

# 1.4820

## Comparable specifications

EN ISO 14343-A: 25 4  
Werkstoff Nr.: 1.4820

## Description and applications\*

\* Illustrative, not-exhaustive list

Heat resisting stainless steel alloy with a low Nickel content for welding, The weld deposit is resistant to abrasion at high temperatures and it can be easily machined.

This grade may be used for:

- welding, joining and surfacing of similar alloys, heat-resistant rolled, forged and cast steels, as well as for welding of heat-resistant ferritic Cr-Al-Si steels;
- cladding corrosion and heat-resistant overlays up to 1150°C
- applications in industrial furnaces;
- applications in the petrochemical industry and the ceramic industry;
- applications such as high pressure piping and tubing.

## Weldable base materials\*

\* Illustrative, not-exhaustive list

All 300 series of austenitic stainless steels (e.g. 1.4713, 1.4724, 1.4742, 1.4762, 1.4821, 1.4822, 1.4823).

## All-weld metal mech. properties\*

\* For reference only values

Tensile strength (Rm):  $\geq 550 \text{ N/mm}^2$  Yield Strength (Rp<sub>0.2</sub>):  $\geq 350 \text{ N/mm}^2$   
Elongation:  $\geq 25\%$

## Chemical composition\*

\* For reference only values

C	Mn	Si	S	P	Ni	Cr	Mo	Cu
max	1.00	max	max	max	4.10	24.80	max	max
0.14	1.40	1.40	0.020	0.030	5.90	27.00	0.50	0.50

## Standard packaging data\*

Welding process	Product type	Ø mm (inches)	Packing type	Weight kg (lbs)	Length mm (inches)
GMAW **	filler wire	1.20 - 1.60 (0.047 - 0.063)	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.
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.

Customized labels are available upon request.

## Lot classification

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