



Cold Heading Wires

Stainless & Non-ferrous

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For over 35 years Fox Wire has been a leading supplier to the cold heading industry and fully understands the paramount importance of product quality for manufacturers operating in the global fastener market.

We provide customers with competitively priced, consistently high quality products, on reliable short lead-times and as a totally independent wire manufacturer we are able to offer customers totally impartial technical advice.

The Fox Brand

"The Fox brand is an assurance of quality"

Developed to meet increasingly demanding heading and extruding processes, our wide range of Cold Heading Wires are produced to individual dimensional and manufacturing requirements.

Strict process controls and rigorously applied quality assurance procedures ensures compliance with customer specifications.

Optimal Solution

Reflecting the diversity of the applications served by the Fastener Sector as well as its products and production processes, we have structured our business to supply individually tailored solutions to your precise needs.

We produce Stainless Steels and Non-Ferrous Cold Heading alloys across a wide range of sizes, tensiles and surface finishes.

Stainless

Aluminium

Brass

Copper

Phosphor Bronze

All our products are manufactured from high quality wire rod and processed through dedicated wire drawing, heat treatment, coating and inspection equipment.

Tight control of the entire manufacturing process ensures consistent tensile strength, enhanced forgeability and both uniform microstructure and surface finish. These enable customers to maximise their manufacturing processes through longer die life, improved yield and increased machine availability as well as improve product performance.

Fox Premier Coating, available as an option, is virtually dust free, further enhancing productivity, die life and the manufacturing environment.

So no matter what manufacturing processes are employed or service criteria specified, Fox Wire can supply the optimal material solution.

Total Flexibility

Our technical expertise and customer service, combined with short lead-times, accurate delivery and low minimum ordering quantities, make us the most flexible manufacturer and distributor in the market.

Technical Support

Impartial technical advice from experienced Stainless and Non-ferrous experts provides you with support in material selection, optimising your manufacturing processes and enhancing your products in-service performance.

This wealth of knowledge and expertise, combined with our commitment to continuous improvement enables customers to develop genuine competitive advantage and to supply to even more demanding applications.

Quality Assured

Our Policy is to provide a system of continuous improvement in all aspects of our business, satisfying the requirements of ISO 9001:2008. In addition, we hold a number of specific customer approvals.

In addition to Chemical Analysis Verification, comprehensive in-house testing facilities enable us to offer:

- **Tensile Strength Tests**
- **Proof Stress Tests**
- **Elongation**
- **Hardness Tests**
- **Wrap Tests**

- **Bend Tests**
- **Torsion Tests**
- **Laser Gauge Measurement**
- **In line Tensile Strength Monitoring**
- **In-line Eddy Current Testing**
- **Off-line Magnetic Particle Crack Detection**
- **Ageing Tests**
- **Corrosion Tests**

Our qualified metallurgists are able to provide and advise on, a comprehensive range of material testing and evaluation options.

Standard Deliveries - Short and Accurate

By holding Strategic Raw Material Stocks we can manufacture and deliver an extensive range of products on short deliveries with exceptionally high levels of delivery accuracy.

Fox Fast Track

Available over the majority of our product range, Fox Fast Track ensures that material is ready for despatch within 2 weeks from receipt of order, frequently providing customers with genuine competitive advantage and the ability to minimise their production cycles securing faster order completion.



Non-Ferrous

All wire is supplied with a certificate of conformity and can be supplied in a range of tensiles from fully annealed to hard drawn.

Most alloys can be supplied as catch-weight coils, on steel formers or steel reels, dependant on the final wire diameter.

Pay-pack drums are also available for Copper and Brass wire diameters 1.2mm to 2.4mm.

63/37 Brass (copper - zinc)

Conforms to:	Equivalent to:	Chemical Symbol:	Diameter Range:
BS EN 12166 CW508L BS EN 12166 CW507L	BS 2873 CZ108 BS 2873 CZ108	CuZn37 CuZn36	1.20mm - 10.80mm 1.20mm - 10.80mm

70/30 Brass (copper - zinc)

Conforms to:	Equivalent to:	Chemical Symbol:	Diameter Range:
BS EN 12166 CW505L	BS 2873 CZ106	CuZn30	1.20mm - 10.80mm

Copper Dip Formed 99.95% copper and it is Oxygen Free.

Conforms to:	Equivalent to:	Chemical Symbol:	Diameter Range:
BS EN 12166 CW008A	BS 2873 C103	Cu-OF	1.20mm - 10.50mm

Aluminium & Aluminium Alloy Round Wire Suitable For Cold Heading

Series	Alloy	Diameter Range	Series	Alloy	Diameter Range
1000	AA 1350A	2.50mm - 10.00mm	5000	AA 5019	2.50mm - 7.00mm
2000	AA 2014	2.50mm - 11.00mm	5000	AA 5052	2.50mm - 11.00mm
	AA 2017A	2.50mm - 11.00mm		AA 5056	2.50mm - 7.00mm
	AA 2024	2.50mm - 11.00mm		AA 5154A	2.50mm - 11.00mm
	AA 2117	2.50mm - 11.00mm		AA 5754	2.50mm - 11.00mm
3000	AA 3003	2.50mm - 11.00mm	6000	AA 6061	2.50mm - 11.00mm
	AA 3103	2.50mm - 11.00mm		AA 6082	2.50mm - 11.00mm
			7000	AA 7075	2.50mm - 7.00mm

PB102 Phosphor Bronze 95% (Copper and 5% Tin)

Conforms to:	Equivalent to:	Chemical Symbol:	Diameter Range:
BS EN 12166 CW451K	BS 2873 PB102	CuSn5	2.50mm - 10.00mm

PB103 Phosphor Bronze (94% Copper and 6% Tin)

Conforms to:	Equivalent to:	Chemical Symbol:	Diameter Range:
BS EN 12166 CW452K	BS 2873 PB103	CuSn6	2.50mm - 10.00mm

Other alloys and sizes available by agreement.



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Stainless Steel

We supply a large variety of grades of stainless steels for the production of simple rivets and screws through to the more complicated bolts and other fasteners where chemical composition, coating and tensile strength play an important part in production.

Detailed below is our range of stainless cold heading wires. All material is produced to your specific requirements and we are always pleased to develop bespoke solutions to your needs.

Steel Grades

EN 10088 Designation		Chemical composition % by mass max unless stated										
Number	Name	C	Si	Mn	P	S	N	Cu	Cr	Mo	Ni	Others
1.4301	X5CrNi18-10	0.07	1.00	2.00	0.045	0.030	0.11	-	17.5/19.5	-	8.0/10.5	-
1.4306	X2CrNi19-11	0.03	1.00	2.00	0.045	0.030	0.11	-	18.0/20.0	-	10.0/12.0	-
1.4567	X3CrNi18-9-4	0.04	1.00	2.00	0.045	0.030	0.11	3.00/4.00	17.0/19.0	-	8.5/10.5	-
1.4303	X4CrNi18-12	0.06	1.00	2.00	0.045	0.030	0.11	-	17.0/19.0	-	11.0/13.0	-
1.4404	X2CrNiMo17-12-2	0.03	1.00	2.00	0.045	0.030	0.11	-	16.5/18.5	2.00/2.50	10.0/13.0	-
1.4578	X3CrNiCuMo17-11-3-2	0.04	1.00	1.00	0.045	0.030	0.11	3.00/3.50	16.5/17.5	2.00/2.50	10.0/11.0	-
1.4401	X5CrNiMo17-12-2	0.07	1.00	2.00	0.045	0.030	0.11	-	16.5/18.5	2.00/2.50	10.0/13.0	-
1.4571	X6CrNiMoTi17-12-2	0.08	1.00	2.00	0.045	0.030	-	-	16.5/18.5	2.00/2.50	10.5/13.5	Ti: 5C/0.70
1.4016	X6Cr17	0.08	1.00	1.00	0.04	0.030	-	-	16.0/18.0	-	-	-
1.4021	X20Cr13	0.16/0.25	1.00	1.50	0.04	0.030	-	-	12.0/14.0	-	-	-
1.4028	X30Cr13	0.26/0.35	1.00	1.50	0.04	0.030	-	-	12.0/14.0	-	-	-
1.4006	X12Cr13	0.08/0.15	1.00	1.50	0.04	0.030	-	-	11.5/13.5	-	0.75	-

Similar Steel Grades

AISI	BS	W.Nr	EN 10088
304	304S31	1.4301	X5CrNi18-10
304L	304S15	1.4306	X2CrNi19-11
XA7®	394S17	1.4567	X3CrNiCu18-9-4
305	305S19	1.4303	X4CrNi18-12
316L	316S11	1.4404	X2CrNiMo17-12-2
XA9®	396S17	1.4578	X3CrNiCuMo17-11-3-2
316	316S31	1.4401	X5CrNiMo17-12-2
316Ti	320S31	1.4571	X6CrNiMoTi17-12-2
430	430S17	1.4016	X6Cr17
420	420S29	1.4021	X20Cr13
420	420S45	1.4028	X30Cr13
410L	410S21	1.4006	X12Cr13

(XA7 and XA9 are registered brands of Fox Wire Limited)

Forms of Supply

Wire Diameter	
Soap Coat	1.60 mm - 22.00 mm
Light Drawn & Soap Coated	1.60 mm - 8.00 mm
Oil Drawn	1.60 mm - 10.00 mm
Condition	
Light Soap Drawn	
Vicafill Oil Drawn	
Annealed & Coated	
Tolerances	
To specific requirements	
Coil Weights	
1.60 mm - 20.00 mm	50 - 650 kgs
Presentations	
Coils	
Spools	
Formers	
Pay-pack Drums	



Other grades and sizes available by agreement.



FOX WIRE

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