Product Data Sheet

W 'Tungsten inert gas arc welding'

OK Tigrod 12.64

Prepared by	Qualified by	Approved by	Reg no	Cancelling	Reg date	Page
Magnus Johansson	P-O Oskarsson	Raj Kumar Singh	EN011209	EN010899	2024-03-17	1 (2)

REASON FOR ISSUE

Removal of Society NAKS/HAKC

GENERAL

A copper coated, G4Si1/ER70S-6 rod for GTAW of general structural and engineering unalloyed and low-alloyed carbon-manganese steels. Compared with OK Tigrod 12.61, OK Tigrod 12.64 has a slightly higher silicon and manganese content, which increases the weld metal strength. The high silicon content promotes low sensitivity to surface impurities and contributes to smooth, sound welds.

Shielding Gas: I1 (EN ISO 14175) **Alloy Type:** Carbon-manganese steel

CLASSIFICATIONS Weld Metal

EN ISO 636-A	W 46 5 4Si1

CLASSIFICATIONS Wire Electrode

EN ISO 636-A	W 4Si1
SFA/AWS A5.18	ER70S-6

APPROVALS

ABS	3Y (I1)
BV	3YM
CE	EN 13479
DNV-GL	III YM (I1)
LR	3Y H15 (I1)
UKCA	EN 13479
VdTÜV	05260

APPROVAL COMMENT

Valid for lot numbers starting with PV

CHEMICAL COMPOSITION

	All Weld Metal (%) Wire/Strip (%)		
	Ar		
	Nom	**Min**	**Max**
C	0.08	0.06	0.12
Si	0.80	0.80	1.15
Mn	1.28	1.60	1.85
P	0.015		0.025
S	0.013		0.025

MECHANICAL PROPERTIES OF WELD METAL

All Weld Metal

Standard	Shielding Gas	Condition	ReL [MPa/ksi]		Rm [MPa/ksi]			A4 [%]		A5 [%]	
			Min	Typ	Min	Max	Typ	Min	Typ	Min	Typ
EN	Ar (I1)	As welded	460/67	525/76	530/77	680/99	595/86			20	26
AWS	Ar (I1)	As welded	400/58	510/74	480/70		610/88	22	30		
AWS	Ar (I1)	Stress relieved 620°C 2h		400/58			525/76		32		

Comments:

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MECHANICAL PROPERTIES OF WELD METAL

Standard	Shielding Gas	Condition	Temp [°C/°F]	Charpy V [J/ft-lb]	
				Min	Typ
EN	Ar (I1)	As welded	-30/-22 -40/-40 -46/-51 -50/-58	 47/35	 150/111 90/67
AWS	Ar (I1)	As welded	-30/-22 -40/-40 -46/-51 -50/-58	27/20	 100/74
AWS	Ar (I1)	Stress relieved 620°C 2h	-30/-22 -40/-40 -46/-51 -50/-58		 80/59

Comments:

OTHER DATA

Length of rods: 1000 mm.

Dimensions available are: 1.6, 2.0, 2.4, 3.0 and 3.2 mm.

The wire rods are delivered in boxes of 5.0 kg net weight.