

# FOR TEXTILES

## OPTIBELT SUCCESS STORY REDUCED WEAR, REDUCED COSTS



The Padma Group, based in Bangladesh, is one of the world's largest textile producers and exporters. The company had been experiencing considerable difficulties with a new production machine. The belts used in the machine often needed replacing after just two weeks. The result was high maintenance costs and stoppages in production. After the machine had been fitted with **optibelt OMEGA HP** and **optibelt OMEGA HL** belts, however, maintenance costs and downtimes were reduced to a minimum.

OPTIBELT has been focusing on sustainable improvements in drive systems for many years. This is why many renowned textile manufacturers in India, such as Vardhman, Nalar, Sangam and KPR Mill, place their trust in **optibelt VARIO POWER** variable speed belts made by OPTIBELT, in order to significantly increase the efficiency of their machines. The large Indian corporation RWSM Bhiwara, for example, has commissioned OPTIBELT to supply all of its subsidiaries. All of these companies reap tangible benefits from the high product quality and the comprehensive services that OPTIBELT has to offer.

## OPTIBELT SUCCESS STORY ALWAYS THE FIRST CHOICE IN INDIA



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## 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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## POWER TRANSMISSION TEXTILE



# SPECIALISTS

"So that everything runs smoothly."

Norbert, 42, foreman



### IN WORLDWIDE USE

The modern textile industry offers an enormous band width, not only in relation to the products it manufactures, but also with regard to the machinery used in their manufacture. The requirements and performance conditions are therefore equally numerous and varied. OPTIBELT's comprehensive range of belts offers the ideal solution for every type of situation and is therefore in demand the world over.

## optibelt STD

### TIMING BELTS



TIMING BELT PULLEYS  
optibelt ZRS  
standard STD timing belt pulleys

#### DIMENSIONS

S3M	120-633 mm
S5M	255-2000 mm
S8M	440-3200 mm
S14M	1400-5012 mm

optibelt STD also available in HP or HL quality, profiles + dimensions on request

**ADVANTAGES AND CHARACTERISTICS**

- for existing drives with STD profile
- noise level comparable to optibelt OMEGA profile

## optibelt VARIO POWER

### VARIABLE SPEED BELTS



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

#### DIMENSIONS

13 x 5-70 x 18	468-2500 mm
1422 V-4436 V	235-750 inches
HI-HQ	1200-3550 mm
	> 3550 mm on request

Other profiles + dimensions on request

**ADVANTAGES AND CHARACTERISTICS**

- also available as double-sided belts
- polyester or aramid cord
- high transverse rigidity
- allows transmission ratios of up to 1:12
- also available as EPDM version

## 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	180-2325 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 OMEGA HL

### HIGH PERFORMANCE TIMING BELTS



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

#### DIMENSIONS

BM 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

# EXEMPLARY

## Precise dimensions are essential.

**ROYSE**  
rodamientos y servicios  
Desde 1979

In the textile industry, quality and quantity are of equal importance. This requires special drive machinery that is precisely tailored to the product in question, making exacting demands on all components. High rotational speeds, low noise, low heat generation and minimum wear are all essential criteria here. OPTIBELT's state-of-the-art belts provide efficient long-term solutions to these complex challenges.



**2. CIRCULAR KNITTING MACHINES**  
These machines manufacture so-called tubular fabrics, which are used to create T-shirts and pullovers.



**4. WEAVING MACHINES/LOOMS**  
These are used to manufacture woven fabrics and can produce fabrics that are up to 10 metres wide.



**6. SEWING MACHINES**  
Sewing machines fasten textiles together with precision and at very high speed - a particularly challenging task.



**8. WINDING MACHINES**  
These are used for winding and unwinding. The run and tension of the fabric must therefore remain absolutely constant.



**1. KNITTING MACHINES**  
These allow knitted products to be industrially mass-produced.



**3. DYEING MACHINES**  
These machines give synthetic or natural fibres the desired hue. A highly sensitive process with special requirements.



**5. CUTTING MACHINES**  
These machines cut textile products to the right shape. The highest level of precision is required of the machinery and sensors.



**7. SPINNING MACHINES**  
Using various different methods, these machines take loose fibres and spin them into yarn for use in textile production.



**9. TEXTILE FINISHING**  
Here, the material is chemically, mechanically or thermally treated, by impregnation for example, to suit the intended type of use.

## 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	120-2325 mm
8M	288-4400 mm
14M	966-4578 mm

Other profiles + dimensions on request

**ADVANTAGES AND CHARACTERISTICS**

- 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 ZR

### TIMING BELTS



TIMING BELT PULLEYS  
optibelt ZRS  
standard STD timing belt pulleys

#### DIMENSIONS

MXL	91.44-1026.16 mm
XL	152.40-1600.20 mm
L	276.23-1676.40 mm
H	584.25-4318.00 mm
XH	1289.05-4445.00 mm

Other profiles + dimensions on request

**ADVANTAGES AND CHARACTERISTICS**

- responsible design
- used worldwide for many different applications
- also available as double-sided timing belts, depending on the profile

## optibelt ALPHA FLEX

### TIMING BELTS - ENDLESS



TIMING BELT PULLEYS  
all standard pulleys,  
special pulleys on request

#### DIMENSIONS

T5, T10, T20	
AT5, AT10, AT20	
5M, 8M, 14M	
H	

Lengths from 1100 to 22000 mm, depending on profile

**ADVANTAGES AND CHARACTERISTICS**

- the length range can be manufactured according to gradations in pitch
- option of polyamide fabric on the tooth side for belts at least 1500 mm long
- available with S or Z cord twist
- also available as double-sided profiles

## optibelt ALPHA LINEAR

### TIMING BELTS - OPEN-ENDED



TIMING BELT PULLEYS  
all standard pulleys,  
special pulleys on request

#### DIMENSIONS

XL, L, H, XH	
5M, 8M, 14M	
T5, T10, T20	
AT5, AT10, AT20	

Other profiles + dimensions see product range

**ADVANTAGES AND CHARACTERISTICS**

- high tensile strength with low elongation
- high-precision positioning
- ATL version timing belts for linear drives