

AA M610

CATEGORY FCAW Flux-Cored

TYPE Seamless metal-powder cored wire without slag for M21

APPLICATIONS Steel construction, shipbuilding, pressure vessels, mechanical engineering, pipe work, offshore, crane building, heavy transport, lifting equipment respecting the NACE requirements.

PROPERTIES Seamless metal cored wire with remarkable stable arc and no spatters. Excelent for use in automated welding applications such as orbital Mag or robotic welding. This wire offers a unique covering range that enables you to use only one wire to cover more procedures upto 620N/mm² yield strenght steels. AA M610 can also be used for constructions that needs post weld heat treatment after welding and still offers excellent impact properties. Due to the seamless production process the hydrogen content is below 3ml/100gr weld metal even after long storage.

CLASSIFICATION

AWS	5.28: E80C-Ni1 H4 5.28M: E55C-Ni1 H4
EN ISO	18276-A T 62 6 Mn1Ni M M 1 H5 18276-B T696T15 1MA N2M1 H5

SUITABLE FOR	Materials TM pipe steels High strength fine grain steels (tempered) High strength fine grain steels (low temp) Steels to API standard AISI 4130 - 4140 - 8630 25CrMo4, 42CrMo4 1.7218, 1.7228 The ASME classification is carried out based on a weld metal according to ISO standards.	EN up to L555MB up to S620QL up to S620G1QL1 X70-X80-X90	ASTM Typical A517 A537
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APPROVALS CE approved.

WELDING POSITIONS:



PURE WELD DEPOSIT WITH M21 MIXED GAS

C	Mn	Si	Cr	Ni	Mo	P	S
0.06	1,7	0,6	-	0.95	0,4	<0,015	<0,015

MECHANICAL PROPERTIES (TYPICAL)

Heat treatment	R _{p0,2} (N/mm ²)(ksi)	R _m (N/mm ²)(ksi)	A ₅ (%)	Impact energy (J) ISO-V			Hardness HRc / HV
				-20°C	-40°C	-60°C	
AW	> 620 (90)	670 - 890 (97 - 129)	25		>70	>47	
SR 580°C/2hr	> 600 (87)	650 - 800 (94 - 116)	24		>70	>47	
PWHT 660°C/90 min.	>520	>600	27		>70	>47	

AW: as welded / SR: stress relieved / PWHT: post weld heat treated

WELDING PARAMETERS / PACKING

parameters			packing		
D (mm)	Voltage (V)	Current (A) DC+	Spools / Drums	kg / spools	Kg per pallet
1,0 mm	14-26	70-220	D-200 / KD-300 / POP	5 / 16 / 300	1200 - 1024 - 600
1,2 mm	14-31	90-330	D-200 / KD-300 / POP	5 / 16 / 300	1200 - 1024 - 600
1,6 mm	25-38	180-420	D-200 / KD-300 / POP	5 / 16 / 300	1200 - 1024 - 600

REDRYING TEMPERATURE not required

