

# Pipelinor<sup>®</sup> 111M

## Key Features

- Consistent Arc – Designed for optimal performance in automated pipe welding applications where a consistent arc length is critical.
- Flat Bead Shape – Fast freezing slag provides consistent puddle support all the way around the pipe.
- Impact Toughness – Capable of producing weld deposits with impact toughness exceeding 27 J at -40°C.
- Q2 Lot<sup>®</sup> Control and Tested – Certificate showing actual deposit chemistry and mechanical properties per lot available online.
- ProTech<sup>®</sup> Packaging – Hermetically sealed packaging for moisture resistance.

## Typical Applications

- Hot, fill and cap pass welding on X80 to X100 grade pipe
- Fully automated pipe welding
- Semi-automatic pipe welding

## Shielding Gas

75-85% Argon/Balance CO<sub>2</sub>  
Flow Rate: 20-30 L/min

## Welding Positions



## Conformances

**AWS A5.29/A5.29M:** E111T1-GM

## Diameter / Packaging

Diameter mm	Part Number	Packaging
1.2	ED033745	4.5 kg Plastic Spool (Vacuum Sealed Foil Bag)
1.2	ED033746	11.3 kg Plastic Spool (Vacuum Sealed Foil Bag)

## Mechanical Properties - As Required per AWS A5.29 / A5.29M: 2010

	Yield Strength MPa	Tensile Strength MPa	Elongation %	Charpy V-Notch J @ -40°C
<b>Requirements</b> - AWS E111T1-GM	680 min	760-900	15 min	NS
<b>Typical Results</b> - As Welded	690-840	790-880	15-22	56-78

## Deposit Composition

	%C	%Mn	%Si	%P	%S	%Ni
<b>Typical Results</b> - As Welded	0.07-0.08	1.45-1.67	0.27-0.32	0.007-0.013	0.006-0.009	2.03-2.38
	%Mo	%Cr	%V	%B	Diffusible Hydrogen (ml/100g weld deposit)	
<b>Typical Results</b> - As Welded	0.66-0.79	0.02-0.06	0.01	0.005-0.007	4-5	

## Typical Operation Procedures

Diameter Polarity	CTWD mm	Wire Feed Speed in/min	Voltage volts	Current amps	Deposition Rate kg/hr
1.2 mm DC+	19	175-400	23-30	130-275	1.8-4.1