

Classifications

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

Characteristics and typical fields of application

GMAW wire of type G 20 10 3 / (308Mo). This wire 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 -60 °C to $+300\text{ °C}$.

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 solid wire (wt.-%)

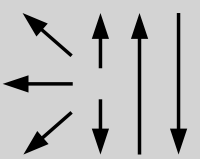
	C	Si	Mn	Cr	Ni	Mo
wt-%	0.06	0.7	1.3	20.0	10.0	3.3

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	520 (≥ 400)	720 (≥ 620)	30 (≥ 20)	140 (≥ 70)	≥ 32

u untreated, as welded – shielding gas Argon + max. 2.5 % CO_2

Operating data

	Polarity:	Shielding gases:	\varnothing (mm)
	DC (+)	Argon + max. 2.5 % CO_2 Argon + max. 1.0 % O_2	1.0 1.2

Preheating and interpass temperature as required by the base metal.

Approvals

TÜV (1087.), DB (43.014.10), DNV (308Mo), CE