

## Standards

Material No.	1.4820
EN 1600	E 25 4
ASME / AWS	TZ 25 4 R M 3 (C3)

## Characteristics and typical applications

CARBO F-4820 is an alloyed tubular wire for fabrication welding on equal or similar, corrosion and heat-resistant steels and steel-castings. The weld-deposit is on equal base-material scale-resistant and, by reason of its low nickel-content, resistant against attack of sulphurous gases at higher temperatures up to 1150°C. When welding CARBO F-4820 low heat-input should be guaranteed as alloys of such chemistry are sensitive to embrittlement at 600-800°C. The interlayer-temperature must not exceed 300°C.

**Working temperature** From room temperature up to + 1150° C

## Base materials

1.4340	GX40CrNi27-4	1.4745	GX40CrSi23
1.4710	GX30CrSi6	1.4746	X8CrTi25
1.4711	X10CrSi6	1.4762	X10CrAl24
1.4722	X10CrSi13	1.4776	GX40 CrSi29
1.4723	X10 CrAl13	1.4821	X20CrNiSi25-4
1.4740	GX40CrSi17	1.4822	GX40CrNi24-5
1.4741	X2CrAlTi18-2	1.4823	GX40CrNiSi27-4
1.4742	X10CrAl18		

## Mechanical properties of all-weld metal ( typical values)

Tensile strength R <sub>m</sub> N/mm <sup>2</sup>	Yield strength R <sub>p0,2</sub> N/mm <sup>2</sup>	Elongation A <sub>5</sub> %	Hardness HB
700	500	20	ca. 180

## Weld metal analysis (typical, wt %)

C	Si	Mn	Cr	Ni
0,06	1	0,7	25	4

## Gas types EN 439

I1, M13: Argon and 99% Argon with 1% Oxygen

## Current

= +

## Current intensity

DIA (mm)	DIA (inch)	Volt	Amps	Delivering form
1,2	3/64			
1,6	1/16	20 - 26	160 - 260	G
2,0	5/64	22 - 27	220 - 280	G
2,4	3/32	24 - 28	260 - 340	G S
2,8	7/64	25 - 29	300 - 400	S
3,2	1 / 8	26 - 30	320 - 460	S

## Delivering form

**O = Flux cored wire self shielding**  
**G = Flux cored wire for shielded arc welding**  
**S = Flux cored wire for submerged arc welding**

## Coils, weight

B/BS 300 = 15 kg      B 450 = 30 kg      pay off pack = 150 / 300 kg

Rev. 000

Statements on composition and application are just for the applier's information. Statements on mechanical properties always refer to the all-weld-metal according to valid standards. Carbo-Weld may change the characteristics of its products without notice. We recommend the applier to check our products for their special application autonomously.