

# ESAB ARMOID 1



A specially designed stainless steel electrode for joining of armour plates and other crack sensitive steels



## DESCRIPTION

ESAB ARMOID 1 is a stainless steel electrode designed for joining of high strength and dissimilar alloys, armour plates and other crack sensitive steels. ESAB ARMOID 1 is also suitable as a cushioning alloy under hard deposits and for repairing of carbon steel, alloy steel and stainless steel components. It deposits an austenitic weldmetal with sufficient residual ferrite to impart extreme crack resistivity. The electrode has excellent operating characteristics with superior arc stability at low current levels. The weldmetal has excellent work hardening rate without deformation. The slag cover is easily detachable and the weldbead is shiny smooth and finely rippled.

**APPROVALS:** CQA (Met)

**WELDING CURRENT:** DC +, AC 70V

## TYPICAL APPLICATIONS

ESAB ARMOID 1 is especially designed for welding of armour plates. Other than application on armour plates, the electrode is also suitable for joining of high strength steels such as high carbon steels, Chrome-Carbon steels, Chrome-Moly steels and spring steels. Dissimilar steels such as Carbon & Alloy steels to Mn-steels or Stainless Steels can also be welded with ESAB ARMOID 1. The excellent work hardening characteristics displayed by ESAB ARMOID-1, makes it suitable for use in reinforcing rail steels, excavator bucket teeth, for surfacing of gear teeth and steel mills roll prior to hard metal deposition.

## TYPICAL ALL WELDMETAL PROPERTIES

Chemical Composition (%)				Mechanical Properties	
C	0.08	Mo	2.60	UTS	735 N/mm <sup>2</sup>
Cr	20.30	Si	0.60	EL (L=4d)	35%
Ni	8.50	S	0.015	Hardness/As Welded Condition.	280 VHN
Mn	1.20	P	0.020	Hardness/Work Harden Condition.	400 VHN

## CURRENT RANGE & PACKING DATA

Size (mm)	Length (mm)	Current Range (Amps)	No. of Electrodes in a	
			Carton	Cardboard box
2.50	350	55-75	80	400
3.15	350	90-110	70	350
4.00	350	120-160	50	250
5.00	350	140-205	40	200

**PACKING:** Electrodes are packed in heat sealed plastic cartons and five of these cartons are shrink wrapped in a cardboard box.