

BÖHLER CN 19/9 M-IG

TIG rod, high-alloyed, special applications

Classifications

EN ISO 14343-A	EN ISO 14343-B	AWS A5.9
W 20 10 3	SS(308Mo)	ER308Mo (mod.)

Characteristics and typical fields of application

GTAW rod of type W 20 10 3 / 308Mo. This rod is designed for dissimilar joints and weld cladding. BÖHLER CN 19/9 M-IG offers a lower chromium and ferrite content than a 309L weld deposit with the result that carbon diffusion and Cr-carbide formation is reduced after post weld heat treatment and lower ferrite contents can be achieved in the second layer of 316L surfacing.

Suitable for service temperatures from -80 °C to +300 °C.

Very good welding and wetting characteristics.

Base materials

High-strength, mild steels and low-alloyed constructional steels, QT-steels and armour plates among themselves or among each other; non-alloy as well as alloyed boiler or constructional steels with high-alloy stainless Cr- and Cr-Ni-steels; austenitic manganese steels similar and dissimilar.

Typical analysis of the TIG rods (wt%)						
	С	Si	Mn	Cr	Ni	Мо
wt-%	0.05	0.7	1.2	20.0	10.0	3.2

Mechanical properties of all-weld metal

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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	–80 °C
u	540 (≥ 400)	710 (≥ 620)	35 (≥ 20)	200	≥ 32
		alding goo Argon			

u untreated, as welded – shielding gas Argon

Operating data

	Polarity: DC (-)	Shielding gas: 100 % Argon	Rod marking: front: + W 20 10 3 back: 1.4431	ø (mm) 1.6 2.0 2.4 3.2
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Preheating and interpass temperature as required by the base metal.

Approvals

TÜV (0427.), DNV (308Mo), CE