

Saffire Super Steel

Classification Weld Metal

EN 1668 W 46 4 W 2 Ti

Classification Wire Electrode

EN 1668 W 2 Ti
 AWS A/SFA 5.18 ER70S-2

Description and applications

Saffire Super Steel is a triple-deoxidised copper-coated mild steel filler rod particularly suited to TIG welding (with argon shielding gas) root runs in pipes. The rods may also be used without flux for oxy-acetylene welding. Typical all-weld metal ultimate tensile strength is 630 N/mm².

Composition

Wire Analysis Wt %

	Min	Max
C	0.04	0.07
Si	0.40	0.70
Mn	0.90	1.40
P		0.025
S		0.025
Cr	0.15	
Ni	0.15	
Mo		0.15
V		0.03
Cu		0.35
Al	0.05	0.15
Ti	0.05	0.15
Zr	0.02	0.12
Ti+Zr	0.07	0.25

Mechanical Properties of weld Metal

Properties	All Weld Metal			Ar (I1)	
	Min	Max	Typ	Min	Max
Rp 0.2 (MPa)	460		570	400	
Rm (MPa)	530	680	625	480	
A4 (%)				22	
A5 (%)	20		26		
Charpy V At -29°C (J)				27	
Charpy V At -40°C (J)	47		180		