



Product Data Sheet

W 'Tungsten inert gas arc welding'

OK Tigrod 13.12

Prepared by Mats Linde	Qualified by Christos Skodras	Approved by Per-Erik Andersson	Reg no EN005657	Cancelling EN004657	Reg date 2012-01-13	Page 1 (1)
---------------------------	----------------------------------	-----------------------------------	--------------------	------------------------	------------------------	---------------

REASON FOR ISSUE

Shielding gas update

GENERAL

A copper coated, low alloyed, chromium-molybdenum (1% Cr, 0,5% Mo) rod for GTAW of creep resistant steels of the same type, such as pipes in pressure vessels and boilers. The rod can also be used for welding low-alloyed high strength steels with a minimum tensile strength of 550 Mpa.

Shielding Gas: I1 (EN ISO 14175)

Alloy Type: Low alloyed steel (1 % Cr - 0.5 % Mo)

CLASSIFICATIONS Wire Electrode

EN ISO 21952-A W CrMo1Si
EN ISO 21952-B W 55 1CM3
SFA/AWS A5.28 ER80S-G

APPROVALS

VdTÜV 04952

CHEMICAL COMPOSITION

	All Weld Metal (%)	Wire/Strip (%)	
	Nom	Min	Max
C	0.1	0.08	0.12
Si	0.7	0.50	0.70
Mn	1.0	0.80	1.20
P	0.010		0.020
S	0.015		0.020
Cr	1.1	1.00	1.30
Mo	0.5	0.40	0.60

MECHANICAL PROPERTIES OF WELD METAL

Properties	All Weld Metal		All Weld Metal	
	Min	Typ	Min	Typ
			Ar (I1) AWS	Ar (I1) EN
			As welded	Stress relieved 700°C 0,5h
Rp0.2 (MPa)	470	560	355	560
Rm (MPa)	550	720	510	650
A4-A5 (%)	19	24	20	26
Z (%)		70		
Charpy V at 20°C (J)		120	47	180
Charpy V at -20°C (J)		50		
Charpy V at -30°C (J)		40		
Charpy V at -40°C (J)		20		
Charpy V at -60°C (J)		20		