

EN ISO 21952-A: W CrMo5Si
 EN ISO 21952-B: W 55 5CM
 AWS A5.28: ER80S-B6
 AWS A5.28M: ER55S-B6
 W. No.: 1.7373

BÖHLER CM 5-IG

GTAW rod, high-alloyed, high temperature

Description

GTAW rod for 5% Cr 0.5 % Mo steels and steels for hot hydrogen service, particularly for application in oil refineries and the base metals X12CrMo5 / P5. Approved in long-term condition up to +650°C service temperature.

Typical Composition of Welding Rod

	C	Si	Mn	Cr	Mo
wt-%	0.08	0.4	0.5	5.8	0.6

Mechanical Properties of All-weld Metal

yield strength R_e N/mm ² (MPa):	510	(≥470)
tensile strength R_m N/mm ² (MPa):	620	(≥550)
elongation A ($L_0=5d_0$) %:	20	(≥15)
impact work ISO-V KV J +20°C:	200	(≥47)

a annealed 730°C/2 h/furnace down to 300°C/air – shielding gas Argon

Operating Data



shielding gases: **100% Argon**
 rod marking:
 front: **W CrMo5 Si**
 back: **ER80S-B6**

ø mm
 1.6
 2.0
 2.4
 3.0



Preheating and interpass temperatures 300-350°C. Tempering at 730-760°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

1.7362 X12CrMo5, 1.7363 GX12CrMo5

ASTM A213 Gr. T5, A217 Gr. C5, A335 Gr. P5

Approvals and Certificates

TÜV-D (0724.), TÜV-A (524), SEPROZ, CE

Same Alloy Filler Metals

SMAW electrode: FOX CM 5 Kb
 GMAW solid wire: CM 5-IG
 SAW combination: CM 5-UP/BB 24