

AA R610

CATEGORY FCAW Flux-Cored

TYPE Seamless micro alloyed rutile cored wire with slag for M21

APPLICATIONS Offshore, Shipbuilding, pressure vessels, orbital pipe work respecting the NACE requirements. Steels with yield strength up to 620 MPa (90 ksi).

PROPERTIES Very good modeling ability, therefore excellent all-position welding with higher currents. For use down to -40 °C (-40 °F) .. Particularly suitable for MAG-orbital welding and for weldings on ceramics in all positions. Low spatter loss, and remarkable easy slag removal.

CLASSIFICATION

AWS	5.29: E101T1-K2M H4 5.29M: E691T1-K2M H4
EN ISO	18276-A: T 62 4 Mn1Ni P M 1 H5 18276-B: T694T1 1MA N2M1 H5

SUITABLE FOR	Materials	EN	ASTM
	TM-pipe steels	up to L555MB	typical
	High-strength fine grain structural steels (tempered)	up to S620QL	A 517
	High-strength fine grain structural steels (low temp)	up to S620G1QL1	A 537
	Steels to API-standard	-	-
		X70-X80 - X90	-

The ASME classification is carried out based on a weld metal according to ISO standards

APPROVALS CE approved.

WELDING POSITIONS:



WELD METAL ANALYSIS % (TYPICAL VALUES M21)

C	Mn	Si	Cr	Ni	Mo	P	S
0.08	1,6	0,6	-	0,95	-	<0.015	<0.015

MECHANICAL PROPERTIES

Heat Treatment	R _{P0,2} (N/mm ²)(ksi)	R _m (N/mm ²)(ksi)	A5 (%)	Impact Energy (J) ISO-V			Hardness HRC / HV
				0°C	-20°C	-40°C	
AW	> 620 (90)	690-830 (100 - 121)	>17	>90	>65	>47	

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A) DC+	type spool / drum	kg / spool / drum	kg / pallet
1,0	19-25	140-230	D-200 / K-300 / Drum	5 / 16 / 300	1000 / 1024 / 600
1,2	21-29	160-280	D-200 / K-300 / Drum	5 / 16 / 300	1000 / 1024 / 600
1,6	23-32	190-350	D-200 / K-300 / Drum	5 / 16 / 300	1000 / 1024 / 600

REDRYING TEMPERATURE Not required

GAS ACC. EN ISO 14175: M21