



ZOLLERN steel profiles are the basis of high precision and a long life time of the subsequently produced linear guides.

# **Maximum precision** in design

In a production area covering almost 20,000 square metres, ZOLLERN processes 200 different materials selected for specific applications into first class steel profiles. Six million metres steel profiles are produced here each year by qualified specialists using the latest technology. ZOLLERN custom manufactures its products according to specific customer requirements.

That is why 8,000 different steel profiles have been produced to date, and this number is increasing every day.

#### Features and benefits of ZOLLERN steel profiles

- 100% quality
- · 60% material saving
- Supreme surface quality
- Unique mechanical properties
- 1200 MPa after cold drawing
- Perfect dimensional accuracy and reproducibility
- Conservative use of available resources throughout the entire production chain
- Contribution to reduction in costs

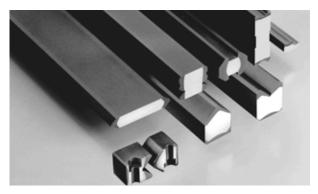
# **Individual design**Cost-effective solutions

ZOLLERN steel profiles are produced in close collaboration with the customer. Thanks to the wide-ranging design options for steel profiles, there are virtually no limits to the construction possibilities. Steel profiles make cost-effective solutions possible, even with individual designs.

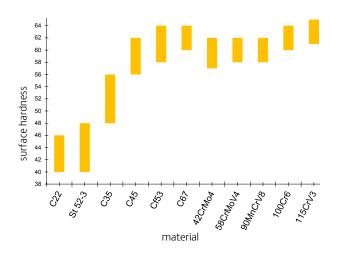
#### Steel profiles for linear guides

- Customer-designed materials
- · Realising of high load rating
- Optimal further processing because of targeted heat treatment under inert gas
- Great hardenability of the used materials
- Minimal machining allowance by narrow tolerances and less surface decarburization
- · Less distortion by specific straightening methods





The case hardened area has been made visible by etching // Diagram see below: achievable surface hardness of inductive hardened profiles.



#### Area of application

- Ball and roll guides
- Linear axe, linear carriage
- Telescopic slides and guides
- M and V-guides
- Heavy duty rails
- Flat guides
- Slip-in guides
- Shaft support
- Measuring systems
- Miniature linear guides

## **ZOLLERN steel profiles**Product range

#### **Profile types**

Hot-rolled, cold-rolled, cold-drawn, induction-hardened

#### **Cross sections**

Profile cross sections from 5 to 6,000 mm<sup>2</sup> (40 g/m to 48 kg/m)

#### **Delivery options**

Bars up to 12 m Rings up to 2 t

#### **Dimensional tolerances**

From 30 µm

#### Surface roughness

From Rz 5 µm

#### Materials

Structural steels, free-cutting steels, case-hardened steels, quenched and tempered steels, bearing steels, tool steels, stainless steels

#### **Processing**

Heat treatment, induction hardening which can achieve a surface hardness of up to 64 HRC, ready-to-fit components including mechanical processing and surface finishing





### **ZOLLERN**

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