and durability
- No molds needed for v-belt production 47” and above

LENGTH TOLERANCES

Single v-belts of the same length will vary during manufacturing. This is an issue when running multiple v-belts on one drive. Industry matched-set length tolerances were established to identify v-belts with closer tolerances. That meant operations had to track sets of single v-belt matched-sets to ensure proper tension.

OPTIBELT established a higher manufacturing standard called S=C PLUS or Set-Constant. Every S-C Plus labelled v-belt is much closer to equal lengths than any matched-set regardless of the date manufactured. Any drive running multiple single v-belts will run more efficiently simply by using Optibelt S=C PLUS v-belts.

WHAT IT MEANS FOR YOU:

- Any of your multiple v-belt drives will consume less power reducing your energy bills.
- Consistent power delivery will reduce drive stress and increase production.
- Reduced maintenance intervals will save replacement costs and valuable production time.

WHAT IS YOUR MULTIPLE?

x2 Drives running 2 single v-belts (on average) will run 2-5% more efficiently using OPTIBELT S=C PLUS v-belts.

x4 Drives running 3 single v-belts (on average) will run 4-8% more efficiently using OPTIBELT S=C PLUS v-belts.

Note: Results are averaged, individual results will vary.

OPTIBELT-USA.COM  800-292-6081
INDUSTRY: OIL & NATURAL GAS
APPLICATION: MUD PUMP
PRODUCT: BLUE POWER

An operator of one of the largest offshore drilling fleets in the world was having issues with their mud pump running 2 sets of 5/8V1800 banded v-belts. The belts were prone to slip at depths of 16,000+ ft causing numerous shut-downs.

2 sets of 5/8V1800 Optibelt BLUE POWER were used as a direct replacement. With the added grip of a rubber impregnated fabric cover and rotary vulcanization quality properly distributing the 1600 HP, BLUE POWER proved more than capable.

The customer was also extremely surprised of BLUE POWER’s capacity to withstand abusive shock loads while keeping the drive protected and running.

INDUSTRY: LUMBER & PAPER MILL
APPLICATION: DEBARKER
PRODUCT: BLUE POWER

This plant’s debarker drive runs at 650 to 800 hp at 1200 RPM. The drive used 5 pieces of 3/8V2240 and was experiencing consistent slippage failures due to varying banded v-belt lengths of the same size.

BLUE POWER was used with only 4 pieces of 3/8V2240. Because of the rubber impregnated fabric cover and rotary vulcanization process BLUE POWER resolved the drive’s slippage problems and the drive’s service factor shot up to over 2.3!

EXPERIENCE THE OPTIBELT ADVANTAGE
Simply replace your current v-belts with OPTIBELT to experience the superior performance and v-belt length tolerances can do for your operations. If you have questions, need engineering support or would like an on-site visit, contact a customer service representative at 800-292-6081, or send an e-mail to info@optibelt-usa.com.
INDUSTRY: MINE & AGGREGATE
APPLICATION: STONE CRUSHER
PRODUCT: RED POWER
One of the largest stone crushing systems in Europe can be found in the town of Slite, Sweden. The crusher can produce over 2,000 tons of stone per hour. To drive such a massive machine the company uses 64 single 8V/5230 RED POWER v-belts.

Optibelt’s S=C PLUS length tolerances makes such drive possible by unifying the power of all 64 single v-belts. RED POWER’s power capacity & durability ensures the plant runs with minimal maintenance.

INDUSTRY: POWER GENERATION
APPLICATION: STACK SCRUBBER
PRODUCT: RED POWER
A coal fire power plant uses 350 HP stack scrubber pumps to reduce its carbon and sulfur emissions. The drive used 8, 8V1700 v-belts. The drive’s belts lasted between 6-9 months and needed to be re-tensioned 3 times causing shut-downs and lower production rates.

RED POWER was tested as a direct replacement for the plant’s standard belts. The results amazed the plant’s facility manager as RED POWER needed no re-tensioning maintenance and lasted over 2 years! That is 9 fewer maintenance shut-downs and 3 fewer replacement shut-downs!!

The facility now runs all of its 22 scrubber units exclusively on RED POWER.
PRODUCTS

BLUE POWER ARAMID CORD

Optibelt’s BLUE POWER is the strongest aramid cord v-belt available. The cord provides 2 times the power capacity over standard v-belts. Its transverse fiber rubber provides added strength and dissipates heat at a greater rate than standard rubber v-belts.

1. ARAMID CORD
   2x the power capacity over standard v-belts.

2. TRANSVERSE FIBER RUBBER
   Increased efficiency, ability to absorb stress loads, and increases the heat dissipation rate.

3. DUAL WRAP
   Rubber impregnated 2x fabric wrap increases grip strength and provides increased durability.

SPECIFICATIONS
Temperature Range: -22° - 212°F
Anti-Static: ISO 1813

PRODUCT INFORMATION & SIZES
Additional sizes and specialty constructions available. Contact an OPTIBELT Representative for more details.

<table>
<thead>
<tr>
<th>PROFILE</th>
<th>SINGLE</th>
<th>BANDED</th>
</tr>
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<tbody>
<tr>
<td>5V</td>
<td>50 - 355 in.</td>
<td>80 - 315 in.</td>
</tr>
<tr>
<td>8V</td>
<td>100 - 600 in.</td>
<td>100 - 475 in.</td>
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</table>
RED POWER  HIGH PERFORMANCE

RED POWER is the most advanced v-belt available. Its combination of high modulus polyester cord and transverse fiber core improves power capacity up to 50%, improves the heat dissipation rate, and eliminates the need for re-tensioning maintenance.

1. HIGH MODULUS CORD
   Up to 50% more power capacity over standard v-belts and no re-tensioning maintenance needed.

2. TRANSVERSE FIBER RUBBER
   Increased efficiency, ability to absorb stress loads, and increases the heat dissipation rate.

3. DUAL WRAP
   Rubber impregnated 2x fabric wrap increases grip strength and provides increased durability.

SPECIFICATIONS

Temperature Range:  -22° - 212°F
Anti-Static: ISO 1813

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<tr>
<th>PROFILE</th>
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<tbody>
<tr>
<td>A</td>
<td>52 - 120 in.</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>52 - 148 in.</td>
<td>144 - 240 in.</td>
</tr>
<tr>
<td>3V</td>
<td>47 - 150 in.</td>
<td>50 - 150 in.</td>
</tr>
<tr>
<td>5V</td>
<td>50 - 315 in.</td>
<td>56 - 355 in.</td>
</tr>
<tr>
<td>8V</td>
<td>100 - 475 in.</td>
<td>100 - 475 in.</td>
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Additional sizes and specialty constructions available.
PRODUCTS

VB & SK PERFORMANCE V-BELTS

VB Classical and SK Standard & Metric v-belts are OPTIBELT’s performance standard. The combination of superior engineered materials, manufacturing processes and S=C PLUS length tolerances is what makes them far superior than industry standards.

1. POLYESTER CORD
   Capable of handling stress loads in high power drives.

2. BLENDED RUBBER
   Engineered natural and synthetic rubber combined with additional stabilizing agents for superior performance.

3. DUAL WRAP
   Rubber impregnated 2x fabric wrap increases grip strength and provides increased durability.

SPECIFICATIONS
Temperature Range: -40° - 158°F
Anti-Static: ISO 1813

PRODUCT INFORMATION & SIZES
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<tr>
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<th>BANDED</th>
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<tbody>
<tr>
<td>A</td>
<td>20 - 190 in.</td>
<td>48 - 360 in.</td>
</tr>
<tr>
<td>B</td>
<td>23 - 360 in.</td>
<td>81 - 420 in.</td>
</tr>
<tr>
<td>C</td>
<td>47 - 420 in.</td>
<td>100 - 660 in.</td>
</tr>
<tr>
<td>D</td>
<td>100 - 660 in.</td>
<td>180 - 660 in.</td>
</tr>
<tr>
<td>E</td>
<td>180 - 660 in.</td>
<td>180 - 660 in.</td>
</tr>
<tr>
<td>3V</td>
<td>20 - 190 in.</td>
<td>48 - 360 in.</td>
</tr>
<tr>
<td>5V</td>
<td>47 - 420 in.</td>
<td>81 - 420 in.</td>
</tr>
<tr>
<td>8V</td>
<td>100 - 660 in.</td>
<td>100 - 660 in.</td>
</tr>
<tr>
<td>SPZ</td>
<td>487 - 3550 mm</td>
<td>1250 - 3550 mm</td>
</tr>
<tr>
<td>SPA</td>
<td>707 - 4500 mm</td>
<td>1250 - 4500 mm</td>
</tr>
<tr>
<td>SPB</td>
<td>1250 - 8000 mm</td>
<td>2000 - 8000 mm</td>
</tr>
<tr>
<td>SPC</td>
<td>2000 - 12500 mm</td>
<td>3000 - 12500 mm</td>
</tr>
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