

Data sheet and application

DIM L-1.4430[©]

W.-Nr. 1.4430	
DIN 8556:	SG X2CrNi19 12
EN ISO 14343-A:	G 19 12 3 LSi
(EN 12072:	G 19 12 3 LSi)
AWS A5.9:	ER316LSi

For stainless steels

Characteristics

Austenitic welding material with low C-value and approx. 10 % δ -Ferrit. Resistant against pitting corrosion and intercrystalline corrosion up to 400°C.

Scale-resistant up to 800°C. Lowest operating temperature is -196°C.

High gloss polishable.

Application

Applicable on medical devices, in chemical industry, textile industry, in machine-, apparatus-, pipeline- and container construction as well as food- and brewing industry.

For connection welding and claddings of non-stabilized and stabilized CrNi-steel, e.g.:

- 1.4301 - X 5 CrNi 18-10 (X 5 CrNi 18-9),
- 1.4306 - X 2 CrNi 19-11 (X 2 CrNi 18-9),
- 1.4308 - GX 6 CrNi 18-9,
- 1.4311 - X 2 CrNiN 18-10,
- 1.4401 - X 5 CrNiMo 17-12-2 (X 5 CrNiMo 18-10),
- 1.4404 - X 2 CrNiMo 17-13-2 (X 2 CrNiMo 18-10),
- 1.4406 - X 2 CrNiMoN 17-12-2,
- 1.4408 - GX 6 CrNiMo 18-10,
- 1.4409 - GX 2 CrNiMo 19-11-2,
- 1.4418 - X 4 CrNiMo 16-5-1,
- 1.4429 - X 2 CrNiMoN 17-13-3,
- 1.4435 - X 2 CrNiMo 18-14-3 (X 2 CrNiMo 18-12),
- 1.4436 - X 5 CrNiMo 17-13-3 (X 5 CrNiMo 18-12),
- 1.4441 - X 2 CrNiMo 18-15-3
- 1.4541 - X 6 CrNiTi 18-10,
- 1.4550 - X 6 CrNiNb 18-10 (X 10 CrNiNb 18-9),
- 1.4552 - GX 5 CrNiNb 18-9,
- 1.4571 - X 6 CrNiMoTi 17-12-2,
- 1.4573 - X 10 CrNiMoTi 18-12,
- 1.4580 - GX 10 CrNiMoNb 18-10,
- 1.4581 - GX 5 CrNiMoNb 18-10,
- 1.4583 - X 10 CrNiMoNb 18-12,
- 1.4948 - X 6 CrNi 18-11,
S31653, AiSi 316 L, 316 Ti, 316 Cb
- 1.4057 - X 17 CrNi 16-2

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Chemical composition

C	Si	Mn	Cr	Ni	Mo	Fe
0,03	0,65 - 1,0	1,75	19,0	12,5	2,75	Remainder

Certificate of batch upon request.

Mechanical properties of pure weld metal

	Yield strength Rp0.2 MPa	Tensile strength Rm MPa	Elongation A 5 (%)	Impact energy ISO-V KV J (bei 196°C ~ 40 J)
u*	370	560	37	80

u* untreated at 20°C, according to the applicable regulations. Actual values are higher.

Processing instructions

Protection gas
EN ISO 14175: M12 Inoxline C2
(max. 2,5 % CO₂- 97,5 % Ar);
M13 Inoxline X2

Approvals and suitability tests

TÜV, DB, UDT