# Ratna R-680

#### **APPLICATIONS**

For joining difficult-to-weld steel and dissimilar steels such as dies, tool and spring steels and
joining steel to unknown composition, also used as cushion layer on difficult steels to weld steel
before depositing final hard facing layer.

## **DESCRIPTION**

 A unique austenitic-ferritic low heat input welding electrode for combination of high tensile strength and weldability. Electrode is controlled grain structure and ferritic. Weld metals offers superb combination of high strength, crack resistance, ductility and weldability.

CURRENT POLARITY	WELDING POSITION
DC(+), AC	FLAT, HORIZONTAL, VERTICAL, OVERHEAD

TYPICAL WELD METAL MECHANICAL PROPERTIES (ELEMENT %)			
ULTIMATE TENSILE STRENGTH (N/MM²) KSI	ELONGATION (%)	HARDNESS BHN (AS WELDED)	
800	22	220 BHN	

SIZE AND CURRENT RECOMMENDATIONS		
SIZE D X L (MM)	SIZE D X L (IN)	CURRENT (AMPS) DC+, AC
2.5mm x 350mm	3/32" x 14"	50-80
3.2mm x 3 <mark>50</mark> mm	1/8" x 14"	70-110
4.0mm x 350mm	5/32" x 14"	100-130

## **RE-DRY CONDITIONS**

Re-dry the electrode at 350°C for 1 hour.

#### NOTE