

Pipeweld 90DH

A low alloyed low hydrogen electrode of AWS E9045-P2 type specially designed for downhill welding circumferential joints in pipelines API 5L X70,X80. 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 : E9045-P2 H4R EN ISO 18275-A : E 55 6 Mn1Ni B 45 H5
Approvals	NAKS/HAKC : 3.2-4.5 mm

Approvals are based on factory location. Please contact ESAB for more information.

Welding Current	DC+
Diffusible Hydrogen	<4.0 ml/100g
Alloy Type	Low alloyed
Coating Type	Basic

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
ISO			
As Welded	590 MPa	670 MPa	24 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
ISO		
As Welded	-60 °C	50 J
As Welded	-30 °C	80 J

Typical Weld Metal Analysis %

C	Mn	Si	Ni
0.07	1.5	0.5	0.8

Deposition Data

Diameter	Current	Voltage	Efficiency (%)	Fusion time per electrode at 90% I max	Deposition Rate
2.5 x 350.0 mm	70-100 A	21 V	70 %	58 sec	1.0 kg/h
3.2 x 350.0 mm	110-150 A	21 V	68 %	56 sec	1.5 kg/h
4.0 x 350.0 mm	180-220 A	24 V	67 %	54 sec	2.3 kg/h
4.5 x 350.0 mm	210-270 A	24 V	68 %	54 sec	2.9 kg/h