

254

Comparable specifications

ASTM: UNS S31254
Material No.: 1.4547
EN designation: X1CrNiMoCuN20-18-7

Description and applications*

* *Illustrative, not-exhaustive list*

This filler wire is an austenitic stainless steel, which due to its high molybdenum content shows very high resistance to localized corrosion such as pitting and crevice corrosion, as well as to stress-corrosion. It was firstly designed for use in halide-containing environments, such as seawater.

Due to its high nitrogen content, this grade has higher mechanical strength than most of the other austenitic stainless steels.

It is recommended to perform welding by using the lowest heat input possible, as due to its stable austenitic structure, it could somewhat be more sensitive to hot cracking.

Main applications in chemical industry, seawater desalination plants.

Weldable base materials*

* *Illustrative, not-exhaustive list*

Parent metal, alloy 254.

Chemical composition*

* *For reference only values*

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
max	max	max	max	max	17.50	19.50	6.00	0.50	0.18
0.02	1.00	0.70	0.010	0.030	18.50	20.50	6.50	1.00	0.22

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 / S300	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.