BÖHLER A 7 CN-IG

Solid wire, high-alloyed, austenitic stainless, special applications

Classifications

EN ISO 14343-A	AWS A5.9 / SFA-5.9
18 8 Mn	ER307 (mod.)

Characteristics and typical fields of application

Solid wire G 18 8 Mn / ER307 (mod.) for joining heat resistant Cr-steels and heat resistant austenitic steels. Max. service temperature 850ºC. Suited for fabricating dissimilar austenitic-ferritic joints at a max. application temperature of 300ºC. Very well suited für joining of thin plates in fully automized prozesses for example exhaust systems. Available in Böhler BASEdrum 250 and ECOdrum 100, 250, 400.

Base materials

For fabrication, repair and maintenance! Dissimilar joints, tough buffer and intermediate layers prior to hardfacing, 14% manganese steels, 13 – 17% chromium and heat resistant steels up to 850ºC, armour plates, high carbon and quenched and tempered steels, surfacing of gears, valves, turbine blades etc.

Typical analysis

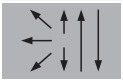
	C	Si	Mn	Cr	Ni
wt.-%	0.08	0.8	7.0	19	8.2

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact energy ISO-V KV J	
	MPa	MPa	%	20°C	–110°C
u	430 (≥350)	640 (≥600)	42 (≥35)	(≥ 110)	(≥32)

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

Operating data



Polarity	DC+
Shielding gas (EN ISO 14175)	Ar + max. 2.5% CO_2

Dimension mm
0.8
1.0
1.2
1.4
1.6

Preheating and interpass temperature as required by the base metal.

Approvals

DB (43.132.44), C.E