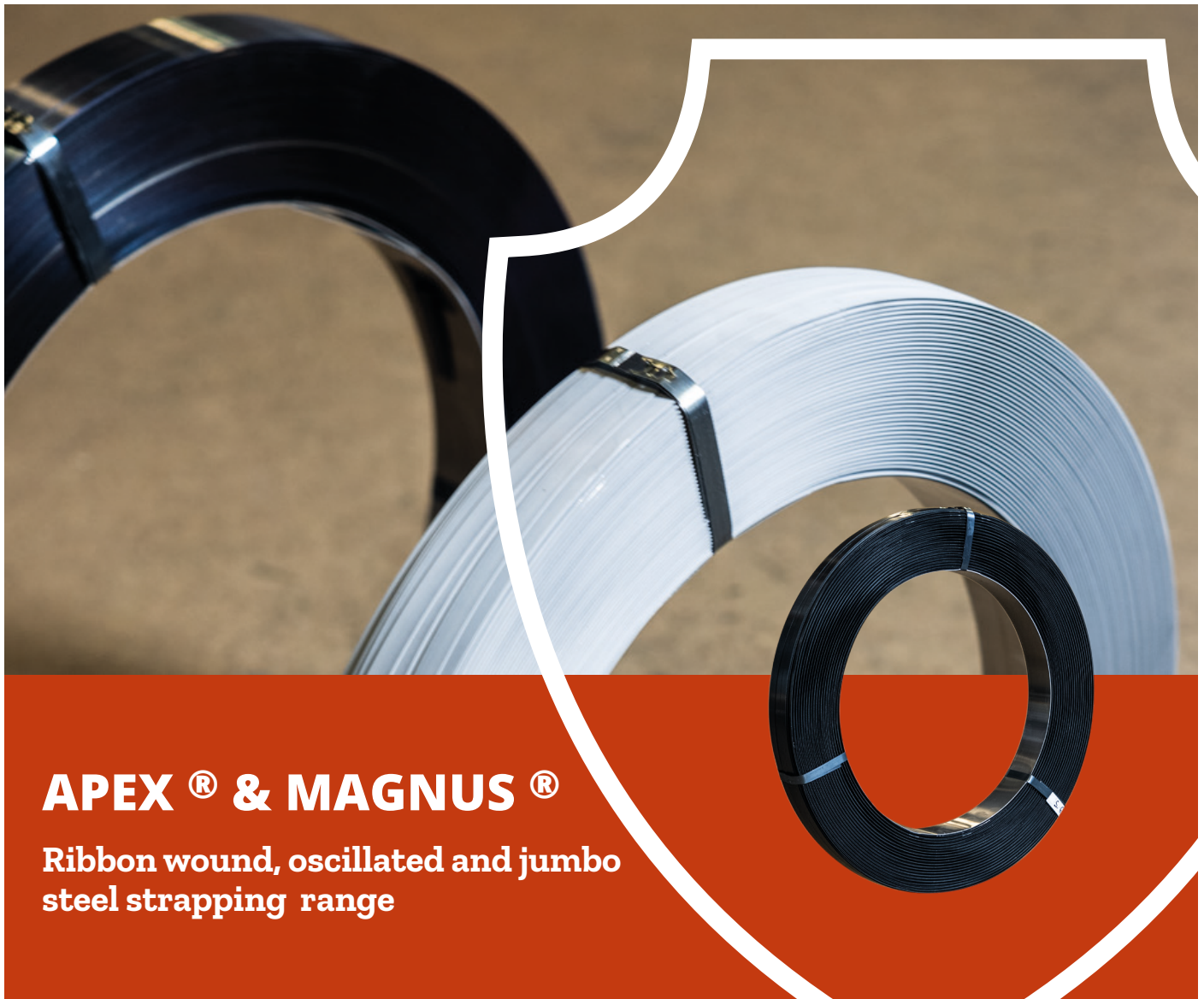


# Steel Strapping



## Mark of quality

High quality products, supply a full range of options.

## 100% recyclable

Signode steel strap is made from raw material, which is 100% recyclable.

## Coil customisation

Options available for coil customisation to better fit customer requirements.

## Produced locally

Steel strap range is produced in Germany and Sweden.

# APEX & MAGNUS steel strapping

## Our steel strapping range

### Reasons why the steel strap product range of APEX and MAGNUS are the key choice for customers:

#### ■ Steel strap APEX and MAGNUS products produced in Germany and Sweden

With a large quantity being produced per year, our plants in Germany and Sweden are Europe's leading manufacturers of packaging straps.

#### ■ Customisation available to meet customer's various requirements

We offer a wide range of both standard and high-tensile straps, but are also flexible for customers' needs. In production we can produce strips with a width from 10 mm up to 32 mm and with a thickness from 0,4 mm up to 1,45 mm.

#### ■ The same outstanding service customers have come to expect

We have a high level of service and a flexible organization. Helping customers with material development is an important part of our work. It encourages both parties to constantly improve and thereby strengthen positions in the market.

#### ■ Environmental accountability

To reduce the impact on the surrounding environment, we work continuously with environmental improvement measures. This enables us to progress with our ambitious targets given in our Twentyby30 sustainability program.



### About our steel strapping

Signode APEX is a cold-rolled, low carbon steel strapping. It has been engineered to yield a higher break strength at a thinner gauge. MAGNUS is a cold-rolled, heat-treated steel strapping that provides high tensile strength and shock resistance for the heaviest-duty applications.

## Key elements of our products:

Why the complete range has a solution for every customer

### ■ 3 different coil types

We offer steel strapping in different coil types available in ribbon wound, oscillated and jumbo coils.

### ■ 16 various product dimensions

Wide variety of dimensions available to suit every need.

### ■ A surface to meet every need

The straps can be delivered bright, blue-annealed, black, zinc-painted or hot dip galvanized, depending on the customer's wishes. Various surface finishes on the steel strapping products offer the same robust strength, all finishes are waxed.



### Hot-dip galvanized

Hot-dip galvanized strips offers a superior corrosion resistance and can be combined with the strength of a MAGNUS strap.



# APEX & MAGNUS

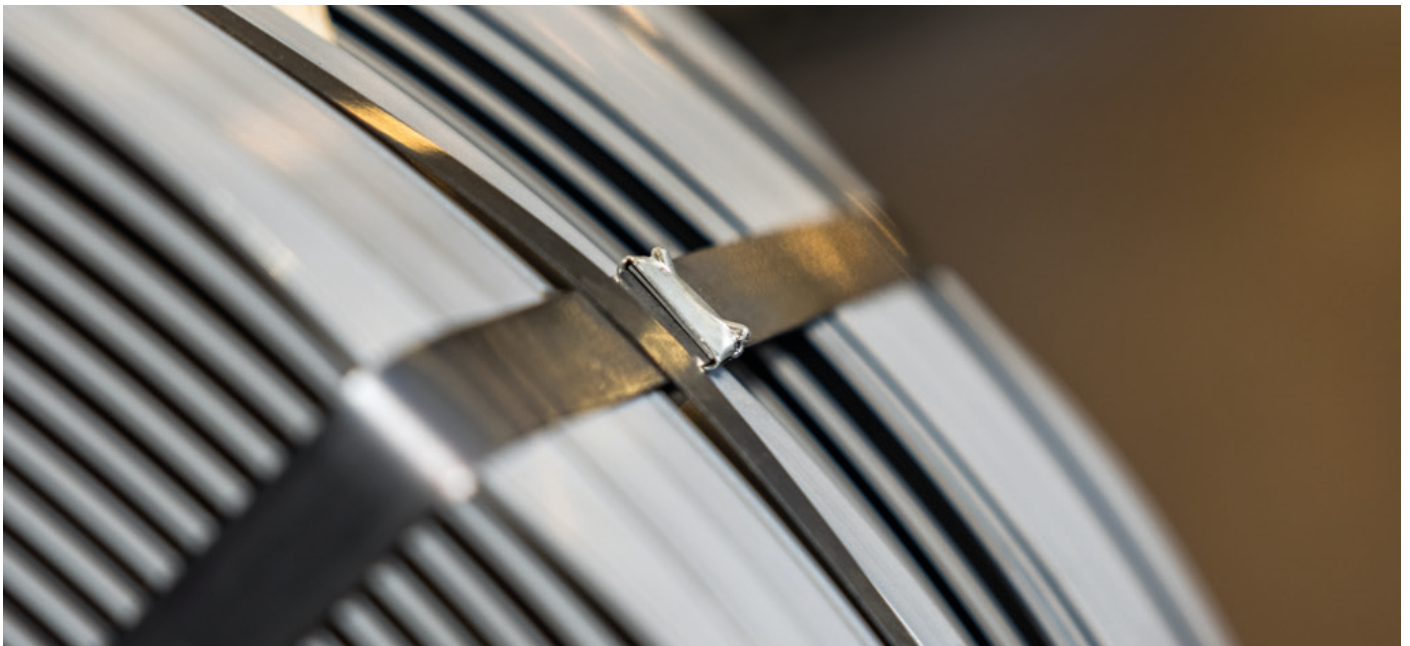
## Our steel strapping range



### Used for a wide range of applications

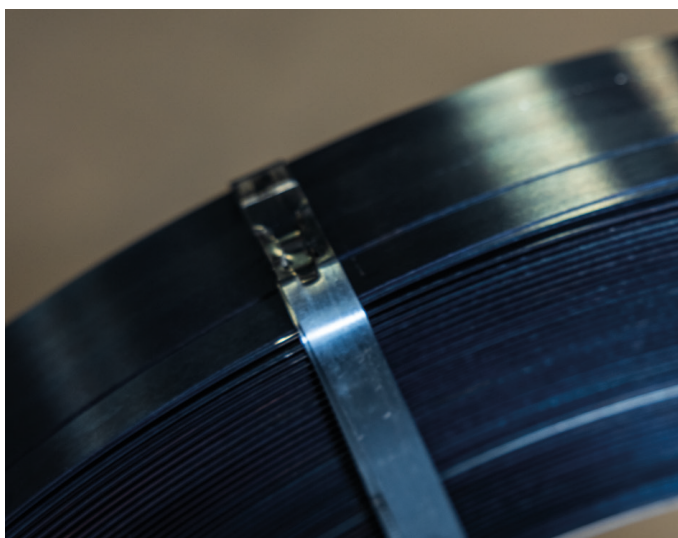
There are three different coil types across APEX and MAGNUS range of steel strapping, ribbon wound, oscillated and jumbo coils.

Production of steel strapping at the German and Swedish plants ensures a consistent quality customers have come to expect. Steel range is delivered wrapped in film or with zero packaging depending on coil size.



#### Jumbo coils

Wound in several layers.



#### Oscillated coils

Wound in several layers.



#### Ribbon wound coils

Wound in 1 layer.

# Sustainability

How we are making a difference

## Recyclable raw material

Steel strapping range is made using raw materials from trusted sources. Our location also enables us to utilize less packaging when bringing steel products to customers.



## Produced locally in Germany and Sweden

Our steel products are produced locally in Germany and Sweden which not only allows for great quality control but ensures a high rate of sustainability.



## We produce zero packaging waste

All packaging comes from recycled sources and any packaging waste we produce is recycled again.



## Reduces overall emissions significantly

Emissions are reduced across the steel range. Supplying from our European facilities ensures less transportation needs. This enables us to progress with the ambitious targets given in our Twentyby30 sustainability program.



## Close proximity to customers

Being closer to customers not only increases our products overall sustainability but ensures quality customer service.



## Shipping from local warehousing

Shipments can also be made from various central European warehouse locations.



**WE'LL ALWAYS  
PROTECT IT.**



# APEX

## Ribbon wound



### Product specifications

Width (mm)	13 – 32
Thickness (mm)	0,4 – 1,45
Coating	Bright / Blue / Black / Zinc Hot dip galvanized (all waxed)
Winding	Ribbon wound
Coil closure	Spot weld / taped / PP strap
Kg/Coil	20 – 50 kg
Coil orientation	Laying
Coils per pallet*	13 – 31

### Technical specifications\*

Tensile strength	770 – 880 N/ mm <sup>2</sup> or [MPa]
Break strength	3,500 – 26,080 N
Elongation A100	0,5 – 2 %
Elongation A5	2 – 7 %

### Further information

- Number of ribbon wound coils per pallet depends on dimensions.\*

## Product



Technical specification and packaging varies by the dimension of the strap\*

# APEX

## Oscillated wound



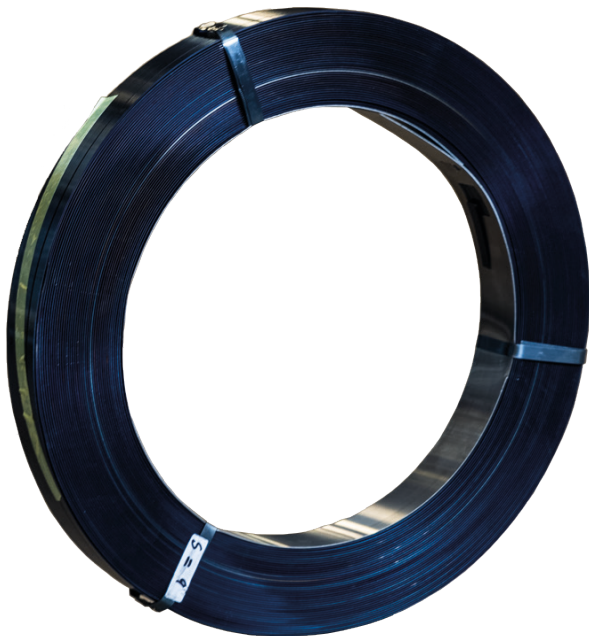
### Product specifications

Width (mm)	10 – 19
Thickness (mm)	0,4 – 1,45
Coating	Bright / Blue / Black / Zinc Hot dip galvanized (all waxed)
Winding	Oscillated wound
Coil closure	Taped / strapped
Kg/Coil	50 kg
Coil orientation	Laying
Coils per pallet*	12

### Technical specifications\*

Tensile strength	770 – 880 N/ mm <sup>2</sup> or [MPa]
Break strength	3,500 – 26,080 N
Elongation A100	0,5 – 2 %
Elongation A5	2 – 7 %

## Product



Technical specification and packaging varies by the dimension of the strap\*

# APEX

## Jumbo coil



### Product specifications

Width (mm)	13 – 32
Thickness (mm)	0,5 – 1,45
Coating	Bright / Blue / Black / Zinc Hot dip galvanized (all waxed)
Winding	Jumbo
Coil closure	Taped / strapped
Kg/Coil	350 – 1000 kg
Coil orientation	Laying / standing
Coils per pallet*	1 – 2

### Technical specifications\*

Tensile strength	770 – 880 N/ mm <sup>2</sup> or [MPa]
Break strength	3,500 – 26,080 N
Elongation A100	0,5 – 2 %
Elongation A5	2 – 7 %

### Further information

- Jumbo-coils are delivered on a special pallet with a maximum 1- 2 coils per pallet depending on coil weight.\*

## Product



Technical specification and packaging varies by the dimension of the strap\*



# MAGNUS

## Ribbon wound



### Product specifications

Width (mm)	13 – 32
Thickness (mm)	0,5 – 1
Coating	Bright / Blue / Black / Zinc Hot dip galvanized (all waxed)
Winding	Ribbon wound
Coil closure	Spot weld / taped / PP strap
Kg/Coil	20 – 50 kg
Coil orientation	Laying
Coils per pallet*	13 – 31

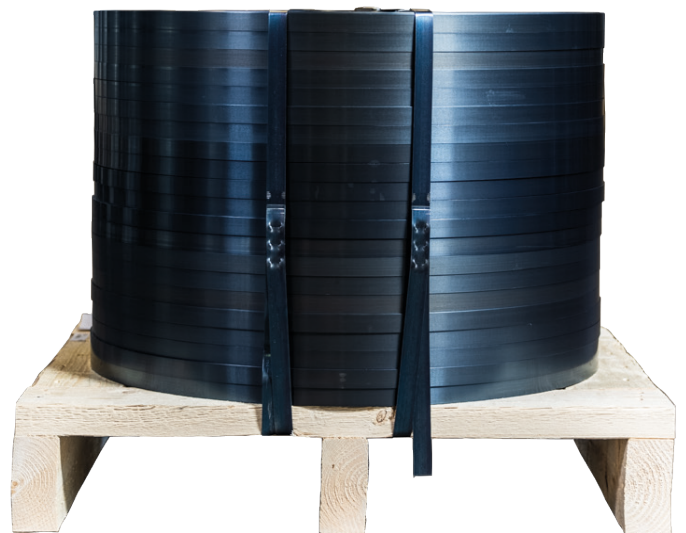
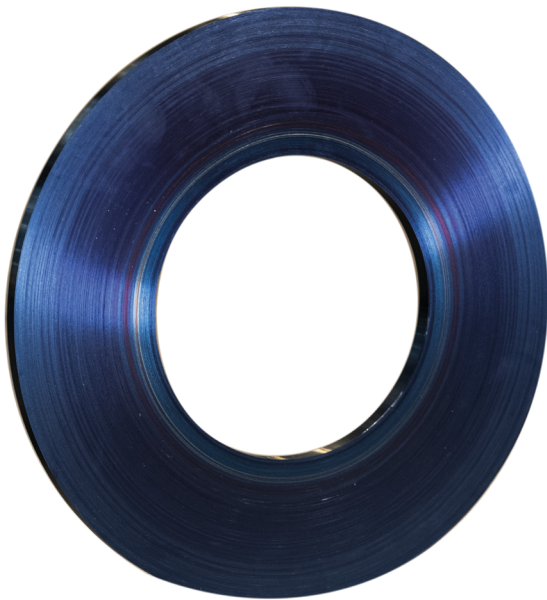
### Technical specifications\*

Tensile strength	950 – 1,050 N/ mm <sup>2</sup> or [MPa]
Break strength	6,480 – 36,500 N
Elongation A100	3 – 12 %
Elongation A5	10 – 22 %

### Further information

- Number of ribbon wound coils per pallet depends on dimensions.\*

## Product



Technical specification and packaging varies by the dimension of the strap\*

# MAGNUS

## Oscillated wound



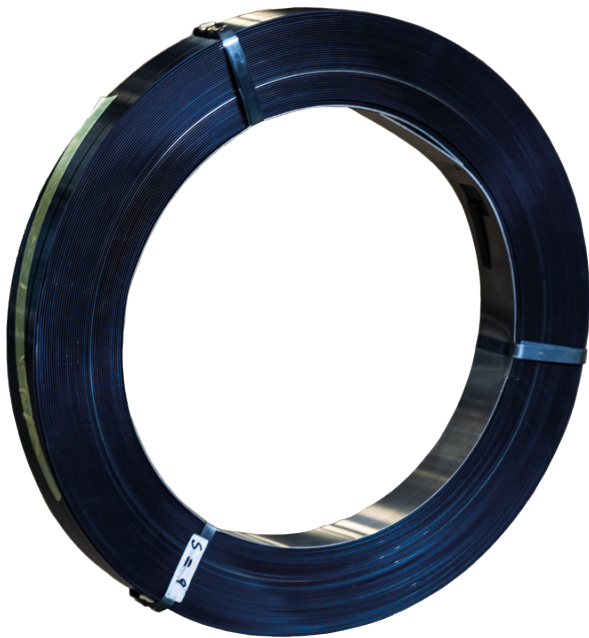
### Product specifications

Width (mm)	13 – 19
Thickness (mm)	0,5 – 1
Coating	Bright / Blue / Black / Zinc Hot dip galvanized (all waxed)
Winding	Oscillated wound
Coil closure	Taped / strapped
Kg/Coil	50 kg
Coil orientation	Laying
Coils per pallet*	12

### Technical specifications\*

Tensile strength	850 – 1,390 N/ mm <sup>2</sup> or [MPa]
Break strength	6,480 – 36,500 N
Elongation A100	3 – 12 %
Elongation A5	10 – 22 %

## Product



Technical specification and packaging varies by the dimension of the strap\*

# MAGNUS

## Jumbo Coil



### Product specifications

Width (mm)	13 – 32
Thickness (mm)	0,5 – 1
Coating	Bright / Blue / Black / Zinc Hot dip galvanized (all waxed)
Winding	Jumbo coil
Coil closure	Taped / strapped
Kg/Coil	350 – 1000 kg
Coil orientation	Laying / standing
Coils per pallet*	1 – 2

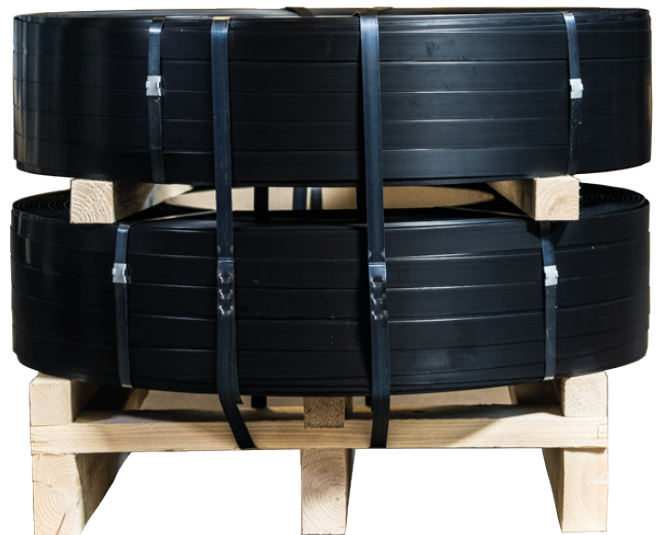
### Technical specifications\*

Tensile strength	850 – 1,390 N/ mm <sup>2</sup> or [MPa]
Break strength	6,480 – 36,500 N
Elongation A100	3 – 12 %
Elongation A5	10 – 22 %

### Further information

- Jumbo-coils are delivered on a special pallet with a maximum 1- 2 coils per pallet depending on coil weight.\*

## Product



Technical specification and packaging varies by the dimension of the strap\*