



# Product Data Sheet

W 'Tungsten inert gas arc welding'

## OK Tigrod 13.09

Signed by Mats Linde	Approved by Per Sundberg/Barbro Karlström	Reg no EN002133	Cancelling EN000607	Reg date 2004-06-11	Page 1 (2)
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### REASON FOR ISSUE

Classification weld metal, chemical composition and mechanical properties changed.

### GENERAL

A copper coated, low alloyed, molybdenum (0,5% Mo) rod for GTAW of creep resistant steels of the same type, such as pipes in pressure vessels and boilers with a working temperature of up to about 500 °C.

**Shielding Gas:** I1 (EN 439)

**Alloy Type:** Low alloyed steel (0.5 % Mo)

### CLASSIFICATIONS Weld Metal

EN 1668 W 46 2 W2Mo

### CLASSIFICATIONS Wire Electrode

EN 1668 W2Mo  
EN 12070 W MoSi  
SFA/AWS A5.28 ER80S-G

### APPROVALS

Ü 42.039/2  
DB 42.039.08  
DNV IIIYMS  
UDT DIN 8575  
VdTÜV 04950

### CHEMICAL COMPOSITION

Compound	All Weld Metal (%)		Wire/Strip (%)	
	Nom	Min	Max	
C	0.1	0.08	0.12	
Si	0.7	0.30	0.70	
Mn	1.1	0.90	1.30	
P	0.015		0.020	
S	0.015		0.020	
Mo	0.5	0.40	0.60	
Cu	0.2		0.35	

### MECHANICAL PROPERTIES OF WELD METAL

Properties	All Weld Metal								
	AWS Ar (I1)		EN Ar (I1)			EN Ar (I1)		EN Ar (I1)	
	Min	Typ	Min	Max	Typ	Typ	Typ	Typ	
Rp0.2 (MPa)	470		460		540	424		424	
Rm (MPa)	550		530	680	630	560		560	
A4-A5 (%)	17		20		25	31		31	
Z (%)		79			69	78		78	
Charpy V at 20°C (J)			47		180	147		147	
Charpy V at -20°C (J)					130	127		127	
Charpy V at -29°C (J)		150							
Charpy V at -40°C (J)					90				
Charpy V at -46°C (J)		130							
Charpy V at -60°C (J)					25				



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### OTHER DATA

Lengths available are: 1000 mm.

Dimensions available are: 1.0, 1.6, 2.0, 2.4, 3.2 and 4.0 mm.

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

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