

CMo

0.5Mo MIG WIRE FOR CREEP RESISTING STEELS

PRODUCT DESCRIPTION

Solid wire for MIG welding

CLASSIFICATIONS

AWS A5.28M ER70S-A1
ISO 21952-A G MoSi

ASME IX QUALIFICATION

QW432 F-No 6
QW442 A-No 2

CHEMICAL COMPOSITION (WIRE WT %)

	C	Mn	Si	S	P	Cr	Mo	Ni	Cu	V
Min.	0.08	0.90	0.50	--	--	--	0.45	--	--	--
Max.	0.12	1.30	0.70	0.020	0.020	0.2	0.60	0.20	0.3	0.03
Typical	0.1	1.2	0.6	0.01	0.01	0.03	0.5	0.02	0.05	0.01

ALL-WELD MECHANICAL PROPERTIES

Properties as-welded (AW) or PWHT:	Min.	Typical (Ar +5% CO ₂)	
		AW	620°C/1h
Tensile strength [MPa]	515	650	620
0.2% proof strength [MPa]	400	530	505
Elongation (%) 4d	19	29	25
5d	22	25	24
Impact ISO-V(I) -30°C	--	42	96
Hardness HV	--	215/235	200/220

*Minimum values are after PWHT 620°C/1h (AWS) and as-welded for ISO.

Welds using more oxidising shielding gas (higher CO₂ + O₂) will have lower strength than shown.

TYPICAL OPERATING PARAMETERS

Shielding gas	Current	Diameter (mm)	Parameters
Argon + 2-20%CO ₂ / Argon + 1.5%O ₂ or proprietary	DC+	1.2	260A, 26V

PACKAGING DATA

Diameter (mm)	Weight (kg)	Packaging	Item number
0.8	15	S300	MCMO-08
1.2	15	S300	MCMO-12

FUME DATA (WT % TYPICAL)

Fe	Mn	Cr ³	Ni	Mo	Cu	OES (mg/m ³)
55	5	<0.1	<0.1	<0.5	1.2	5

All information in this data sheet is accurate to the best of our knowledge at the time of printing. Please refer to www.specialalloys.eu for any updated information.