



Product Data Sheet

Weld M 309L

G 'Gas-shielded metal-arc welding'

Prepared by	Qualified by	Approved by	Reg no	Reg date	Page
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REASON FOR ISSUE

The new product.

GENERAL

A continuous solid corrosion resisting chromium-nickel wire for welding of similar steels, wrought and cast steels of 23% Cr-12% Ni types. The alloy is also used for welding of buffer layers on CMn steels and welding of dissimilar joints. When using the wire for buffer layers and dissimilar joints it is necessary to control the dilution of the weld.

Weld M 309L has a good general corrosion resistance. When used for joining dissimilar materials the corrosion resistance is of secondary importance.

Shielding Gas: M12, M13 (EN ISO 14175)

Alloy Type: Austenitic (with approx. 9 % ferrite) 24 % Cr - 13 % Ni - Low

CLASSIFICATIONS Wire Electrode

SFA/AWS A5.9: ER309L
EN ISO 14343-A: G 23 12 L

Approvals

Not applicable

CHEMICAL COMPOSITION

	Wire/Strip (%)	
	Min	Max
C		0.03
Si	0.30	0.65
Mn	1.4	2.20
P		0.030
S		0.020
Cr	23.0	25.0
Ni	12.0	14.0
Mo		0.3
Cu		0.5
Others tot		0.50
FN WRC-92	7	20

MECHANICAL PROPERTIES OF WELD METAL

Properties	All Weld Metal	
	As welded	
	Min	Typ
Rp0.2 (MPa)	320	440
Rm (MPa)	510	600
A4-A5 (%)	25	41
Charpy V at 20°C (J)		160