

DATA SHEET N. S130 - 002

DAIKOW 309LSi

MIG - TIG

Description / Alloy type: Solid wire for dissimilar joining and buffer layer.

Specifications: **AWS A5.9** **EN ISO 14343-A**
ER309LSi 23 12 L Si

Applications: These consumables are mainly used under high dilution conditions, particularly dissimilar welds between stainless and CMn steels. Also overlays on CMn steel or low alloy steel and for joining clad plate. Other application is welding of similar metal joints (23Cr-12Ni type). The higher silicon content (if compared with standard 309L) increase the welding fluidity and improve the bead appearance.

Composition:
(weight %)

%	C	Mn	Si	S	P	Cr	Ni	Mo	Cu	FN
Min	-	1.0	0.65	-	-	23.0	12	-	-	8
Max	0.030	2.5	1.00	0.020	0.030	25.0	14	0.3	0.3	20
Typ	0.015	1.7	0.80	0.005	0.015	23.5	13	0.1	0.15	12

Typical parameters:

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

All-weld properties:

As welded	Typ. TIG
Tensile strength [MPa]	590
Yield strength [MPa]	450
Elongation 4d [%]	43
Impact Energy +20°C [J]	150

Complementary products: SMAW electrode (AWS A5.4 E309L-15/16/17)
GMAW/GTAW/SAW wire (ER309L)
FCAW wire (AWS A5.22 E309LT0-1/4 / E309LT1-1/4)
ESW strip (A5.9 EQ309L)

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