Data sheet and application

DIM L-1.4404 ©

Mat.-no.: 1.4404
DIN 8556: SG X 2 CrNiMo 17-12-2
EN ISO 14343-A: G 19 12 3 L Si
EN ISO 14343-B: SS316LSi
AISI: 316L / UNS: S 31603 / AFNOR: Z 3 CND 18.12.02 / BS: 316 S 11 / UNI: X 2 CrNiMo 17 12 /
JIS: SUS 316L
AWS A5.9: ER316LSi

Highly alloyed, chemically resistant

Characteristics

Solid wire electrode for use in all branches of industry, where steels of the same type and ferritic 13% chromium steels are welded, e.g. Medical technology, chemical apparatus and container construction, textile and cellulose industry, dyeing operations, beverage production, synthetic resin plants and the like. Also suitable for chlorine-containing media by Mo addition. Excellent gliding and conveying properties. Very good welding and flow behavior. IK-resistant up to + 400°C operating temperature. Cold toughness up to -196°C.

Material

1.4401 X5CrNiMo17-12-2, 1.4404 X2CrNiMo17-12-2, 1.4435 X2CrNiMo18-14-3, 1.4436 X3CrNiMo17-13-3, 1.4571 X6CrNiMoTi17-12-2, 1.4580 X6CrNiMoNb17-12-2,
1.4583 X10CrNiMoNb18-12, 1.4409 GX2CrNiMo19-11-2
UNS S31603, S31653; AISI 316L, 316Ti, 316Cb

Chemical composition

C	Si	Mn	Cr	Ni	Mo
0,02	0,8	1,7	18,4	12,4	2,8

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 (L0=5d0) %	Impact energy ISO-V KV J +20°C | -196°C
u*	430 (≥320)	580 (≥510)	38 (≥25)	(≥32)

u* Untreated, welding state - protective gas Ar + 2.5% CO2

Processing instructions

Protective gases: Argon + max. 2.5% CO2

Approvals

TÜV, DB