Inweld

Alloy ER309L
AWS A5.9
UNS Number: S30983

Description and Applications:

ER309L is the same classification as ER309, except for the low carbon content. Low carbon (0.03 % max) in this filler metal reduces the possibility of intergranular carbide precipitation. This increases the resistance to intergranular corrosion without the use of stabilizers such as columbium (niobium) or titanium. Strength of this low-carbon alloy, however, may not be as great at elevated temperatures as that of the columbium (niobium) stabilized alloys or ER309.

Chemical Composition of ER309L

C	Cr	Ni	Mo	Mn	Si	P	S	N	Cu
0.03	23.0-25.0	12.0-14.0	0.75	1.0-2.5	0.30-0.65	0.03	0.03	-	0.75

Single values are maximum unless otherwise specified.

(As Welded)
Shielding Gas:

Tensile Strength (min) psi: 84000

Elongation % (min) 36%

Welding Positions
All positions

Shielding Gas
Ar or Ar CO2 mix

Welding Current
DCEP (Electrode Positive)