Product Data Sheet

W 'Tungsten inert gas arc welding'

OK Tigrod 312

Signed by	Approved by	Reg no	Cancelling	Reg date	Page
Mats Linde	Per-Åke Pettersson/Christos Skodras	EN005051	EN004152	2009-11-25	1 (1)

REASON FOR ISSUE

Shielding Gas standard up date.

GENERAL

Bare corrosion resisting chromium-nickel welding rods for welding of materials of the 29% Cr, 9% Ni types.

OK Tigrod 312 has a good oxidation resistance at high temperatures due to its high content of Cr. The alloy is widely used for joining dissimilar steels especially if one of the component is fully austenitic and steels that are difficult to weld, i e machine components, tools and austenitic manganese steels.

Shielding Gas: I1, I2, I3 (EN ISO 14175) **Alloy Type:** Ferritic-austenitic (29 % Cr - 9 % Ni)

CLASSIFICATIONS Wire Electrode		APPROVALS
EN ISO 14343	W 29 9	Not applicable
SFA/AWS A5.9	ER312	

CHEMICAL COMPOSITION

	All Weld Metal (%)	Wire/Strip (%)	
	Nom	**Min**	**Max**
C	0.1		0.15
Si	0.5	0.30	0.65
Mn	1.7	1.4	2.2
P	0.020		0.030
S	0.010		0.020
Cr	29	29.5	31.5
Ni	9	8.5	10.5
Mo			0.3
Cu			0.3
Others tot			0.50

MECHANICAL PROPERTIES OF WELD METAL

	All Weld Metal	
	As welded	
Properties	**Min**	**Typ**
Rp0.2 (MPa)	450	610
Rm (MPa)	650	770
A4-A5 (%)	15	20
Charpy V at 20°C (J)		50