

# CARBO S- 1.4115

# CARBO T- 1.4115

## International standards

	S = solid wire	T = bare rod
Mat. No.	1.4115	
EN 1600	E 17 Mo	E 17 Mo
DIN 8555	E6-200-PR	E6-200-PR

## Approvals

### Application notes

CARBO S-1.4115 is solid wire electrode for plating and joining equal and similar ferritic Cr-steels and cast steels. Proper weldings are subject to the recommended heat treatment.

The electrode is specially suitable for sealing surfaces on water-, steam- and gas-valves, especially for sulphuric gases

The deposit is resistant to seawater, thin acids and scale resistant in air an oxidizing gases up to 950°C.

The deposits can be tempered.

### Operating temperature

Room temperature up to 450° C

### Base materials

1.4122 (G)X35CrMo17

### Recommendations for fabrication

Since ferritic steels tend to embrittlement caused by coarse grain development the heat input should be as low as possible.

For hardfacing on low alloyed base materials a preheating of 150°C-350°C subject to the thickness (on materials with higher strength 350°C) should be done.

Post weld treatment is not necessary but quench hardening to the desired hardness may be applied

### Mechanical properties of all-weld metal

( typical values)

Tensile strength $R_m$ N/mm <sup>2</sup>	Yield strength $R_{p0,2}$ N/mm <sup>2</sup>	Elongation $A_5$ %	Hardness	
			HB 30	HRc annealed
540	340	20	ca. 200	ca. 43

### Weld metal analysis (typical, wt. %)

C	Si	Mn	Cr	Mo
0,2	0,5	0,5	16	1,2

### Gas types EN 439

S = solid wire  
M 12 / M 13

T = bare rod  
I1

### Current

	= +				= -				
Diameter mm	0,8	1,0	1,2	1,6	1,6	2,0	2,4	3,2	4,0
Welding amps (A) min.	80	120	180	250					
(A) max.	130	190	250	320					

### coils, weight

Rev. 001/13

B300 15 kg.

10 kg.