



# Maintenance, Repair & Operations



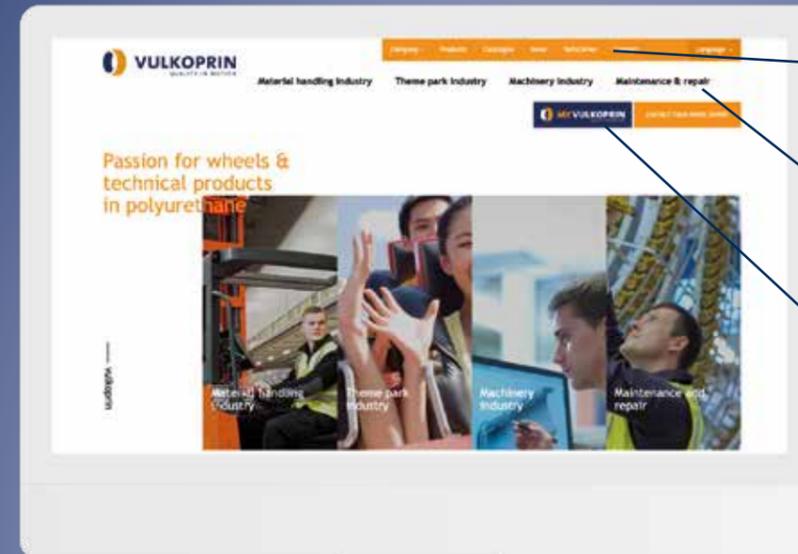
- family owned company, located in Tielt (Belgium)
- more than 55 years of experience
- in-house design, engineering & production
- global customer base in material handling-, machinery- and theme park industry



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<https://www.vulkoprin.be>



Techcorner

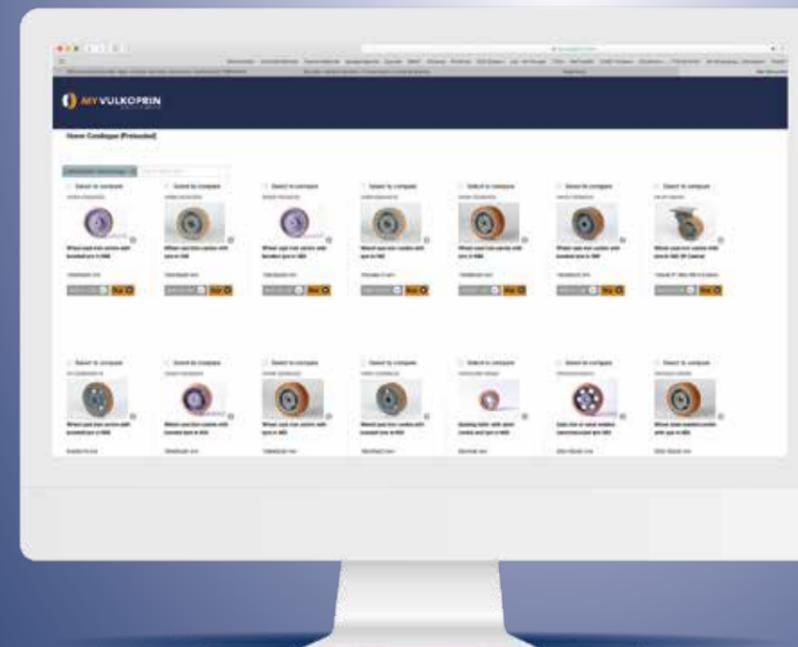
Technical support

Maintenance & Repair

Applications

MY VULKOPRIN

Digital catalogue



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# QUALITY LABELS

# Download



VULKOLLAN® is one of the most powerful elastomers in the market. The excellent mechanical properties ensure a maximum dynamic load capacity and a long service life, even in difficult and demanding conditions. The ultra-high-performance elastomer can only be manufactured by Covestro licensed.

## Printhane<sup>B</sup>™ Printhane<sup>C</sup>™ Printhane<sup>R</sup>™ Printhane<sup>X</sup>™

Printhane™ is the generic name of the polyurethane elastomers developed by Vulkoprin for specific applications.

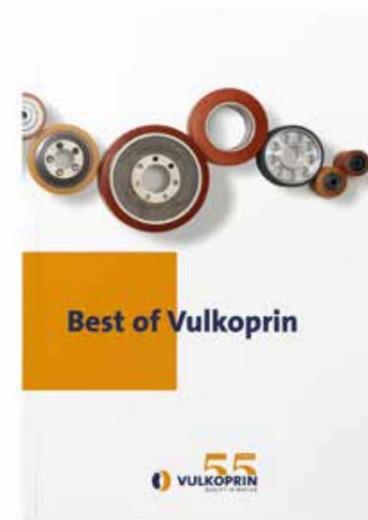
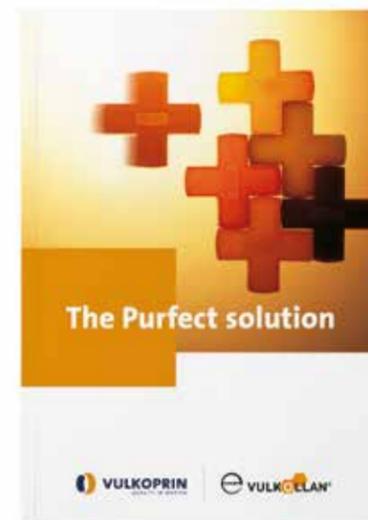
- Printhane-B™ is a polyurethane developed primarily for technical applications or in wheel applications that require more grip.
- Printhane-C™ is conductive Vulkollan® and meets the standards EN12527 through EN12533. It finds application in environments with a higher risk of explosion, fire or electrostatic discharge (ESD).
- Printhane-R™ is a rigid polyurethane for use in applications that require thick-walled plastic parts that shows a high impact-resistance and elasticity and who are non-deforming. This material is a great alternative to parts in milled engineering plastics (polyamide, POM, ...).
- Printhane-X™ has been developed specially for applications with high speeds, which means it is well suited for all amusement park- & roller coaster applications.

## Printhopan®

Printhopan® is a thermoplastic polyurethane. The elasticity of the Printhopan® TPU ensures that the guiding roller is silent, very durable and resistant to oil and grease.



Easyroll™ is a super elastic rubber in 65 Shore A.





Printhane  
vulkoprin elastomer

VULKOLLAN®  
THE ULTIMATE ELASTOMER



Polyurethane industrial wheels

PLUR



PMM

PMMS

PVM

PMC

PMCS



100-300 kg



80-200 mm

Wheel with tread in TPU mounted in a pressed steel castor with top plate or bolt hole fixation

WKGK



WKGK PMM

WKGK PMMS

WKGK PVM

WKGK PMC

WKGK PMCS



175-300 kg



100-200 mm

Wheel with elastic vulcanised PUR mounted in a pressed steel castor with top plate or bolt hole fixation

WKGK



WKGK YKN

WKGK YKNS

WKGK YVN



450-1000 kg



125-250 mm

Wheel with elastic casted PUR mounted in a pressed steel castor

APPLICATIONS



DID YOU KNOW THAT

we offer heavy duty wheels with footguards





**Printhane**  
vulkoprin elastomer

**VULKOLLAN**  
THE ULTIMATE ELASTOMER



**Polyurethane industrial wheels**

**VKEK  
VKBK**



VKEK NKS    VKEK NKSS    VKEK NVS

KG  
200-500 kg    100-300 mm



Wheel with elastic tyre made of Vulkollan® mounted in a solid pressed steel castor with top plate or bolt hole fixation

**VKBK**



VKBK UKN    VKBK UKNR    VKBK UVN

KG  
550-1200 kg    125-250 mm



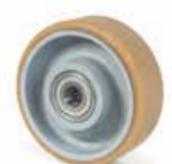
Wheel with elastic tyre made of Vulkollan® mounted in a heavy duty pressed steel castor with top plate fixation

**VKBK**



VKBK MMH    VKBK MMHM    VKBK MVH

KG  
400-2700 kg    100-400 mm



Wheel with elastic tyre made of Vulkollan® mounted in a heavy duty steel welded castor with top plate fixation

**VKBK**



VKBK WNI    VKBK WNIM    VKBK WVI

KG  
700-6400 kg    100-400 mm



Double wheel with elastic tyre made of Vulkollan® mounted in a solid pressed steel twin castor with top plate fixation

**VKLG**



VKLG MMG    VKLG MMGM    VKLG MVG

KG  
175-1200 kg    65-300 mm



Wheel with elastic tyre made of Vulkollan® mounted in a heavy duty steel welded castor with top plate fixation

**VKHK**



VKHK MMH    VKHK MMHM    VKHK MVH

KG  
1000-3000 kg    150-500 mm



Wheel with elastic tyre made of Vulkollan® mounted in a heavy duty steel welded castor with top plate fixation and high load capacity

**VKXK**



VKXK

KG  
2700-9200 kg    250-600 mm



Wheel with elastic tyre made of Vulkollan® with a steel welded wheel center and by consequence a very high load capacity



**Drive wheels**

**VKBH  
VKBS**



**VKBS**

450-1800 kg	50-80 mm	100-250 mm

Wheel with elastic tyre made of Vulkollan® with a cast iron wheel center with a plain H7-bore or with a keyway

**VKLH  
VKLS**



**VKLS**

175-1200 kg	30-50 mm	65-300 mm

Wheel with elastic tyre made of Vulkollan® with a cast iron wheel center with a plain H7-bore or with a keyway

**VKJH  
VKJS**



**VKJS**

350-1200 kg	40-50 mm	100-300 mm

Wheel with elastic tyre made of Vulkollan® with a cast iron wheel center with a plain H7-bore or with a keyway

## APPLICATIONS





Drive wheels

VKMH  
VKMS



VKMS



Wheel with elastic tyre made of Vulkollan® with a cast iron wheel center with a plain H7-bore or with a keyway

VKHH  
VKHS



VKHS

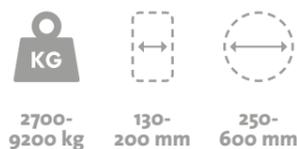


Wheel with elastic tyre made of Vulkollan® with a cast iron wheel center with a plain H7-bore or with a keyway

VKXH  
VKXS



VKXS



Wheel with elastic tyre made of Vulkollan® with a cast iron wheel center with a plain H7-bore or with a keyway

## APPLICATIONS





**Printhopan®**  
**VULKOLLAN®**  
THE ULTIMATE ELASTOMER



**Guiding rollers**

**WUDP**



WUDP

KG	mm	mm
10-260 kg	6-25 mm	18-100 mm

Guiding roller with tread in Printhopan® injected polyurethane on precision ball bearing (ZZ or 2RS)

**VKRK**



VKRK

KG	mm	mm
25-260 kg	14-25 mm	28-125 mm

Guiding roller with tread made of Vulkollan® on precision ball bearing (ZZ or 2RS)

**PGZK**



PGZK

KG	mm	mm
200 kg	30-32 mm	60 mm

Guiding roller with tread made of Printhalon® (6PLA) on precision ball bearing (ZZ or 2RS)

**APPLICATIONS**



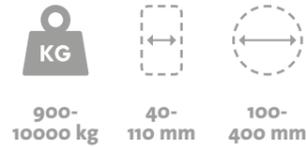


**Pallet roller and Press-on tyre**

**PGSK**



PGSK



Pallet roller with tread made of Printhalon® (6PLA) on precision ball bearing (ZZ or 2RS).

**APPLICATIONS**

**VKFL  
VKDL**



VKFL

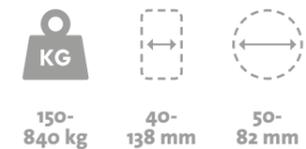


Cylindrical steel rim with tyre made of Vulkollan®. Flat (FL) or profiled (GL)

**VKTK  
VKTD**



VKTK

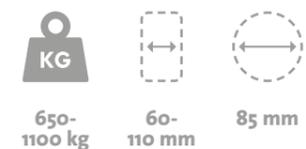


Palletroller with tread made of Vulkollan® on precision ball bearing (ZZ or 2RS). Steel center, nylon or metal sealing.

**PLTK  
PLTD**



PLTK



Pallet roller with tread made of Printhalon® (PA6) on precision ball bearing (ZZ or 2RS). Light polyamid sealing.



**DID YOU KNOW THAT**

we offer a refurbishment service



# APPLICATIONS



## Nylon industrial wheels

### PLVG PLVR



175-300 kg

80-200 mm



Wheel in high quality polyamide PA6 on roller bearing mounted in a pressed steel castor with double ball race

### PLVG PLVR



200-450 kg

100-250 mm



Wheel in high quality polyamide PA6 on roller bearing mounted in a pressed steel castor with double ball race

### PLVK



200-450 kg

100-250 mm



Wheel in high quality polyamide PA6 on precision ball bearing mounted in a pressed steel castor with double ball race





**Nylon industrial wheels**

**PLLK**



**PLLK  
MMH**

**PLLK  
MMHM**

**PLLK  
MVH**

**KG**  
225-  
750 kg

**80-  
200 mm**



Wheel in high quality polyamide PA6 on precision ball bearing mounted in a heavy duty steel welded castor with double ball race

**PLSK**



**PLSK  
MMH**

**PLSK  
MMHM**

**PLSK  
MVH**

**KG**  
600-  
1000 kg

**100-  
250 mm**



Wheel in high quality polyamide PA6 on precision ball bearing mounted in a heavy duty steel welded castor with double ball race

**PLLK**



**PLLK  
WNI**

**PLLK  
WNIM**

**PLLK  
WVI**

**KG**  
800-  
1500 kg

**100-  
200 mm**



Double wheel in high quality polyamide PA6 on precision ball bearing mounted in a heavy duty steel welded twin castor with double ball race

**PLSK**



**PLSK  
WNI**

**PLSK  
WNIM**

**PLSK  
KWVI**

**KG**  
1200-  
2400 kg

**150-  
250 mm**



Double wheel in high quality polyamide PA6 on precision ball bearing mounted in a heavy duty steel welded twin castor with double ball race

**PLSK**



**PLSK  
UKN**

**PLSK  
UKNR**

**PLSK  
UVN**

**KG**  
700-  
1200 kg

**125-  
250 mm**



Wheel in high quality polyamide PA6 on precision ball bearing mounted in a heavy duty pressed steel castor with double ball race



**easyroll**



**Rubber industrial wheels**

**RBSG  
RBSR**



RBSG PMM

PLVG PMMS

RBSG PVM

RBSG PMC

RBSG PMCS



50-200 kg



80-200 mm

Wheel with semi-elastic rubber tyre mounted in a pressed steel castor with double ball race

**RGVR**



RGVR FJM

RGVR FJMS

RGVR FVM

RGVR FJC

RGVR FJCS



100-350 kg



80-200 mm

Wheel with elastic vulcanised tyre in rubber mounted in a pressed steel castor with double ball race

**EGVR**



EGVR NKS

EGVR NKSS

EGVR NVS



150-300 kg



100-200 mm

Wheel with elastic vulcanised tyre in Easyroll™ rubber mounted in a solid pressed steel castor with double ball race

**ENAY  
ENAK**



ENAY NKS

ENAY NKSS

ENAY NVS



150-400 kg



100-200 mm

Wheel with elastic vulcanised tyre in Easyroll™ rubber mounted in a solid pressed steel castor with double ball race. Wheel pressed steel center. Cone ball bearings or precision ball bearings

**ENGK**



ENGK PMM

ENGK PMMS

ENGK PVM

ENGK PMC

ENGK PMCS



175-300 kg



100-200 mm

Wheel with elastic vulcanised rubber tyre mounted in a pressed steel castor with double ball race. Aluminium centre

**ENGK**



ENGK YKN

ENGK YKNS

ENGK YVN



300-500 kg



125-250 mm

Wheel with elastic vulcanised rubber tyre mounted in a heavy duty pressed steel castor with double ball race. Aluminium centre

**ENFK**



ENFK MMH

ENFK MMHM

ENFK MVH



450-700 kg



150-300 mm

Wheel with elastic vulcanised tyre in Easyroll™ rubber mounted in a heavy duty steel welded castor with double ball race. Wheel pressed steel center. Precision ball bearings

# APPLICATIONS



## Stainless steel wheels

### RTWK



Wheel with thermoplastic rubber tyre mounted in a pressed stainless steel castor with double ball race. Polypropylene centre.

### RTFK



Wheel with thermoplastic rubber tyre mounted in a pressed stainless steel castor with double ball race. Polypropylene centre.

### RTFK



Wheel with thermoplastic rubber tyre mounted in a pressed stainless steel castor with double ball race. Polypropylene centre. Expander fitting for round tube.





**Stainless steel wheels**

**RGVS**



Wheel with elastic vulcanised tyre in rubber mounted in a pressed stainless steel castor with double ball race

**PLWG**



Wheel in high quality polyamide Printhalon® PA6 mounted in a pressed stainless steel castor with double ball race

**PLVG  
PLVS**



Wheel in high quality polyamide Printhalon® PA6 mounted in a pressed stainless steel castor with double ball race

**PLVK**



Wheel in high quality polyamide Printhalon® PA6 mounted in a pressed stainless steel castor with double ball race

**PLSK**



Wheel in high quality polyamide Printhalon® PA6 mounted in a heavy duty pressed stainless steel castor with double ball race on 2RS precision ball bearings

**PLUS**



Wheel in injected polyurethane TPU mounted in a pressed stainless steel castor with double ball race

**HPGG**



Heat resistant synthetic wheel in phenolic resin mounted in a pressed steel castor with double ball race

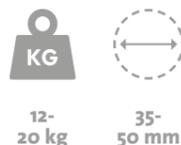


**Wheels glass industry**

**RBGL  
RBGR**



**RBGL**

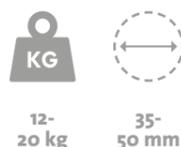


Ball castor in elastic natural rubber. For transport tables in the glass industry

**WKGL  
WKGR**



**WKGL**

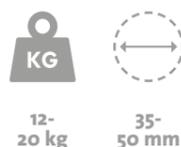


Ball castor in Printhopan® injected polyurethane. For transport tables in the glass industry

**RBIL  
RBIR**



**RBIL  
RBIR**



Stainless steel ball castor in natural rubber injected polyurethane. Used for transport tables in the glass industry

**WKIL**



**WKIL**



Stainless steel ball castor in Printhopan® injected polyurethane. For transport tables in the glass industry

**RHGL**



**RHGL**



Heat resistant ball castor in elastic rubber. For transport tables in the glass industry

**RBCL**



**RBCL**



Drive wheel for conveyor belts in elastic natural rubber

**VKPG  
TVKHB**



**VKPG**



Glass transport roller with tyre made of Vulkollan® with centre in cast polyamide

## APPLICATIONS



**Glass transport ring in NBR**





**Equipment wheels**

**RTSG**



Wheel with tyre in thermoplastic rubber mounted in a pressed steel castor with double ball race. Polypropylene centre

**RGGK**



Wheel with tyre in elastic rubber mounted in a pressed steel castor with double ball race. Polyamide centre

**RTFK**



Wheel with tyre in thermoplastic rubber mounted in a pressed steel castor with double ball race. Polypropylene centre

**PLNG**



Wheel in high quality polyamide Printhalon® PA6 mounted in a pressed steel castor with double ball race

**PLNG**



Wheel in high quality polyamide Printhalon® PA6 mounted in a pressed steel castor with double ball race

**STW**



Twin wheel in injected polypropylene on plain bearing

**WLUG**



Wheel with tread in injected polyurethane mounted in a pressed steel castor with double ball race. Polyamide centre



## Equipment wheels

### RTSG



Wheel with thermoplastic rubber tyre mounted in a pressed steel castor with double ball race. Polypropylene centre

### RGGG RGGK



Wheel with elastic rubber tyre mounted in a pressed steel castor with double ball race. Polyamide centre

### RGCK



Wheel with elastic rubber tyre mounted in a pressed steel castor with double ball race. Polyamide centre

### RTFK



Wheel with thermoplastic rubber tyre mounted in a pressed steel castor with double ball race. Polypropylene centre. Expander fitting for round and square tube

## THE PERFECT WHEEL CHOICE

### Wheel & Castor

A wheel is made out of a tread tyre, rim and wheel bearing. It's that simple. A wheel becomes a castor by installing the wheel in a housing. Depending on the type of housing, the result is a swivel castor or a fixed castor. The swivel castors can be rotated thru' 360° by using a ball bearing-mounted swivel bearing, ensuring good manoeuvrability. The fixed castors, in contrast, cannot rotate and are fixed in place, and ensure good directional stability. In most cases, 2 swivel castors and 2 fixed castors are affixed.

### Bearing

#### Plain bearing

Simple, largely maintenance-free bearing. Shock- and impact resistant. Suitable for use in damp environments. For low-speed devices (max. 4 km/h) and for short distances.

#### Ball bearing

Sturdy, hardwearing, largely maintenance-free bearings. Low bearing friction. Shock- and impact resistant. Permanent lubrication. The most frequently used bearings for low-speed devices (max. 4 km/h). Smoother rolling compared to plain bearings.

#### Precision ball bearing

For speeds of up to 20 km/h and heavier loads. Low rolling resistance when in use.

### The choice of wheel and castor primarily depends on:

- How much does a wheel/castor has to carry?
- The load of a castor can be calculated using the following rule of thumb:
  - load = (inherent weight + max. load)/3
  - It is divided by 3 because on uneven flooring, even an item of equipment with 4 castors will only have 3 castors in contact with the floor, and these 3 then carry the full weight.
  - This is a very general way to determine the loadbearing capacity. Ask your supplier for a detailed calculation.

#### 1. The loadbearing capacity required

The load capacities specified in our product range for wheels and castors apply for speeds of up to 4 km/h and an ambient temperature of 10°C to 60°C.

#### 2. The floor conditions

Is the floor rough or smooth? Is the floor covered in tiles, concrete, or is it heavy-duty industrial flooring?

In general, on smooth industry floors, you can use harder wheels (thin tread) while, on rough industry floors, soft wheels (thick tread) are better performing.

Choose non-marking castors if you wish to avoid leaving rubber tread marks. If there are ground sills, extra loadbearing capacity must be factored in.

Choose wheels with plain bearings and a stainless steel housing in food production areas or on wet surfaces.

#### 3. The frequency of use

Is the equipment moved only on occasion, or all the time?

#### 4. Environmental factors (temperature, including temperature fluctuations, chemicals, moisture and hygiene requirements)

Every site of use involves specific requirements. Moisture, cold, heat, temperature fluctuations, electrical conductivity and chemicals all affect the durability, rolling properties or the smoothness of motion.

#### 5. Comfort

You can also choose the required level of comfort and smoothness. The material of the wheels determines the rolling properties and ride comfort.

- Solid rubber rolls smoothly and silently. The strength and load capacity are limited however.
- Polyamide is shock- and impact resistant, chemically resistant and hardwearing. On the other hand it is a non-elastic material.
- Polyurethane is extremely wear resistant, noise absorbing and has excellent rolling properties thanks to its elasticity.

#### 6. Specific dimensions such as wheel diameter, overall height and hub length, or plate sizes and assembly hole spacing for castors

# TECHNICAL MOLDED PARTS



Elastic coupling in Vulkollan®. Large stock.

Semi finished products in Vulkollan® can be milled, turned, drilled and grinded.



Capping rings, cutting bars, cylinder linings and tension rollers in Vulkollan®.



Plate material Printhane-D™ 70-80-90 sh A. Large stock and fully customizable.



Cast pieces in Printhane-R™. The ideal solution for turned or milled parts in PA or other plastics.

Bumpers, positioning pieces, lifting arms etc. made of Vulkollan®.



Scrapers, mixing blades, guards, wear plates, seperators, etc. in Printhane-B™ 85 sh A.

Rollers and slides for monorail transport systems sealing balls, rings for valves and valves cable wheels made of Vulkollan®.



## DID YOU KNOW THAT

we offer customized wheel solutions, also in smaller numbers





**Material  
handling  
industry**

**Theme park  
industry**



**Machinery  
industry**

**Maintenance  
and repair**

