

DATA SHEET No. S020

DAIKO SF 316L

MIG – TIG – SAW

Description / Alloy type: Solid stainless wire for 316L Mo bearing austenitic stainless steels.

Specifications: **AWS A5.9** **EN ISO 14343-A**
ER316L 19 12 3 L

Approvals: TÜV (TIG); CE.

Applications: These consumables are used for Mo bearing austenitic stainless steels with 1.5 ÷ 3 Mo.
316 steels are used for their good resistance to pitting, many acids and general corrosion.

Materials to be welded: **ASTM:** 316L; 316, 316LN; CF3M; CF8M;
EN & DIN: 1.4404/1.4401; 1.4436; 1.4406/1.4429; 1.4408; 1.4437.

Composition:
(weight %)

%	C	Mn	Si	S	P	Cr	Ni	Mo	Cu	FN
Min	-	1.0	0.30	-	-	18.0	11.0	2.5	-	3
Max	0.030	2.0	0.65	0.02	0.030	20.0	14.0	3.0	0.3	10
Typ	0.015	1.4	0.50	0.01	0.015	18.5	12.8	2.6	0.15	6

Typical parameters:

	TIG	MIG	SAW
Shielding	Argon	Ar + 2% O ₂ Ar-He + <3% CO ₂	Daikoflux
Current	DC-	DC+	DC+
Diameter	2.4 mm	1.2 mm	2.4 mm
Parameters	100A, 12V	260A, 26V	350A, 28V

All-weld properties:

As welded	min	TIG	MIG	SAW
Tensile strength [MPa]	510	605	570	570
0.2% proof stress [MPa]	320	465	435	445
Elongation [%]	30	35	42	40
Impact Energy -196°C [J]	-	>60	>30	30
Hardness HV	-	200/220	200/220	190/220

Complementary products: SMAW basic / rutile electrode (AWS A5.4 E316L-15/16/17)
FCAW wire 316L / 316LP (AWS A5.22 E316LT0-1/4 / E316LT1-1/4)
TIG & SAW WIRE (AWS A5.9 ER316L)
Strip (AWS A5.9 EQ316L)