



POWER TRANSMISSION PULP & PAPER



SPECIALISTS FOR PULP & PAPER

“Top performance even under pressure.”

Norbert, 42, foreman

IN WORLDWIDE USE

As an effective partner in the print and paper industry, OPTIBELT has the ideal drive solution to meet even the most demanding requirements. This means that every processing step – from cutting and folding through to material transport – runs smoothly and with absolute precision. Additional factors that find approval with customers and users alike include exemplary efficiency and minimised maintenance costs. This is why OPTIBELT's sustainable premium products can be found in use around the globe.

OPTIBELT SUCCESS STORY

LOWER COSTS THANKS TO **optibelt RED POWER**



Bio-Pappel is the leading manufacturer and producer of sustainable packaging, newsprint and fine papers in Mexico and Latin America. Previously, the vacuum pumps used in the company's paper mills had caused ongoing problems due the standard belts wearing out after eight to ten months. This led Bio-Pappel to switch to **optibelt RED POWER** maintenance-free, high performance wedge belts, which delivered a service life of at least 24 months. As a result of this switch, the company now makes an annual saving of around 6,000 US dollars.

OPTIBELT SUCCESS STORY

PERFECT SERVICE FROM OPTIBELT

The Canadian company Domtar specialises in the production of pulp and paper and had been plagued by problems with a powerful grinding mill used for grinding waste wood. The belts, made by another manufacturer, were slipping and causing damage to the bearings of the mill on a regular basis. OPTIBELT designed a completely new drive solution for Domtar, using four high performance **optibelt BLUE POWER** kraftbands, and set up the system with high precision using the **optibelt TT OPTICAL** frequency tension tester. The mill now runs smoothly with no breakdowns.



FAST & PRECISE

It's not just the result that counts.

In the printing and paper industry there are many different and sophisticated manufacturing and finishing processes, which all impose exacting demands on the machinery. Precision, durability, reliability and optimal power transmission are decisive criteria that the relevant drive systems are expected to meet throughout the entire production chain. OPTIBELT's high performance belts provide sustainable solutions to these challenges.



1. PULPER (PULP PRODUCTION)
Pulp and waste paper are mixed with water and broken down into separate fibres.



3. DRYING
Heated hollow cylinders dry the paper.



5. SMOOTHING
Steel rollers smooth the paper ready for further processing.



7. WINDING ONTO ROLLS
The paper web is wound onto a tambour in various widths.



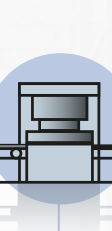
9. OFFSET PRINTING
Requires reliable machinery that runs particularly smoothly.



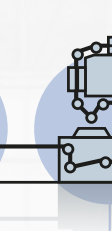
10. WINDING MACHINE
The drive and mechanical equipment is subjected to enormous tensile forces.



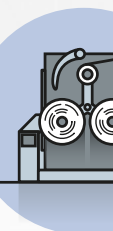
2. SHEET FORMATION
The fibres become matted into a paper web on a vibrating screen.



4. PRESS
Water is then carefully removed from the wet paper web.



6. FINISHING
The properties of the paper are chemically tuned.



8. REEL STAND
A powerful drive system ensures a quick and flexible output.



11. PLOTTER
A precise control mechanism ensures excellent results.

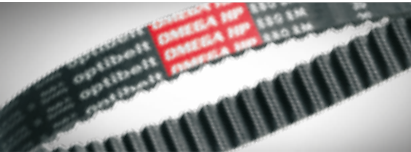


12. DIGITAL PRINTING
Precise paper feed at high speeds is imperative.

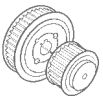


optibelt OMEGA HP

HIGH PERFORMANCE TIMING BELTS



TIMING BELT PULLEYS
optibelt OMEGA timing belts run in standard HTD and RPP pulleys



| DIMENSIONS | |
|--|---------------|
| 2M HP | 74 – 1224 mm |
| 3M HP | 111 – 1569 mm |
| 5M HP | 180 – 2525 mm |
| 8M HP | 288 – 3600 mm |
| 14M HP | 966 – 4578 mm |
| Other profiles + dimensions on request | |

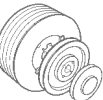
- ADVANTAGES AND CHARACTERISTICS**
- glass cord
 - high performance timing belt for extremely large loads at high rotational speeds
 - shear-resistant fabric with minimised wear and friction
 - up to 2 times the power transmission capability of the **optibelt OMEGA** standard version

optibelt RED POWER 3 S=C Plus

HIGH PERFORMANCE WEDGE BELTS



V-GROOVED PULLEYS
all standard pulleys, special pulleys on request



| DIMENSIONS | |
|--|-------------------|
| SPZ | 1202 – 3550 mm |
| SPA | 1207 – 4000 mm |
| SPB | 1250 – 8000 mm |
| SPC | 2000 – 10 000 mm |
| 3V / 9N | 47.5 – 140 inches |
| Other profiles + dimensions on request | |



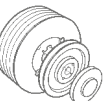
- ADVANTAGES AND CHARACTERISTICS**
- maintenance-free polyester cord
 - core with transverse fibres
 - suitable for back-bend idlers
 - up to 50 % higher performance than **optibelt SK**, making it possible to use smaller drives

optibelt SK S=C Plus

HIGH PERFORMANCE WEDGE BELTS



V-GROOVED PULLEYS
all standard pulleys, special pulleys on request



| DIMENSIONS | |
|--|------------------|
| SPZ | 487 – 3550 mm |
| SPA | 732 – 4500 mm |
| SPB | 1250 – 8000 mm |
| SPC | 2000 – 12 500 mm |
| 3V / 9N | 25 – 140 inches |
| Other profiles + dimensions on request | |

- ADVANTAGES AND CHARACTERISTICS**
- polyester cord
 - specially developed with general machine construction in mind
 - transmits more power than the classic V-belts with comparable top width

optibelt RB

RIBBED BELTS



RIBBED BELT PULLEYS
standard range, special pulleys on request



| DIMENSIONS | |
|--|---------------|
| PK | 630 – 2845 mm |
| PL | 954 – 6096 mm |
| Other profiles + dimensions on request | |

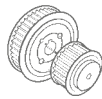
- ADVANTAGES AND CHARACTERISTICS**
- polyester cord
 - high belt speeds are possible
 - suitable for back-bend idlers
 - PK, PL profiles also available with aramid cord
 - DPK profile available

optibelt DELTA CHAIN Carbon

HIGH PERFORMANCE TIMING BELTS



TIMING BELT PULLEYS DC
all standard pulleys, special pulleys on request

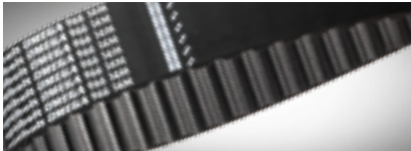


| DIMENSIONS | |
|---|---------------|
| 8MDC | 640 – 1792 mm |
| Runs in optibelt ZRS DC timing belt pulleys and comparable competitive pulleys with CTD and PC profiles. | |
| Other profiles + dimensions on request | |

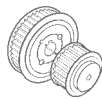
- ADVANTAGES AND CHARACTERISTICS**
- one of the strongest timing belts on the market
 - carbon cord
 - alternative for chains and gear transmissions
 - excellent resistance to oil and chemicals

optibelt OMEGA

TIMING BELTS



TIMING BELT PULLEYS
optibelt OMEGA timing belts run in standard HTD and RPP pulleys



| DIMENSIONS | |
|--|---------------|
| 2M | 74 – 1224 mm |
| 3M | 111 – 1863 mm |
| 5M | 120 – 2525 mm |
| 8M | 288 – 4400 mm |
| 14M | 966 – 4578 mm |
| Other profiles + dimensions on request | |

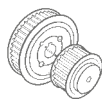
- ADVANTAGES AND CHARACTERISTICS**
- rubber timing belt with **optibelt OMEGA** profile
 - glass cord
 - low noise
 - efficiency of up to 98 %
 - suitable for power transmission with slow and fast running drive systems with no high impact loading

optibelt OMEGA HL

HIGH PERFORMANCE TIMING BELTS



TIMING BELT PULLEYS
optibelt OMEGA timing belts run in standard HTD and RPP pulleys

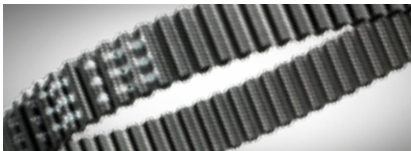


| DIMENSIONS | |
|--|---------------|
| 8M HL | 288 – 3600 mm |
| 14M HL | 966 – 4578 mm |
| Other profiles + dimensions on request | |

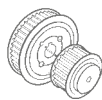
- ADVANTAGES AND CHARACTERISTICS**
- reinforced glass cord
 - optimised absorption of shock loading
 - highly resistant to dynamic loading
 - very low elongation
 - up to 15 % more power than **optibelt OMEGA HP**

optibelt OMEGA double-sided

TIMING BELTS



TIMING BELT PULLEYS
optibelt OMEGA timing belts run in standard HTD and RPP pulleys



| DIMENSIONS | |
|--|----------------|
| D8M | 1120 – 3600 mm |
| Other profiles + dimensions on request | |

- ADVANTAGES AND CHARACTERISTICS**
- timing belt with **optibelt OMEGA** profile
 - glass cord
 - low noise
 - efficiency of up to 98 %
 - suitable for power transmission with slow and fast running drive systems with no high impact loading

THE OPTIBELT TEAM FOR DEVELOPMENT, APPLICATIONS AND SERVICE



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.



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.

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