

Comparable specifications

ASME SFA A 5.9: ER383

EN ISO 14343-A: 27 31 4 Cu L

Description and applications*

* *Illustrative, not-exhaustive list*

The nominal composition of this classification is 27.5 Cr, 31.5 Ni, 3.7 Mo and 1 Cu. Filler metal of this classification is used to weld UNS N08028 base metal to itself, or to other grades of stainless steels. It is also suitable for joining Alloy 825 and other similar materials.

It is recommended for sulfuric and phosphoric acid environments. The elements C, Si, P and S are specified at low maximum levels to minimize weld metal hot cracking and fissuring (while maintaining the corrosion resistance) frequently encountered in fully austenitic stainless steel weld metals.

Weldable base materials*

* *Illustrative, not-exhaustive list*

UNS N08028, Alloy 825, Cu-alloyed NiCrMo-steels.

All-weld metal mech. properties*

* *For reference only values*

Tensile strength (Rm): ≥ 500 N/mm²

Yield Strength (Rp_{0.2}): ≥ 240 N/mm²

Elongation: ≥ 25%

Chemical composition*

* *For reference only values*

C	Mn	Si	S	P	Ni	Cr	Mo	Cu
max	1.00	max	max	max	30.00	26.50	3.20	0.70
0.025	2.50	0.50	0.030	0.020	33.00	28.50	4.20	1.50

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.
SMAW **	core wire for electrodes	1.60 - 5.00 (1/16 - 0.197)	wooden boxes	500 - 750 (1100 - 1650)	250 - 450 (10 - 18)


* *Other sizes and packing types are available upon request*

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

 marking type-testing performed and available.

Customized labels are available upon request.

Lot classification

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