

Description

GTAW rod for 2.25 Cr 1 % Mo alloyed boiler, plate and tube steels as well as in oil refineries. Preferably used for base metal 10CrMo9-10 (ASTM A335 P22). Approved in long-term condition up to +600 °C service temperature. Also for similarly alloyed quenched and tempered steels as well as case hardening steels. The weld metal meets all prerequisites for reliable long term creep properties without embrittlement due to very low content of trace elements. Brucato ≤ 15 ppm. Very good operating characteristics.


Typical Composition of Welding Rod

	C	Si	Mn	Cr	Mo	P	As	Sb	Sn
wt-%	0.06	0.7	0.95	2.6	1.0	≤ 0.010	≤ 0.010	≤ 0.005	≤ 0.006


Mechanical Properties of All-weld Metal

(*)	a
yield strength R _e N/mm²:	470 (≥ 420)
tensile strength R _m N/mm²:	600 (≥ 520)
elongation A (L ₀ = 5d ₀) %:	23 (≥ 22)
impact work ISO-V KV J + 20 °C:	190 (≥ 47)
(*) a annealed, 720 °C/2 h/furnace down to 300 °C/air – shielding gas Argon	


Operating Data



shielding gas: 100 % Argon



rod marking:

front:  W CrMo2 Si

back: 1.7384

1.6

2.0

2.4

3.0

Preheating and interpass temperature 200-350 °C. Tempering at 700-750 °C at least 1 hr followed by cooling in furnace down to 300 °C and still air.

Base Materials

high temperature steels and similar alloyed cast steels, similar alloyed case hardening steels, nitriding steels
1.7380 10CrMo9-10, 1.8075 10CrSiMoV7, 1.7379 G17CrMo9-10
ASTM A335 Gr. P22; A217 Gr. WC 9

Approvals and Certificates

TÜV-D (1564.), TÜV-A (89), CL (0899), FI (W CrMo2Si), UDT, SEPROZ

Same Alloy Filler Metals

SMAW stick electrode: FOX CM 2 Kb	GMAW solid wire: CM 2-IG
	SAW combination: CM 2-UP/BB 24