

## A high alloy 'Universal' electrode for joining steels of unknown composition

Classification AWS A 5.4: E 312-16



IS 5206: E 29.9 R 26

DIN 8556: E 29.9 R 23

### DESCRIPTION

ESAB RSW is a rutile coated all position electrodes for welding of complex dissimilar alloys and high strength steels with low heat input, giving sound joints free from any cracks and fissures. It is a specially designed high alloy electrode for joining steels of unknown composition. The weldmetal has high strength combined with excellent resistance against impact, heat (excellent scaling resistance upto 1150°C) and corrosion. The ferritic-austenitic duplex structure weldmetal is highly tolerant to dilution and stress corrosion. Also suitable for depositing buffer layers prior to surfacing on high strength and high alloy steels. ESAB RSW has excellent weldability characteristics in all positions giving a slag that is easily detachable and a final weldbead that is finely rippled, smooth and shiny.

**WELDING CURRENT: DC +**

### TYPICAL APPLICATIONS

ESAB RSW is especially designed for welding of high strength alloy steels and dissimilar joints especially where one or both the components are high in nickel. Also suitable for building up or cushioning prior to hard facing on very high strength and high hardness deposit and hot working tools, dies for plastics etc. Other applications include rebuilding chemical agitator blades, shafts, rolling mill spindles, bucket lips, highly hardenable armour steels and for furnace parts etc.

### TYPICAL ALL WELDMETAL PROPERTIES

Chemical Composition (%)				Mechanical Properties	
C	0.10	Mn	2.20	UTS	800 N/mm <sup>2</sup>
Cr	29.50	Si	0.40	YS	700 N/mm <sup>2</sup>
Ni	10.00	P	0.020	EL (L=4d)	24%
S	0.015			Impact (CVN) at +20°C	40J

### CURRENT RANGE & PACKING DATA

Size (mm)	Length (mm)	Current Range (Amps)	No. of Electrodes in a	
			Carton	Cardboard box
2.50	350	50-80	80	400
3.15	350	70-110	65	325
4.00	350	100-140	40	200
5.00	350	140-180	30	150

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