

# SHUBER E 685

## GENERAL PURPOSE - ULTRA HIGH STRENGTH



### DESCRIPTION

MULTIPURPOSE ELECTRODE DEVELOPED FOR MACHINABLE WELDING OF ALL STEELS INCLUDING COMBINATION OF SIMILAR AND DISSIMILAR STEELS. Can be used safely on carbon steels, low alloy & high alloy steels, spring steel, tool steels, stainless steels, manganese steel, and steels of unknown composition. Weld deposit contains a perfect balance of delta ferrite in an austenitic matrix resulting in a grain structure with outstanding resistance to cracking and optimized tensile strength. Ideal for applications where weld deposit is subjected to high stress such as joining of shaftings, build-up of gears and steel cladding applications requiring high impact resistance.

### SPECIAL FEATURES

- Excellent heat and corrosion resistance.
- Versatile - compatibility with all steel grades reduces inventory.
- High work hardenable - the longer in service, the harder it gets.
- Controlled penetration reduces harmful dilution and carbon pick-up.

### APPLICATION INSTRUCTIONS

Bevel sections over 5 mm to a 90° vee & over 10 mm to a double vee or double "U". Preheat high carbon steels over 50 mm thick to 200°C(400°F). Maintain a short arc and apply stringer beads or weaving technique for flat & horizontal. Allow weld to cool before removing slag.

### TECHNICAL DATA

TENSILE STRENGTH: 86 kg/mm<sup>2</sup> (122,000 psi)

ELONGATION: Up to 36 %

RECOMMENDED CURRENT:	DIAMETER	AMPS
AC or DC (Reverse Polarity)	2.4 mm (3/32")	60 - 90
	3.2 mm (1/8")	80 - 120
	4.0 mm (5/32")	100 - 150

Tip Colour: Gold

DIN 8556  
E Ti 29 9 26