

Operative Site #1: Via Aquileia, 13-15 - 31048 Olmi di San Biagio di Callalta (Treviso) Italy - Ph. +39 0422 796367
Operative Site #2: Via Toscana, 3A-3B - 20056 Grezzago (MI) ITALY - ph. +39 02 9090477
technical@daikowelding.com www.daikowelding.com

DATA SHEET No. D012

DAIKO SF 2594

MIG - TIG - SAW

Description / Alloy type: Solid welding wire suitable for 25% Cr superduplex ferritic-austenitic stainless steels

Specifications: **AWS A5.9** **EN ISO 14343-A**
ER2594 25 9 4 N L

Approvals: TÜV (TIG);

Applications: Offshore applications exploit the high resistance to pitting (typical pitting resistance equivalent number "PREn" of **43**) and stress corrosion cracking in seawater. It is also highly resistant to caustic alkalis and phosphoric acid. Widely used in oil and gas production and process.

Materials to be welded: 25% Cr Superduplex:
UNS S32750; DIN 1.4410; ASTM A182 F53, F55;
SAF 2507 (Sandvik/Avesta); Uranus 47N;
cast: UNS J93404; ASTM A890 5A;

Composition:
(weight %)

	C	Mn	Si	S	P	Cr	Ni	Mo	Cu	N	Oth
Min	-	-	-	-	-	24.0	8.0	3.0	-	0.2	40
Max	0.03	2.5	1	0.020	0.03	27.0	10.5	4.5	0.5	0.3	-
Typ	0.01	0.55	0.40	<0.015	<0.02	25.0	9.3	4.0	0.10	0.25	<0.50

Typical parameters:

	TIG	MIG	SAW
Shielding	Argon	Ar-He + 1÷2,5% CO ₂	Daikoflux
Current	DC-	pulsed	DC+
Diameter	1.6/2.4 mm	1.2 mm	1.6 mm
Parameters	100A, 12V	180A, 28V	350A, 30V

All-weld properties:

As welded	Typ
Tensile strength [MPa]	840
0.2% proof stress [MPa]	665
Elongation [%]	23
Impact Energy -60°C [J]	75

Other products: G-Tech 2594 B SMAW electrodes (AWS A5.4 E2594-15)
Daiko FCW 2594P (AWS A5.22 E2594T1-4)
Daiko Strip 2594 (AWS A5.9 EQ2594)