

Classification

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. Avesta 19 9 H 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 $-80\text{ }^{\circ}\text{C}$ to $+300\text{ }^{\circ}\text{C}$.

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.-%)

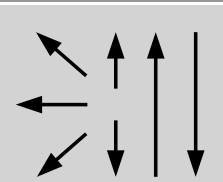
	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.05	0.7	1.2	20.0	10.0	3.2

Mechanical properties of all-weld-metal

Heat treatment	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation ($L_0=5d_0$)	Impact work ISO-V KV J	
	MPa	MPa	%	+20 $^{\circ}\text{C}$	$-80\text{ }^{\circ}\text{C}$
u	540 (≥ 400)	710 (≥ 620)	35 (≥ 20)	200	≥ 32

u untreated, as welded – Shielding gas Ar

Operating data

	Polarity: DC (–)	Shielding gas: 100% Ar Gas flow rate 4 – 8 l/min	ø (mm)
			1.6
			2.0
			2.4
			3.2

Preheating and interpass temperature as required by the base metal.

Approvals