

Pipeliner® G70M-E

CLASSIFICATION

AWS A5.29 : E81T1-GM-H4
 EN ISO : T 50 5 Z P M 2 H5
 17632-A

GENERAL DESCRIPTION

All position gas shielded 1% Ni, 0.15% Mo flux cored wire
 Specifically designed for pipeline applications
 Superior weldability, low spatter, good bead appearance
 Outstanding operators appeal
 Exceptional mechanical properties [CVN >47J at -50°C]
 Very low hydrogen [HDM <5 ml/100g]
 Superior product consistency with optimal alloy control
 Excellent wire feeding

WELDING POSITIONS (ISO/ASME)



PA/1G



PB/2F



PC/2G



PG/3Gd



PE/4G



PJ/5Gd



PH/5Gu

CURRENT TYPE

DC +
 M21 : Mixed gas Ar+ (>15-25%) CO₂
 Amount : 15-25 l/min

CHEMICAL COMPOSITION (W%), TYPICAL, ALL WELD METAL

Shielding gas	C	Mn	Si	P	S	Ni	Mo
M21	0.06	1.5	0.2	0.013	0.010	0.95	0.15

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition	Yield strength [N/mm ²]	Tensile strength [N/mm ²]	Elongation [%]	Impact ISO-V[J]		
						-20°C	-40°C	-50°C
Required: AWS A5.29 ISO 17632-A			min. 470 min. 500	550-690 560-720	min. 19 min. 18			min. 47
Typical values	M21	AW	580	630	23	100	90	70

PACKAGING AND AVAILABLE SIZES

Diameter (mm)	1.2
4.5 kg plastic spool S200	X
15 Kg spool B300	X

Pipeliner® G70ME: rev. C-EN07-09/05/16

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EXAMPLES OF MATERIALS TO BE WELDED

Steel grades/Standard	Type
Pipe material	
EN 10208	L360, L360NB, L360QB, L360MB, L415MB, L415NB, L450MB, L485MB
API 5LX	X52, X60, X65, X70
Fine grained steels	
EN 10025 part 3	S275, S355, S420, S460
EN 10025 part 6	S355, S420, S460, S500N, S460NL, S500NL, S500NC, S550NC

CALCULATION DATA

Diameter (mm)	Electrical stick-out (mm)	Wire Feed Speed (cm/min)	Current (A)	Arc Voltage (V)	Deposition rate (kg/h)	kg wire/kg weldmetal
1.2	20	445	130	20-22	1.6	1.20
		700	180	23-25	2.5	1.20
		950	220	25-27	3.4	1.20
		1270	265	27-29	4.5	1.20
		1590	305	30-32	5.9	1.20

WELDING PARAMETERS, OPTIMUM FILL PASSES IN SHIELDING GAS Ar + [-15-25]% CO₂

Diameter (mm)	Welding positions					
	PA/1G	PB/2F	PC/2G	PF/3Gup	PJ/5Gdown	PE/4G
1.2	230-280A	230-280A	200-240A	200-240A	200-240A	160-220A
	26-32V	26-32V	25-32V	25-28V	25-28V	23-28V