

1.4122

Comparable specifications

EN 10088-3: 1.4122 (X39CrMo17-1)

Description and applications*

* Illustrative, not-exhaustive list

Martensitic stainless steel welding wire, mainly used for hard-facing / cladding. Such a solid welding wire combines high hardness with very good corrosion resistance, shiny weld deposit with a little higher hardness than 1.4115. The weld deposit cannot be machined with normal cutting tools, grinding is possible. Hardness approximately 45 HRc. The deposit can be tempered.

Main applications:

- Hard-facing wire.
- Surgical instruments.
- Valves for moderately aggressive liquids.
- Table and professional cutlery to resist washing machine detergents.
- Shafts, valves, clutch surfaces from trucks, pistons, bearings, fan blades etc.

Weldable base materials*

* Illustrative, not-exhaustive list

X35CrMo17, Cast steels - hard-facing

All-weld metal mech. properties*

* For reference only values assuming QT750 (quenching and tempering) condition

Tensile strength (Rm): $\geq 750 \text{ N/mm}^2$
Elongation: $\geq 12\%$

Yield Strength (Rp_{0.2}): $\geq 550 \text{ N/mm}^2$
Hardness (HRc): ≥ 45

Chemical composition*

* For reference only values

C	Mn	Si	S	P	Ni	Cr	Mo
0.33	max	max	max	max	max	15.50	0.80
0.45	1.50	1.00	0.030	0.040	1.00	17.50	1.30

Standard packaging data*

Welding process	Product type	Ø mm (inches)	Packing type	Weight kg (lbs)	Length mm (inches)
GMAW **	filler wire	0.80 - 1.20 (0.030 - 0.047)	spools BS300 / D300	15 (33)	n.a.
GTAW **	filler rod	1.60 - 4.00 (1/16 - 5/32)	cardboard boxes / tubes	5 (11)	1000 (39.4)
SAW **	filler wire	1.60 - 4.00 (1/16 - 5/32)	basket rims B450	25 (55)	n.a.

* Other sizes and packing types are available upon request

** GMAW: gas metal arc welding; GTAW: gas tungsten arc welding; SAW: submerged arc welding

Marking

Each filler rod for GTAW welding is durably marked with an identification traceable to the unique product type. Welding filler materials wound on spools or in coils are durably marked on the coil or spool with an identification traceable to the unique product type.

The outside of each unit package is suitably labelled with at minimum the following data: grade, diameter, heat, lot no., classifications.

Customized labels are available upon request.

Lot classification

All our productions fulfil the **Class S3** requirements acc. to EN ISO 14344.