

MATERIAL HANDLING FOOD & BEVERAGE



"Always a clean solution."

Paul, 46, head of engineering design



IN WORLDWIDE USE

As an experienced partner in the food and beverage industry, Optibelt has the ideal drive solution to meet even the most demanding requirements. This means that every processing step – from packaging and sorting through to 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 A CLEAN SOLUTION

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MIHO, based in northern Hesse in Germany, is a leading manufacturer of empty bottle inspection systems for the beverage industry. The company had been experiencing problems with the open-pore coating of the transport belts in the cameracontrolled inspection systems. The coating was absorbing too much moisture, resulting in defective goods and bacteriological contamination. So, in cooperation with Optibelt, a new sandwich coating was developed using a neoprene foam combined with a dimpled PVC membrane. This system has shown itself to be optimally effective in practice.

Optima GmbH, based in Schwäbisch Hall in Germany, is the first European manufacturer to offer packaging machines for paper and hygiene products on the Far Eastern Market. To ensure that the packaging film is fed through these machines with great precision, the company uses vacuum timing belts made by Optibelt. The significant feature here is the impressed top-surface structure, which was specially developed for this application with the help of Optibelt. The depth of this structure produces a circular suction effect on the belt top surface, allowing the film to be transported quickly and efficiently.

OPTIBELT SUCCESS STORY PERFECT PRECISION



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NO COMPROMS Speedy, accurate and reliable transport.



1. INSPECTION SYSTEMS Bottles are checked for cleanliness, fractures etc.





3. BEVERAGE FILLING MACHINES Flawless performance and hygiene are key.





The right packaging and the product are brought together.





4. BEVERAGE VENDING MACHINES

Sophisticated technology with minimum space requirement.



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The mechanical handling of foodstuffs places not only high demands with respect to automation technology, but also has to meet stringent hygiene standards. Optibelt offers a special range of timing belts and round section belts for this highly sensitive sector. These belts meet the legal requirements and recommendations and are suitable for use in direct contact with food. Further outstanding features of Optibelt's drive solutions include excellent durability and reliability.



5. CUTTING AND PACKAGING MACHINES (CHEESE & SALAMI)

High quality standards with regard to cleanliness and efficiency.



7. TUBULAR BAGS The process necessitates speed and precision.

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6. TRANSPORT OF FOODSTUFFS (WITH ROUND SECTION BELTS) Everything must work reliably, without stoppages and with perfect timing.



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optibelt ALPHA V TIMING BELTS



TIMING BELT PULLEYS all standard pulleys, special pulleys on request

DIMENSIONS

Available with profiles: XL; L; H; XH; T5; T10; T20; AT5; AT10; AT20; 5M; 8M; 14M; T5K6; T10K6; T10K13; AT5K6; AT10K6; AT10K13; F2; F2.5; F3; FL3

Minimum lengths of 400 to 1200 mm, depending on width and pitch

ADVANTAGES AND CHARACTERISTICS

- lengths can be manufactured according to gradations in pitch
- can be supplied cost-effectively and at short notice
- ideal for transport drives
- PU also available with FDA approval for food contact
- direct welding on of cams and cleats

optibelt ALPHA V SPECIAL **TIMING BELTS**



TIMING BELT PULLEYS all standard pulleys, special pulleys on request



All belt profiles in the

DIMENSIONS

optibelt ALPHA V product group are also available as optibelt ALPHA V SPECIAL versions.

Minimum lengths of 400 to 1200 mm, depending on width and pitch

ADVANTAGES AND CHARACTERISTICS

- with coatings
- with mechanical processing
- with cleats

optibelt ALPHA TORQUE

TIMING BELTS AND SPECIAL BELTS



TIMING BELT PULLEYS all standard pulleys, special pulleys on request



DIMENSIONS

T2.5; T5; T10/AT5; AT10/DT5; DT10 120-2250 mm MXL; XL; L 2.4-67 inches

Special belts on request

ADVANTAGES AND CHARACTERISTICS

- endless casting
- extremely resistant to oil and abrasion
- tension cords made of steel, highly flexible steel, stainless steel, aramid or polyester are available

optibelt **RR/RR** Plus

PLASTIC ROUND SECTION BELTS



DIMENSIONS

OPTIBELT round section belts are available with various degrees of hardness and different surface structures and can be manufactured with diameters ranging from 2 to 20 mm.

Minimum lengths, welded: 200 to 400 mm, depending on the diameter

ADVANTAGES AND CHARACTERISTICS

- welding takes place on site, this also applies to the **optibelt RR Plus** version
- no disassembly of the plant is required
- quick rectification of breakdowns
- short breakdown times
- easy to store (supplied in rolls)

optibelt VB S=C Plus

CLASSIC V-BELTS



all standard pulleys, special pulleys on re

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DIMENSIONS		
A/13	437-5030 mm	
B/17	610-7140 mm	
C/22	1148-8058 mm	
D/32	2075–11 275 mm	
E/40	3080-12580 mm	

Other profiles + dimensions on request

ADVANTAGES AND CHARACTERISTICS

- polyester cord
- greater flexibility in bending than wedge belts
- particularly suitable for use in industrial applications
- V-belts in reliable S=C Plus quality
- not suitable for direct contact with or transport of foodstuffs

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	2000-12500 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
- not suitable for direct contact with or transport of foodstuffs

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

- 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
- not suitable for direct contact with or transport of foodstuffs

optibelt OPTIMAT PKR

OPEN-ENDED V-BELTS







MODELS

Z/10; A/13; B/17; C/22; 25*; D/32*

*Special versions are only available in fabrication lengths of $50 \text{ m} \pm 10\%$.

The 25 and D/32 profiles are only available with a 5 mm top surface.

ADVANTAGES AND CHARACTERISTICS

- quick and easy installation
- manufactured to any length
- stock of spare parts is reduced
- classic V-groove power transmission
- can be used with DIN/ISO V-belt pulleys
- not suitable for direct contact with or transport of foodstuffs

COMPREHENSIVE SERVICE WITH THE OPTIBELT TEAM



CLEAT SELECTOR

Optibelt provides quick and clearly structured access to its comprehensive range of cleats via the cleat selector on the company's website. This tool can be used to search for or adapt the right transport solution according to the type of application, with a standard range of more than 300 different cleat models to choose from. The search results show all of the available cleat versions with detailed illustrations and the relevant technical data. Each match can then be downloaded with all of the associated information in the form of PDF or CAD files.



DATA SHEET SELECTOR

The data sheet selector provides a detailed overview of the Optibelt range of PU timing belts for "POWER TRANSMISSION" and "MATERIAL HANDLING". This online tool, available on the Optibelt website, can be used to download PDF files giving technical details of the required timing belts. The search can be narrowed down according to product, profile group and profile in order to find the ideal drive solution more directly. The corresponding data sheet provides precise information on dimensions, construction, nominal transmittable power, tensile force and length tolerances.



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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