

# Pipelin<sup>®</sup> 80Ni1

## Key Features

- Root pass capability up to API Grade X100 and hot, fill and cap pass up to X80 grade pipe
- Q2 Lot<sup>®</sup> – Certificate showing actual deposit chemistry available online
- ProTech<sup>®</sup> packaging system
- Excellent wire placement for narrow groove welding

## Conformances

**AWS A5.28/A5.28M: 2005** ER80S-G  
**ABS:** 5YQ500SA H10  
**DNV-GL:** V Y50MS H5  
**LR:** 5Y50S H5

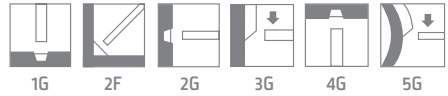
## Typical Applications

- Root pass welding on up to X100 grade pipe
- Hot, fill and cap pass welding on up to X80 grade pipe
- Pipeline and Offshore

## Shielding Gas

75-95% Argon / Balance CO<sub>2</sub>  
 100% CO<sub>2</sub>

## Welding Positions



## Diameter / Packaging

Diameter mm	Part Number	Packaging
1.2	ED033122	4.5 kg Plastic Spool (Vacuum Sealed Foil Bag)
1.2	ED033120	15 kg Plastic Spool (Vacuum Sealed Foil Bag)

## Mechanical Properties - As Required per AWS A5.28/A5.28M: 2005

	Yield Strength MPa	Tensile Strength MPa	Elongation %	Charpy V-Notch J @ -30°C	Charpy V-Notch J @ -60°C
<b>Requirements</b> - AWS ER80S-G	NS	550	NS	NS	NS
<b>Typical Results</b> - As Welded 80% M / 20% CO <sub>2</sub>	510-600	620-670	25-27	92-142	68-100

## Deposit Composition

	%C	%Mn	%Si	%Ni	%Ti	%S
<b>Typical Results</b> - As Welded	0.06-0.08	1.46-1.57	0.74-0.77	0.84-0.92	0.07	0.005-0.011
	%P	%Cu	%Cr	%Mo	%V	%Al
<b>Typical Results</b> - As Welded	0.005-0.010	0.19-0.21	0.04	≤0.01	≤0.01	≤0.01

## Typical Operation Procedures

Diameter Polarity	CTWD mm	Wire Feed Speed in/min	Voltage volts	Current amps	Deposition Rate kg/hr
1.2 mm, DC+ 75-95% Ar/ Balance CO <sub>2</sub>	12-19	125-500	19-31	145-360	1.7-6.5