

PIPEWELD 80DH

A low hydrogen electrode of AWS E8045-P2 type specially designed for downhill welding circumferential joints in pipelines API 5L X52- X70. Suitable for root pass in higher strength steels subject to welding procedure qualification. The low hydrogen weld metal provides high notch toughness and excellent ductility to reduce the risk of cracking. The electrode has been specially designed to provide excellent striking properties and elimination of start porosity. Productivity is significantly higher than conventional low hydrogen electrodes for welding vertically up.

Specifications

Classifications	SFA/AWS A5.5 : E8045-P2 H4R EN ISO 2560-A : E 46 4 B 45 H5
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Welding Current	DC+
Diffusible Hydrogen	< 4.0ml/100g
Alloy Type	Carbon Manganese
Coating Type	Basic covering

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
ISO			
As Welded	530 MPa (77 ksi)	620 MPa (90 ksi)	27 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
ISO		
As Welded	-30 °C (-22 °F)	90 J (67 ft-lb)
As Welded	-40 °C (-40 °F)	80 J (59 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si
0.07	1.25	0.5

Deposition Data

Diameter	Current	Voltage	Deposition Efficiency (%)	Burn-off Time /Electrode	Deposition Rate @ 90% I max
2.5 x 350.0 mm (0.098 x 13.8 in.)	80-90 A	25 V	67 %	53 sec	1.0 kg/h (2.2 lbs/h)
3.2 x 350.0 mm (1/8 x 13.8 in.)	110-150 A	26 V	68 %	53 sec	1.6 kg/h (3.5 lbs/h)
4.0 x 350.0 mm (5/32 x 13.8 in.)	180-220 A	28 V	74 %	50 sec	2.8 kg/h (6.2 lbs/h)
4.5 x 350.0 mm	180-280 A	28 V	71 %	50 sec	3.4 kg/h (7.5 lbs/h)