

## Coreshield 8-Ni1 H5

Coreshield 8-Ni1 H5 is a self-shielded flux cored wire designed to produce welds with low diffusible hydrogen and robust mechanical properties. It is welder friendly and has excellent all-position welding operability. Using DCEN polarity, it produces nice weld beads by either up-hill or down-hill welding to suit for a wider range of WPS requirements. Coreshield 8-Ni1 H5 is especially suited for making root passes or handling poor fit-up, and it features a diffusible hydrogen content lower than 5.0 ml/100g. Coreshield 8-Ni1 H5 can be ideally used in critical steel applications, such as offshore TKY joints, pipe structures, bridges, storage tanks and other applications where cold-cracking resistance is preferred.

### Specifications

<b>Classifications</b>	SFA/AWS A5.29 : E71T8-Ni1-J EN ISO 17632-A : T 42 4 1Ni Y N 1 H5
<b>Approvals</b>	ABS : E71T1-8Ni1 ABS : 4YSA H5 CE : EN 13479
<b>Industry</b>	Offshore Oil Bridge Construction Mobile Equipment Civil Construction Industrial and General Fabrication Ship/Barge Building

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

<b>Welding Current</b>	DC-
<b>Diffusible Hydrogen</b>	<5 ml/100g
<b>Alloy Type</b>	Low Alloy 1%Ni

### Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	447 MPa	536 MPa	30 %

### Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	-29 °C	150 J
As Welded	-40 °C	146 J

### Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	V	Al
0.02	1.4	0.35	0.008	0.008	1.00	0.04	0.01	0.008	0.75

### Typical Weld Metal Analysis %

Cu	Nb
0.04	0.003

### Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	TTW Dist.	Deposition Rate
1.6 mm	120-265 A	19-24 V	1.9-5.7 m/min		0.8-2.8 kg/h
2.0 mm	120-280 A	20-25 V	1.27-3.81 m/min	25.4 mm	0.83-2.8 kg/h