

# POWER TRANSMISSION ROAD CONSTRUCTION



# SPECIALISTS FOR ASPHALT

"So it holds together well."

Norbert, 42, foreman

#### **USED WORLDWIDE**

As a strong partner in the road construction industry, OPTIBELT not only understands the demands and requirements with regard to drive solutions, but sets new standards in the field. Our drive belts run absolutely reliably during any type of weather with a maximum level of power transmission. It is not without reason that the high performance belts by OPTIBELT are used worldwide.

#### **OPTIBELT SUCCESS STORY**

# OPTIMAL PERFORMANCE UNDER EXTREME CONDITIONS

The industrial group Atlas Copco had been experiencing continued problems, at its Indian subsidiary, with its range of plate compactors. The belts used there could not cope with the harsh demands of road construction, and excessive wear resulted in costly machinery downtime. Since switching over to **optibelt SUPER E-POWER** high performance V-belts, the plate compactors work more precisely and efficiently.

The significantly longer service life of the **optibelt SUPER E-POWER** has also brought about a sustainable reduction in costs.



# RELIABLE USE ON HIGHWAYS IN THE USA

For 15 years, the group Astec Industries has been producing, among other things, patented road milling machines for road construction whose special requirements have caused failure of V-belts again and again. After performing calculations and field tests under the most extreme of conditions, OPTIBELT application engineers suggested using

Changing over to **optibelt BLUE POWER** high performance belts guarantees that road milling machines will work at a smooth rhythm.

special OPTIBELT kraftbands with aramid cord.



# TEAMPLAYER

In road construction, one V-belt affects the other.

Road construction of the 21st century is more demanding than ever and the equipment must be able to face any type of situation despite this growing set of requirements. In this connection, a trouble-free production flow and a minimised level of maintenance effort is extremely important. This is where OPTIBELT solutions come into play due to the fact our professional drive belts are not only suitable for the harshest of conditions but are also true heavyweights.

#### 1. THE SUBSTRUCTURE

For instance, this is attained from stone quarries and fed into the crusher to make it usable.



#### 3. COLD MILLING

The asphalt milling machine removes the substructure (asphalt cover layer) and loads the lorry with granulated asphalt.

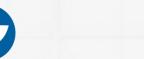


#### 5. ROLLER/VIBRATING COMPACTOR

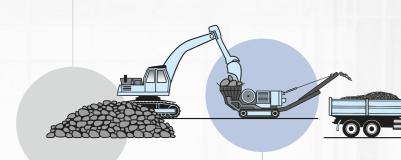
The roller compactors and vibratory plate compactors compact the asphalt layer to ensure the appropriate level of load capacity and durability.



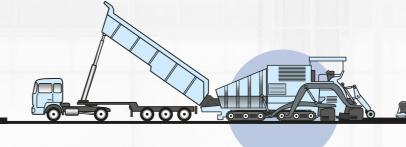


















#### 2. MOBILE CRUSHER

Save on resources with mobile processing.

The crushing and processing of both natural stone from quarries and removed asphalt rubble (cover and base layer) can be carried out.





#### 4. ROAD PAVER

The asphalt road paver is loaded with an asphalt mixture and applies it as a cover.





#### 6. CHASSIS MOUNTED SWEEPER

The chassis mounted sweeper ensures an optimally clean result during both the construction phase as well as after completion.



### optibelt RED POWER 3

# free

#### HIGH PERFORMANCE WEDGE BELTS AND KRAFTBANDS



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

#### **DIMENSIONS**

SPZ 1202-3550 mm SPA 1207-4000 mm

1250-8000 mm

SPC 2000-10000 mm 47.5-140 inches

5V/15N 53-315 inches

8V/25N 100-475 inches

Other profiles + dimensions on request

#### **ADVANTAGES AND CHARACTERISTICS**

- up to 50% higher performance
- maintenance-free, optimal tension during entire life span
- smooth interplay: belts – edge – V-grooved pulleys
- suitable for idler pulleys
- V-belts in reliable S=C Plus quality

### optibelt BLUE POWER

#### HIGH PERFORMANCE WEDGE BELTS AND KRAFTBANDS

with aramid cord



### V-GROOVED AND **KRAFTBAND PULLEYS** all standard pulleys,

special pulleys on request

#### **DIMENSIONS**

SPB 1500-8000 mm SPC 2000-9000 mm 5V/15J 80-315 inches

8V/25N 160-355 inches

Other profiles + dimensions on request

#### **ADVANTAGES AND CHARACTERISTICS**

- compact construction with a favourable cost in comparison to drives with conventional wedge belts possible
- approx. 100% more performance with respect to OPTIBELT standard wedge belts
- temperature resistance up to 100°C, highly resistant to the effects of chemicals

• suitable for idler pulleys

## optibelt SUPER E-POWER M=S



HIGH PERFORMANCE WEDGE BELTS



#### DIMENSIONS

XPZ 587-3550 mm

XPA 707-3550 mm XPB 1250-3550 mm

XPC 2000-3550 mm

3VX/9NX 25-140 inches

5VX/15NX 50-140 inches

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

#### **ADVANTAGES AND CHARACTERISTICS**

- minimised loss of pretensioning force
- M=S Matched Sets, can be installed without measuring
- temperature resistant from -40°C to +120°C

#### Other profiles + dimensions on request

### optibelt SUPER X-POWER

#### HIGH PERFORMANCE WEDGE BELTS AND KRAFTBANDS



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

DIMENSIONS		
XPZ	587-3550 mm	
XPA	707-3550 mm	
XPB	1250-3550 mm	
XPC	2000-3550 mm	
3VX/9NX	25-140 inches	
5VX/15NX	50-140 inches	

#### Other profiles + dimensions on request

#### **ADVANTAGES AND CHARACTERISTICS**

- highest level of performance, extremely low stretch
- optimised running characteristics
- excellent resistance against oil and heat
- low level of maintenance
- V-belts in the tried and tested M=S quality

### optibelt VB

#### **CLASSIC V-BELTS AND KRAFTBANDS**



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

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**

- excellent level of operational reliability
- optimal running characteristics
- abrasion resistant cover fabric
- special drives are feasible, such as V-flat drives
- variety of special constructions
- V-belts in reliable S=C Plus quality

### optibelt SK

#### HIGH PERFORMANCE WEDGE BELTS AND KRAFTBANDS



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

#### DIMENSIONS

SPZ 487-3550 mm SPA 732-4500 mm SPB 1250-8000 mm SPC 2000-12500 mm 25 – 140 inches 5V/15N 53-355 inches 8V/25N 100-500 inches

Other profiles + dimensions on request

#### **ADVANTAGES AND CHARACTERISTICS**

- wrapped wedge belts with abrasion resistant cover fabric
- up to 97% efficiency
- variety of special constructions
- high level of power transmission
- V-belts in reliable S=C Plus quality

# 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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