

**Cold heading wires**

- Cold heading wires for screws, bolts, nuts and form parts
- Cold extrusion wires, e. g. for spark plugs or other special applications
- Wires for anti-friction bearings
- Wires for chains and axles of chains
- Wires for hammer-action drill bits

**Specialities**

- Wires for precision cold formed parts (heading or extruding)
- MARAFORM® - Pretreated wires in coils (hardened and tempered)
- AME - Magnetically super-soft iron wires
- Micro-alloy steels Saarform 800 / 850 / 900


**Surface conditions**

- Bright finish by stearate
- Bright finish by oil or grease
- Phosphate coated, soaped (in process respectively finished)
- Phosphate with Polymer coating (in process respectively finished)
- Copper coated

**Process conditions**

- Hard drawn
- Spheroidized annealed and cold drawn
- SAFS-spheroidized annealed at finished size
- SAIP-spheroidized annealed in process
- Spheroidized annealed + SAIP
- Pretreated and cold drawn (MARAFORM®)


**Materials**
**Cold heading steels and Cold extrusion steels**

- High-grade steels
- Special steels, unalloyed
- Special steels, alloyed
- Alloy case-hardening steels (without boron)
- Alloy case-hardening steels (with boron)
- Alloy heat treatment steels (with boron)
- Alloy heat treatment steels (without boron)
- Anti-friction bearing steels (EN ISO 683-17)
- Micro-alloy steels Saarform 800 / 850 / 900
- Free cutting steels (EN 10087)

**Delivery forms / Weights**

- Catchweight coils
    - up to 250 kg for  $\varnothing$  2 - 6 mm
    - up to 500 kg for  $\varnothing$  2 - 15 mm
    - up to 2000 kg for  $\varnothing$  >10 mm
  - Spooled coils (layer wound)
    - up to 2000 kg for  $\varnothing$  6 - 15 mm
  - Spooled coils
    - for  $\varnothing$  2 - 15 mm
  - Steel formers
    - up to 800 kg for  $\varnothing$  2 - 8 mm
- $\varnothing$  2 mm to 48 mm**

**Typical steel grades**
**According to BS EN 10263**

- C2C - C17C (Qst32-3 up to Qst 38-3)
- C10E2C, C15E2C, C20E2C, (Cq10, Cq15, Cq22), Cf53
- 17Cr3, 16MnCr5, 20NiCrMo2-2
- 18B2, 18MnB4, 22MnB4
- 17B2 (22B2), 23B2, 28B2, 33B2 (35B2), 38B2 (37CrB1), 17MnB4, 20MnB4, 23MnB4 (19MnB4), 27MnB4, 30MnB4, 36MnB4, 37MnB5, 32CrB4, 36CrB4
- C35E(R)C (Cq35), C45E(R)C (Cq45), 34Cr4 - 41Cr4, 25CrMo4 - 42CrMo4, 34CrNiMo6, 21CrMoV57
- 100Cr6
- 8MnSi7 (10MnSi7), 17MnV7, 30MnVS6 (27MnSiVS6)
- 11SMnPb30, - 37 (Te, Bi, TeBi), 11SMn30, - 37



**Profiled wire**

**Shapes**  
**Hexagonal, octagonal** size 5,0 up to 13,0 mm  
**Square** size 4,5 up to 11,0 mm  
**D-section** size Ø 4,5 up to 15,0 mm  
**Oval** size big side 4,5 up to 15,0 mm  
 Shapes other than standard can be supplied by special arrangement

**Surfaces** soap drawn, wet drawn  
**Steel grades** free cutting steel, drawing quality (DIN EN 10016)  
 Steel grades other than standard can be supplied by special arrangement

**Manufacturing process** Hard drawn  
 Manufacturing processes other than standard can be supplied by special arrangement

**Coil presentation**

**Spoolless reels**

**Inside diameter** 540/570/600/720 mm  
**Height** 450/540/600 mm  
 Heights other than standard can be supplied by special arrangement between 350–600 mm  
**Weight** Depending on the shape 500–5000 kg possible

Cheese wound coils from diameter 5,0 mm and higher possible

**Protection against corrosion** Oil sprayed or oiled in process

**Packing** Put on pallets or wooden beams  
 Spoolless reels or orbit wound coils can be protected with a strong inside or outside cardboard  
 Additional outside wrapping in tar paper or plastic

Coil presentation from 4,5–12,0 mm in heavy non spooled coils is possible



**Galvanised redrawn wire**

**Size range** 2,0–11,0 mm  
**Steel grades** according to DIN EN 10016  
 Steel grades other than standard can be supplied by special arrangement

**Coil presentation**

**Spoolless reels**

**Inside diameter** 540/570/600/720 mm  
**Height** 450/540/600 mm  
 Heights other than standard can be supplied by special arrangement between 350–600 mm

**Weights** Depending on the size 500–5000 kg possible

Cheese wound coils from diameter 5,0 mm and higher possible

**Packing**

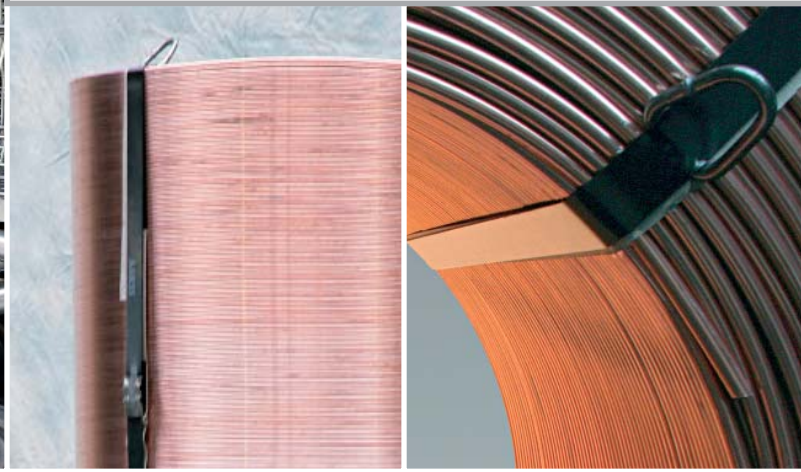
Put on pallets or wooden beams  
 Spoolless reels or orbit wound coils can be protected with a strong inside or outside cardboard  
 Additional outside wrapping in tar paper or plastic

Coil presentation other than standard can be supplied by special arrangement



**Bright wire**

<b>Size range</b>	2,0–15,0 mm
<b>Surfaces</b>	Soap drawn, wet drawn, wet drawn superplating
<b>Steel grades</b>	Drawing quality (DIN EN 10016), free cutting steel (size range only 5,0–15,0 mm) Steel grades other than standard can be supplied by special arrangement
<b>Manufacturing process</b>	Hard drawn Manufacturing processes other than standard can be supplied by special arrangement



**Copper coated wire**

<b>Size range</b>	2,0–15,0 mm
<b>Surfaces</b>	copper flash Fully wet coppered
<b>Steel grades</b>	Drawing quality (DIN EN 10016) Steel grades other than standard can be supplied by special arrangement
<b>Manufacturing process</b>	Hard drawn Manufacturing processes other than standard can be supplied by special arrangement

## Coil presentation

### Orbit wound coils (bright and copper coated wire)

<b>Size range</b>	2,0–4,8 mm
<b>Inside diameter</b>	400/450/500 mm
<b>Outside diameter</b>	approx. 800 mm
<b>Weight of orbit wound coils</b>	max. approx. 1000–1200 kg

Smaller orbit wound coils, delivery on formers or catchweight coils other than standard can be supplied by special arrangement

### Spoolless reels (bright und copper coated wire)

<b>Size range</b>	2,0–15,0 mm Sizes other than standard can be supplied by special arrangement
<b>Inside diameter</b>	540/570/600/720 mm
<b>Height</b>	450/540/600 mm Heights other than standard can be supplied by special arrangement between 350–600 mm
<b>Weight</b>	2,0–5,0 mm 500 to 2500 kg 5,0 to 15,0 mm 500 up to 5000 kg
<b>Coil presentation</b>	cheese wound coils from diameter 5,0 mm and above
<b>Protection against corrosion</b>	Oil sprayed or oiled in process
<b>Packing</b>	Put on pallets or wooden beams Spoolless reels or orbit wound coils can be protected with a strong inside or outside cardboard Additional outside wrapping in tar paper or plastic



## Galvanised wire

<b>Surfaces</b>	Commercially galvanised Brilliant galvanised Heavily galvanised	<b>Packing</b>	Orbit wound coils, plastic wrapped Packing types other than standard can be supplied by special arrangement
<b>Size ranges</b>	Commercially galvanised 2,00–12,0 mm Brilliant galvanised 2,00–8,0 mm Heavily galvanised 2,00–7,50 mm Size ranges other than standard can be supplied by special arrangement	<b>Labelling</b>	Standard, with the following data: Diameter (size), order number, pos.-number, coil-number, supplier, coil weight Data other than standard can be supplied by special arrangement
<b>Tolerances</b>	Standard according to DIN EN 10218 Tolerances other than standard can be supplied by special arrangement	<b>Shipment</b>	via truck Coils lying eye to the side, of the truck (standard)
<b>Steel grades</b>	Standard according to DIN EN 10016 Steel grades other than standard can be supplied by special arrangement		
<b>Tensile range</b>	Soft galvanised 400–550 N/mm <sup>2</sup> Hard galvanised 550–1400 N/mm <sup>2</sup> Tensile ranges other than standard can be supplied by special arrangement		
<b>Coil presentation</b>	Orbit wound coils (standard) Weight approx. 800–1000 kg Outside diameter approx. 880 mm Inside diameter approx. 450–500 mm Height approx. 700–1000 mm Strapping with steel straps  Larger coil sizes Weight up to approx. 2500 kg Outside diameter approx. 900–1300 mm Inside diameter approx. 600–700 mm Height approx. 700–1200 mm Strapping with steel straps		



**Profiled wire**

**Shapes**  
**Hexagonal, octagonal** size 5,0 up to 13,0 mm  
**Square** size 4,5 up to 11,0 mm  
**D-section** size Ø 4,5 up to 15,0 mm  
**Oval** size big side 4,5 up to 15,0 mm  
 Shapes other than standard can be supplied by special arrangement

**Surfaces** soap drawn, wet drawn  
**Steel grades** free cutting steel, drawing quality (DIN EN 10016)  
 Steel grades other than standard can be supplied by special arrangement

**Manufacturing process** Hard drawn  
 Manufacturing processes other than standard can be supplied by special arrangement

**Coil presentation**

**Spoolless reels**

**Inside diameter** 540/570/600/720 mm  
**Height** 450/540/600 mm  
 Heights other than standard can be supplied by special arrangement between 350–600 mm  
**Weight** Depending on the shape 500–5000 kg possible

Cheese wound coils from diameter 5,0 mm and higher possible

**Protection against corrosion** Oil sprayed or oiled in process

**Packing** Put on pallets or wooden beams  
 Spoolless reels or orbit wound coils can be protected with a strong inside or outside cardboard  
 Additional outside wrapping in tar paper or plastic

Coil presentation from 4,5–12,0 mm in heavy non spooled coils is possible



**Galvanised redrawn wire**

**Size range** 2,0–11,0 mm  
**Steel grades** according to DIN EN 10016  
 Steel grades other than standard can be supplied by special arrangement

**Coil presentation**

**Spoolless reels**

**Inside diameter** 540/570/600/720 mm  
**Height** 450/540/600 mm  
 Heights other than standard can be supplied by special arrangement between 350–600 mm

**Weights** Depending on the size 500–5000 kg possible

Cheese wound coils from diameter 5,0 mm and higher possible

**Packing**

Put on pallets or wooden beams  
 Spoolless reels or orbit wound coils can be protected with a strong inside or outside cardboard  
 Additional outside wrapping in tar paper or plastic

Coil presentation other than standard can be supplied by special arrangement



## Plastic coated wire

<b>Size range</b>				
<b>Core wire</b>	1,2–4,2 mm			
<b>Outside diameter</b>	1,6–6,0 mm			
<b>Tensile ranges N/mm<sup>2</sup></b>	Soft	< 550		
	Half hard	550–650		
	Hard	> 650		
<b>Coating</b>	PVC PE			
<b>Colours</b>	All RAL colours are available			
<b>Coil presentation orbit wound coils</b>	<b>inside diameter</b>	<b>outside diameter</b>	<b>height</b>	<b>weight</b>
	approx. 400 mm	approx. 800 mm	approx. 800 mm	approx. 450–550 kg
	approx. 400 mm	approx. 800 mm	approx. 900 mm	approx. 500–650 kg
<b>Catchweight coils and formers are also available on request</b>				
	<b>inside diameter</b>	<b>weight</b>	<b>or</b>	<b>length</b>
	300 mm	1–25 kg		10–500 m
	600 mm	1–25 kg		10–500 m
<b>Tolerances</b>	Standard according to DIN EN 10218-2 Tolerances other than standard can be supplied by special arrangement			