



## The Knauf Interfer Group

The Knauf Interfer Group, headquartered in Duisburg, Germany, is one of the leading plant-independent service providers, producers, and distributors of steel and aluminium solutions in Europe.

Knauf Interfer has excellent relationships with its suppliers and a delivery program that – in addition to the widely-accepted standards – covers an exceedingly wide range of grades and dimensions. We offer products and services with optimal support and a maximum availability of goods. Products and services can be combined, processed, and delivered flexibly and according to customer demand across all business units and locations. From its 12 locations in Germany, Poland, and the Netherlands, the group supplies local and international customers in the automotive and industry sectors.



## Business Unit Steel – Solutions for complex requirements in supply chain and production

The Business Unit Steel covers an extraordinarily wide range of products in terms of dimensions and accompanying services.



## The product range – in brief

Here you can see an overview of our range of grades. Details and further information can be found at knauf-interfer.com/en.

### Steel

### **Cold-strip and cold-rolled steels**

- DIN EN 10139 Cold-rolled strip of soft steels for cold forming
- DIN EN 10132 Cold-rolled steel strip for heat treatment
- DIN EN 10268 Cold-rolled steels with high yield strength (micro-alloyed steels)
- DIN EN 10130 Cold-rolled soft steels for cold forming
- DIN EN 10338 Hot- and cold-rolled multiphase steels for cold forming

### Hot-strip and hot-rolled steels

- DIN EN 10111 Hot-rolled steels for cold forming
- DIN EN 10149 Hot-rolled steels with high yield strength for cold forming
- DIN EN 10025 Hot-rolled structural steels
- DIN EN 10338 Hot- and cold-rolled multiphase steels for cold forming

#### Hot-dip galvanised steels

- DIN EN 10346
  - Soft steels for cold forming
  - Steels with high yield strength for cold forming
  - Steels for use in the construction industry
  - Multiphase steels for cold forming (cold-rolled)
  - Multiphase steels for cold forming (hot-rolled)

#### **Electrolytically refined steels**

- Electrolytically tin-plated steels (GSn)
  - DIN EN 10205 Cold-rolled packaging sheet products ultra-thin sheet
  - DIN EN 10202 Cold-rolled strip, electrolytically tinned
- Electrolytically galvanised steels (GZn)
  - DIN EN 10152 Cold-rolled, electrolytically galvanised steels
  - DIN EN 10139, DIN EN 10132, DIN EN 10268 Cold-rolled strip, electrolytically galvanised (based on DIN EN 10268)

### **Organic coated steels**

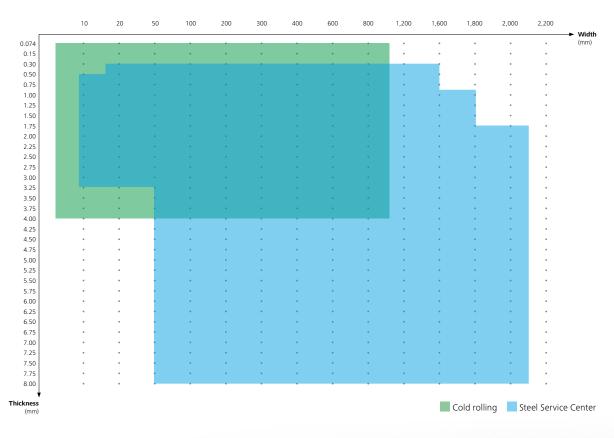
• 140 colours in five coating systems

#### **Special steels**

• ... you are welcome to contact us

## The range of dimensions – at a glance

## Slit strip



## Sheets (for cuttings see page 9)

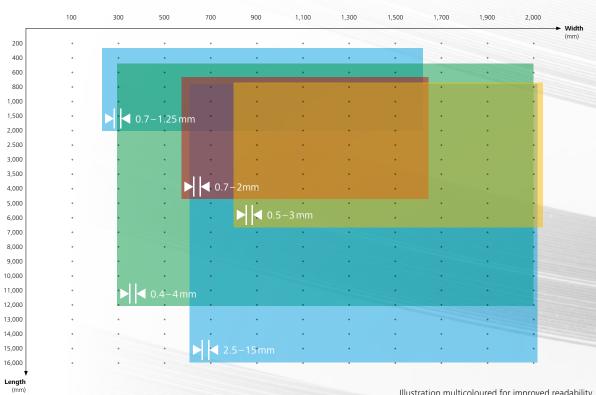
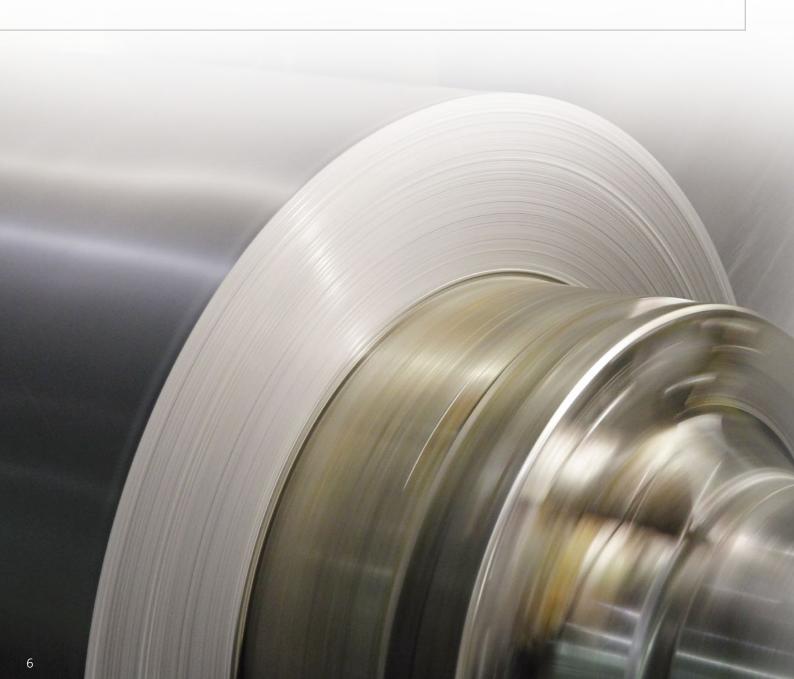


Illustration multicoloured for improved readability

# **Cold rolling**

From the cold rolling process through annealing to refining, these are perfectly adjusted in our production.

In order to meet the highest customer requirements, we combine high-tech forming with accurate heat treatment, precise re-rolling, surface finishing, and packaging. Our product range is characterised by minimal thicknesses and a width range of up to 1,060 mm. This allows the production of extra-wide cold strips of the most diverse materials and surface requirements. Heat treatment is carried out in modern high-convection batch annealing facilities in a controlled  $\rm H_2$  protective gas atmosphere. Take advantage of our materials expertise for your projects.



## Quality-assured

The best material properties can be achieved only if the entire production process is aligned with each other. In the process, we attach great importance to the highest precision and the lowest tolerances in each individual step and in every detail. Optimally adjusted starting material specifications are an essential prerequisite for an excellent cold-rolled product. The synthesis of technology and tools is the result of many years of experience, development, and sustained quality assurance.

## Refined for you

Our finishing is state of the art in terms of technology and environmental protection. On our galvanic zinc coating line, we can electrolytically coat both sides with a zinc layer thickness from 2  $\mu$ m to 10  $\mu$ m according to DIN EN 10152. The electrolytic tin plating line enables tin coatings of max. 30 g/m² on each side according to DIN EN 10202.

## Production optimised

We supply coils according to customer requirements or production-optimised oscillated wound rings (max. 1,050 kg ring weight) for uninterrupted production.

Specialities in cold rolling								
Grades								
Cold-rolled steel strip (EN 10139)	DC01, DC03, DC04, DC05, DC06 Condition: A, LC, C290, C340, C390, C440, C490, C590, C690							
Sheets/slit strip (EN 10130)	DC01, DC03, DC04, DC05, DC06							
Thin sheets (EN 10205)	T50, T52, T57, T61, T65							
Tin sheets (EN 10202)	TS230, TS245, TS260, TS275, TS290, TS550							
Engineering steels (EN 10025–2)	S235-S355							
Case-hardening steels (EN 10132)	C10E, C5E, 16MnCr5, 17Cr3							
Heat-treated steels (EN 10132)	C22E, C35E, C45E, 42CrMo4							
Spring-band steels (EN 10132)	C55S, C60S, C67S, C75S, C100S, 51CrV4, 58CrV4							
Micro-alloyed steels (EN 10268)	HC260LA, HC300LA, HC340LA, HC380LA, HC420LA							
High-strength micro-alloyed special steels according to DIN EN 10286	HC550LA, HC600LA, HC700LA, HC750LA, HC800LA, HC850LA, HC900LA							
Special materials/additional grades	upon request							
Surface type								
MA and MB according to EN 10139 (MC upon request)								
A or B according	ng to EN 10130							
Surface	e finish							
Defined roughness values and variable peak values ranging from Ra $<$ 0.1 $\mu$ m (glossy smooth) to Ra $>$ 2.0 $\mu$ m (extra rough)								
Edge design								
Cut edges (CE), special edges upon request								
Layout								
0.075 mm thick, 4–1,040 mm wide, coil weights up to 20 t								

## **Steel Service Center**

Knauf Interfer Stahl Service Center GmbH has been optimising the global steel supply chains for years in order to provide a custom-fit solution for our customers' requirements in the eight local production facilities.

Our full range of grades (including common surface variants), which we compile globally, is converted into customer orders, packaged, and delivered to you. The product portfolio ranges from sheets to slit strip to wound rings and is supplemented by special grades and intermediate thicknesses for the prototype sector. The extensive range of organic coated products for industrial applications as well as the ability to produce large, stretch-straightened sheets is what sets us apart. Our unique production network enables us to achieve the highest levels of reliability, quality, and speed — even for challenging customer requirements. Whether in the contract or full-service business, we can look back on decades of experience in slitting and cutting-to-length and offer you individual services.



# Your task – our aspiration

Which grade is the best for your particular application depends on many factors. As the interface between steel producers and the steel processing industry, we ensure a reliable, flexible, and demand-oriented supply of pre-material.

The processing of steel coils is carried out close to customers in our decentralised production network on state-of-the-art machines. The quality of the material is continuously monitored in our own laboratories at each production site. This ensures that every single product that leaves our steel service centres has been carefully tested and meets our strict quality standards. Our products are characterised by excellent processing properties. We also offer our customers answers to metallurgical questions through our technical customer service.

# Ultra-high-strength steels – save weight and CO<sub>2</sub>

The development driven by our customers and suppliers is clearly moving towards ultra-high-strength steels. We support this development as a strategic partner and are able to achieve the highest tolerances in production. On our production lines, we can process ultra-high-strength steels (including martensitic steels) with a strength of up to 1,900 MPa.

# Special surfaces – our core expertise

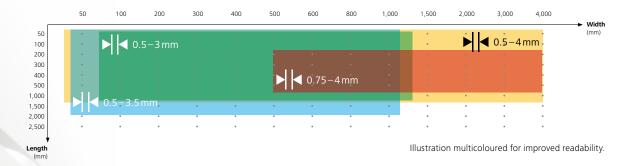
Our machinery is especially geared towards surface-friendly processing. Special braking systems for the different types of surfaces make this possible. In the area of decorative surfaces, you have almost unlimited creative freedom within the most important coating systems. Your semi-finished products are also reliably and permanently protected against corrosion.

Selection of coating systems				
Plastisol				
Polyester				
Polyurethane				
PVC				
PVDF				
We can also offer surface finishes with different lacquers and colours in combinations.				

# Wound rings and small coils – for your production

We produce rings from 1 to 5 t and small coils from 150 kg for you. These can be produced with or without core for inner diameters of 508 mm and without core for an inner diameter of 300 mm. This also applies also to highly sensitive organic coated material.

## Cuttings





## Form-shaped blanks

Knauf Interfer Automotive Blanks GmbH is expanding the production area of the Business Unit Steel to include customised blanks and cut blanks as well as trapezoids and parallelograms.

With the commissioning of the blanking line at the Duisburg production site in Germany, modern production technology was combined with the advantages of trimodal logistics at one of the most important logistics locations in Europe.

Here, engineered semi-finished products are produced for leading manufacturers and suppliers to the automotive industry. A wide range of steel grades and alloys are processed; from these, primarily structural and crash parts are produced. These are used, in the side impact protection of electric vehicles, A- and B-pillars, and other structures for vehicle construction – of course, also with customised tools.

## Technical key data of the blanking line

#### Raw material

Max. width: 1,600 mm
Min. width: 300 mm
Max. thickness: 4 mm
Min. thickness: 0.50 mm

• Max. coil: 25 t

• Max. yield strength: 1,200 MPa

#### **Finished material**

• Form-shaped blanks

· Blank dimensions

Length: 150-2,500 mmWidth: 300-1,600 mm

### **Press parameters**

• Standard length tolerance: ± 0.2 mm (to 1,000 mm feed length)

• Pressing force: 1,300 t

#### Die area

Length: 5,100 mmWidth: 2,500 mm

• Installation height of the dies: 900-1,250 mm

Feed height: 650–850 mmStroke rate: 15–42 strokes/min

### Stacker (2 stacking sections)

• Stack weight: max. 5 t

• Stacking height: max. 800 mm (with pallet)

• Stacking tolerance: ± 3 mm

# **Supply Chain Management**

Particularly in times of unstable supply chains, it is all the more important for our customers to be able to rely on us. We match worldwide material with your requirements and make sure that your production is up and running optimally and safely.

As your supply chain manager, Knauf Interfer ensures that material routes are implemented efficiently and with reduced  $CO_2$  emissions. To this end, we take advantage of the optimal connections of our trimodal locations, and can guarantee security of supply through own fleet of vehicles. Thanks to our decentralised location structure, you benefit from short distances and contact partners in your region. Global material flows require additional transhipment areas, which we are able to provide. Do you need imported grades? No problem! We are ISPS-certified in Duisburg and are thus well prepared for the challenges of globalised supply chains.



## A strong global partner

In addition to the standard range, the Business Unit Steel uses its many years of expertise to supply steel for special industrial applications or small batches for prototype construction. This includes almost all types of sheet – also in special grades and intermediate thicknesses.

# Benelux, the UK, and Ireland

Knauf Interfer Benelux is the sales office for Benelux, the UK, and Ireland. It offers full access to all steel products of the Business Unit Steel and is fully integrated into the internal systems with access to the logistics.

The sales office also distributes products that are no longer part of the core business of the Knauf Interfer Group (e.g. pipes, profiles, or bar and round steel).

## Southern Europe

Our customers have their own regional sales team at their disposal. Thanks to our many years of market and product knowledge, the high continuous quality of the products, and the refinement and production possibilities in our production plants, we have become preferred supplier to our customers.



## Eastern Europe

The Business Unit Steel offers a fully integrated decentralised sales team that provides on-site support for our customers in Eastern Europe.

Our product specialists have unrestricted access to the product portfolio and production network of the Business Unit Steel. They are fully integrated into the company and use the latest systems and logistics expertise.

# A question of responsibility

The green transformation of the steel industry is an essential building block for achieving the climate targets set in Germany and Europe. Decarbonising steel production can save around 30 percent of  $CO_2$  emissions in the industry sector.

In addition to the steel manufacturers, we form a central interface in the supply chain with the steel service centres, the cold rolling mill and our form shaped blanks and thus also an important success factor in linking our customers' transformation measures with the suppliers' production capabilities. In this way, we as the Steel business unit are responding to the increased complexity of steel as a product by supporting our customers both in the development of their individual transformation paths and in the realisation of their individual sustainability goals.

But our responsibility does not end with our products. Beyond the procurement and processing of green steel products, we also rely on efficient, trimodal logistics and short delivery routes thanks to conveniently located sites.



## We are certified

As a leading service provider, producer, and distributor for steel in Europe quality, the environment, energy, and occupational safety are more than just a corporate principle. Our customers can always rely on our products and services. This is confirmed by our certifications according to the requirements (e.g. those of the automotive industry). Find out for yourself, and take a look at the certificates of our locations in the following table.

	ISO 9001	IATF 16949	ISO 14001	ISO 50001	ISO 45001	TISAX	ISO 16247-1
Knauf Interfer SE	•		•		•		
Business Unit Steel							
Knauf Interfer Stahl Service Center GmbH							
– Delta Stahl Plant	•	•	•		•	•	•
– Delta Stahl Plant, Hoym site	•		•		•		•
– Frankfurt a. M. Plant	•		•		•		•
– Max Baum Plant	•		•		•		•
– Nürtingen Plant	•		•		•		•
– Völkel & Winkler Plant	•		•		•		•
– Walter Patz I Plant	•	•	•		•	•	•
– Walter Patz II Plant	•		•		•		•
Knauf Interfer Cold Rolling GmbH	•	•	•	•	•	•	•
Knauf Interfer Automotive Blanks GmbH	•	•	•		•	•	•
Knauf Interfer Benelux	•						•

<sup>•</sup> Planned certifications in 2023

TISAX planned



#### **Knauf Interfer Cold Rolling GmbH**

Werk Giebel Im Ostfeld 1 58642 Iserlohn-Letmathe, Germany Tel. +49 2374 56-0 cold.rolling@knauf-interfer.com

#### **Knauf Interfer Stahl Service Center GmbH**

Kiffward 34 47138 Duisburg, Germany Tel. +49 203 45669-200 ssc@knauf-interfer.com

#### **Knauf Interfer Automotive Blanks GmbH**

Kiffward 34 47138 Duisburg, Germany Tel. +49 203 4519-450 automotive.blanks@knauf-interfer.com

#### **Knauf Interfer Benelux**

Augustijnendreef 2 5611 CS Eindhoven Netherlands Tel. +31 40 244-1000 benelux@knauf-interfer.com

