BÖHLER SAS 4-IG (Si)

Solid wire, high-alloyed, chemical resistant

Classifications

EN ISO 14343-A	AWS A5.9
G 19 12 3 Nb Si	ER318 (mod.)

Characteristics and typical fields of application

GMAW solid wire of type G 19 12 3 Nb Si / ER318Si designed for first class welding, wetting and feeding characteristics as well as reliable corrosion resistance up to +400 °C.

Low temperature service down to –120 °C.

Base materials

1.4571 X6CrNiMoTi17-12-2, 1.4580 X6CrNiMoNb17-12-2, 1.4401 X5CrNiMo17-12-2, 1.4581 GX5CrNiMoNb19-11-2, 1.4437 GX6CrNiMo18-12, 1.4583 X10CrNiMoNb18-12, 1.4436 X3CrNiMo17-13-3

AISI 316L, 316Ti, 316Cb

Typical analysis of solid wire (wt.-%)

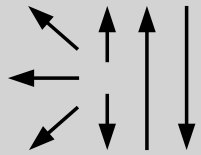
	C	Si	Mn	Cr	Ni	Mo	Nb
wt-%	0.035	0.8	1.4	19.0	11.5	2.8	+

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	–120 °C
u	**490** (≥ 350)	**670** (≥ 550)	**33** (≥ 25)	**100**	≥ 32

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

Operating data



Polarity:	Shielding gases:	ø (mm)
DC (+)	Argon + max. 2.5 % CO_2	0.8 1.0 1.2

Approvals

TÜV (03492.), DB (43.014.04), SEPROZ, CE, NAKS