

BÖHLER CN 13/4-IG

TIG rod, high-alloyed, stainless

Classifications				
EN ISO 14343-A	EN ISO 14343-B	AWS A5.9		
W 13 4	SS(410NiMo)	ER410NiMo (mod.)		

Characteristics and typical fields of application

GTAW rod of low-carbon type 13 % Cr 4 % Ni suited for soft-martensitic steels like 1.4313 / CA 6 NM. Designed with precisely tuned alloying composition creating a weld deposit featuring very good ductility, CVN toughness and crack resistance despite its high strength.

For applications like hydro- and steam turbines, corrosion resistant against water and steam.

Base materials

1.4317 GX4CrNi13-4, 1.4313 X3CrNiMo13-4, 1.4407 GX5CrNiMo13-4, 1.4414 GX4CrNiMo13-4 ACI Gr. CA6NM

Typical analysis of the TIG rods (wt%)						
	С	Si	Mn	Cr	Ni	Мо
wt%	0.01	0.7	0.7	12.3	4.7	0.5

Mechanical properties of all-weld metal					
Condition	Yield strength R _{p0,2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J	
	MPa	MPa	%	+20 °C	−60 °C
u	915	1000	15	85	
а	750 (≥ 500)	830 (≥ 750)	21 (≥ 15)	150	≥ 32

- u untreated, as welded shielding gas Argon
- a annealed, 600 °C / 8 h / furnace down to 300 °C / air shielding gas Argon

Operating data

Polarity: DC (-)	Shielding gas: 100 % Argon	Rod marking: front: +W 13 4 back: -	ø (mm) 2.0 2.4
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Preheating and interpass temperatures in case of thick-walled sections 100 - 160 °C. Maximum heat input 15 kJ/cm. Tempering at 580 - 620 °C.

Approvals

TÜV (04110.), SEPROZ, CE