

Data sheet and application

DIM L-1.4551[©]

Material no.: 1.4551
 DIN 8556: SG X 5 CrNiNb 19 9
 EN ISO 14343-A: G/W 19 9 Nb Si
 EN ISO 14343-B: SS347Si
 AWS A5.9: ER347Si

Highly alloyed, non-corrosive

Characteristics

Solid wire electrode for use in all branches of industry, where steels of the same type, including higher carbonized and ferritic 13% chromium steels are welded, e.g. chemical apparatus and container construction, chemical, pharmaceutical and cellulosic industry, dyeing, food and beverage industry, etc.

Application on sealing surfaces of fittings.

Excellent lubricity and conveying properties. Very good welding and flow behavior. IK-resistant up to +400°C operating temperature. Cold resistant to -196 ° C.

Materials

1.4550 X6CrNiNb18-10, 1.4541 X6CrNiTi18-10, 1.4543, 1.4546 X5CrNiNb18-10,
 1.4552 GX5CrNiNb19-11, 1.4878,
 1.4021 X20Cr13, 1.4301 X5CrNi18-10, 1.4306 X2CrNi19-11, 1.4312 GX10CrNi18-8,
 1.4311 X2CrNi18-10,
 1.6902, 1.6905, 1.6907
 AISI 347, 321, 302, 304, 304LN, ASTM A296 Gr. CF 8 C, A157 Gr. C9,
 A320 Gr. B8C or D

Chemical composition

C	Si	Mn	Cr	Ni	Nb
0,035	0,8	1,3	19,4	9,7	+

Certificate of batch upon request.

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Mechanical properties of pure weld metal

	Yield strength Rp0.2 MPa	Tensile strength Rm MPa	Elongation A 5 (%)	Impact energy ISO-V KV J +20°C -196°C
u*	460 (≥ 350)	630 (≥ 550)	33 (≥ 25)	110 (≥ 32)

u* untreated, welding condition - protection gas Argon + 2.5% CO₂

Processing instructions

Protection gas:
Argon + max. 2.5% CO₂

Approvals and suitability tests

TÜV, GL