

Pipelin[®] 101M

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[®] Control and Tested – Certificate showing actual deposit composition and mechanical properties per lot available online.
- ProTech[®] Packaging – Hermetically sealed packaging for moisture resistance.

Conformances

AWS A5.29/A5.29M: E101T1-GM

Typical Applications

- Hot, fill and cap pass welding on up to X80 grade pipe
- Fully automated pipe welding
- Semi-automatic pipe welding
- Meets hardness and chemistry requirements for NACE

Shielding Gas

75-85% Argon/Balance CO₂
Flow Rate: 20-30 L/min

Welding Positions



Diameter / Packaging

Diameter mm	Part Number	Packaging
1.2	ED033807	4.5 kg Plastic Spool (Vacuum Sealed Foil Bag)
1.2	ED033808	11.3 kg Plastic Spool (Vacuum Sealed Foil Bag)

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

	Yield Strength MPa	Tensile Strength MPa	Elongation %	Charpy V-Notch J @ -40°C
Requirements - AWS E101T1-GM	610 min	690-830	16 min	NS
Typical Results - As Welded	630	690-740	19	52-120

Deposit Composition

	%C	%Mn	%Si	%P	%S	%Ni
Typical Results - As Welded	0.06-0.07	1.48-1.64	0.26-0.30	0.015 max.	0.010 max.	0.76-0.86
	%Mo	%Cr	%V	%B	Diffusible Hydrogen (ml/100g weld deposit)	
Typical Results - As Welded	0.34-0.39	0.06	0.01	0.004-0.005	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