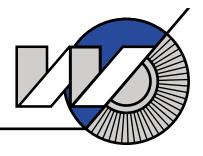
# WAHLMANN-BÜRSTEN since 1904

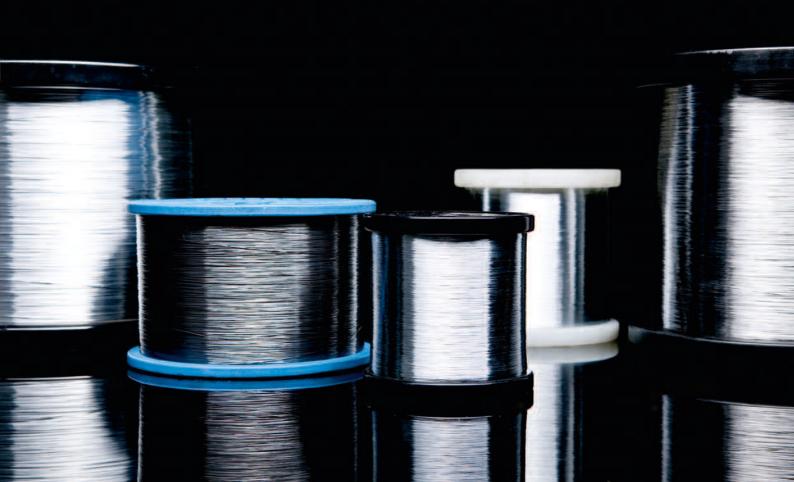
HEINRICH WAHLMANN GmbH

**Technical Brushes & Fine Wires** 



## QUALITY MADE IN GERMANY

## feindraht by wahlmann.





## PARTICULARLY PRECISE. PARTICULARLY CLEAN.

Wahlmann-Bürsten Heinrich Wahlmann GmbH manufactures high-quality fine iron and steel wire for the international market. The production takes place exclusively using wet drawing – a lengthy process, which leads to particularly clean surfaces, and is used by just a few suppliers.

In our manufactory all wire products are individually made to order. The highest precision and regular material testing ensure constantly high product quality. With tensile strengths in the range of 350 to 4,500 N/mm2 and dimensions from 0.08 mm in diameter, we have a unique position in the European market.

Our customers profit from short and flexible delivery times, reliable service and competitive prices. Your satisfaction is our main aim. We advise you in the choice of the right wire, support you in product development, and together we find the best possible solutions.





## AS PARTICULAR AS OUR CUSTOMERS.

Our customers' wishes are the starting point for our work. We produce rope wires, steel wires, spring steel wires, and iron wires in a broad range of strengths on all possible reel types. Small batches are also possible: We supply orders from 5 kilogrammes to 20 tonnes throughout Europe.

Depending on the area of application and customer wishes, our fine wires fulfil the material requirements with regard to strength, wear, fatigue and corrosion resistance. Our particular strength lies in the guarantee of the highest degree of precision, even for very small diameters. We can produce steel wire as small as 0.10mm, and iron wires starting at a diameter of 0.08mm – if required to a tolerance of one thousandth.

#### **PRODUCT ADVANTAGES**

- Mirror-like surfaces
- Broad range of strengths
- Highest precision
- Constant quality
- Suitable for extrusion





# BRIGHT IRON WIRE BESSEMER WIRE\*

#### **Industries**

- Automotive
- Mechanical engineering
- Mining
- Furniture and fittings industry
- Spring and wire rope industry
- Wire works
- Brush manufacturers

#### **Applications**

- Polishing brushes
- \* Named after the English inventor and engineer Sir Henry Bessemer (1813 - 1898)

Our filling wire is particularly low in carbon, and has high tensile strength and breaking strength. It is extremely suitable for use in polishing brushes.

Production:	in accordance with DIN EN 10016-2
Surface:	bright
Diameter	0.08 – 0.65mm
Tensile strength:	700 – 1,600 N/mm²

## ZINC-COATED IRON WIRE

Our electrolytically zinc-coated iron wire is finally annealed. Zinc coat  $> 20 \text{ g/m}^2$ 

Production:	in accordance with DIN EN 10016-2
Surface:	electrolytically zinc-coated
Diameter	0.18 – 1.20 mm
Tensile strength:	300 – 500 N/mm²

We also supply the zinc-coated iron wire in redrawn condition. Diameter 0.10-0.90mm, strengths on request



## **STEEL WIRE**

By decreasing the overall cross section reduction and increasing the carbon content we have developed a particularly flexible and resilient steel wire, which is also suitable for extrusion.

Production:	in accordance with DIN EN 10016-2
Surface:	zinc coated and phosphated
Diameter	0.10 – 0.65mm
Tensile strength:	1,180 – 2,800 N/mm²

### **PHOSPHATED**

Strength N/mm <sup>2</sup>	1,180	1,370	1,570	1,770	1,960	2,160	2,360
min. Ø mm	0.40	0.30	0.20	0.15	0.12	0.10	0.10
max. Ø mm	0.65	0.65	0.65	0.65	0.65	0.65	0.65

## ZINC COATED CLASS B

Strength N/mm²	1,180	1,370	1,570	1,770	1,960	2,160	2,360
min. Ø mm	0.35	0.25	0.15	0.12	0.12	0.10	0.10
max. Ø mm	0.65	0.65	0.65	0.65	0.65	0.65	0.65

#### Markets

- Automotive
- Textile industry
- Electrical engineering
- Brush manufacturers
- Lift manufacturers
- Wire weaving

#### **Applications**

- Brushes
- Weaving wire
- Woven nets



## **ROPE WIRE**

#### Markets

- Automotive industry
- Mechanical engineering
- Architecture
- Mining
- Lift manufacturers
- Spring and wire rope industry
- Wire works

#### **Applications**

- Window lifter wires
- Handbrake cables

Our rope wires are particularly suitable for double twist stranding machines and for extrusion. 85% of our rope wire is produced for the automotive industry, and is used in the 'D part' category.

Production:	in accordance with DIN EN 10264-2
Surface:	zinc coated and phosphated
Diameter	0.10 – 0.65mm
Tensile strength:	1,180 – 2,800 N/mm²

## **PHOSPHATED**

Strength N/mm²	1,180	1,370	1,570	1,770	1,960	2,160	2,360
min. Ø mm	0.40	0.30	0.20	0.15	0.12	0.10	0.10
max. Ø mm	0.65	0.65	0.65	0.65	0.65	0.65	0.65

## ZINC COATED CLASS B

Strength N/mm²	1,180	1,370	1,570	1,770	1,960	2,160	2,360
min. Ø mm	0.35	0.25	0.15	0.12	0.12	0.10	0.10
max. Ø mm	0.65	0.65	0.65	0.65	0.65	0.65	0.65



## **SPECIAL WIRE**

The continuous development of innovative products and processes guarantees a common future for us and our customers. We produce to your specifications and find solutions for particular requirements.

#### One example of our special productions:

For a customer order we developed a rope wire with the specifications  $\emptyset$  0.10mm, tolerances +/- 0.002, tensile strength > higher than 4000 N/mm<sup>2</sup>. Since then we have been able to supply high strength special wire with tensile strengths up to 4,500 N/mm<sup>2</sup>.

Production:	in accordance with DIN EN 10016-2 and DIN EN 10264-2				
Surface:	zinc coated				
Diameter:	from 0.10mm				
Tensile strength:	2,800 – 4,500 N/mm²				
Tolerances:	in accordance with DIN EN 10218-2 Table 1 'T5' or smaller				
Other surfaces and dimensions on request					

## REEL TYPES valid for all products

DIN 100	DIN 125	DIN 160	DIN 200	DIN 250			
DIN B 10/17	DIN B 10/47	DIN B 60	DIN B 250	DIN B 260	DIN K 355		
Other reel types on request							
Maximum reel weight: 38kg							

#### Markets

- Automotive
- Medical technology
- Electrical engineering
- Special wire suppliers
- Special cable manufacturers

#### Applications

- Brushes
- Weaving wire
- Woven nets
- Cables





#### Wahlmann-Bürsten

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