



# ULTRACORTEN I

**LOW ALLOY STEEL (Weathering Steel)**



Low Alloy Steel Electrode for Welding Weathering Steels

**CLASSIFICATION : AWS A/SFA 5.5**

**APPROVALS :**

E 7018-W1

**KEY FEATURES :**

- Basic type iron powder electrode
- Cr-Ni-Cu type low alloy steel welds
- Exhibits excellent atmospheric corrosion resistance
- High crack resistance under restraint
- Radiographic quality weld deposit
- All position capability

**WELDING POSITION :**



AC (70 OCV) / DCEP

**TYPICAL APPLICATIONS :**

- Welding of weathering steels e.g. CORTEN-A and CORTEN-B and their equivalents
- Bridges, Architectural structures, Exhaust gas flues, Chimneys
- Suitable for ASTM A242 and A588

**REDRYING CONDITION : 250-300°C for minimum 1 hr. (Also available in vacuum packed condition)**

**CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt % :**

	<b>C</b>	<b>Mn</b>	<b>Si</b>	<b>Cr</b>	<b>Ni</b>
Specification	0.12 max	0.40-0.70	0.40-0.70	0.15-0.30	0.20-0.40
	<b>Cu</b>	<b>V</b>	<b>S</b>	<b>P</b>	
Specification	0.30-0.60	0.08 max	0.025 max	0.025 max	

**MECHANICAL PROPERTIES OF ALL WELD METAL :**

	<b>Condition</b>	<b>UTS, MPa</b>	<b>YS at 0.2% offset, MPa</b>	<b>EL%</b>	<b>CVN Impact at -20°C, J</b>
Specification	As Welded	490 min	415 min	22 min	27 min

**Diffusible H2 Content: <5 ml/100 gm)**

**PARAMETERS - PACKING DATA :**

<b>Ø x L, mm</b>	<b>Amperage, A</b>	<b>Approx. Pcs/Carton</b>	<b>Carton/Box</b>	<b>Approx. wt. of 1000 pcs, Kg.</b>
3.15 x 450	100-140	113	4	44
4.0 x 450	140-180	79	4	63
5.0 x 450	190-250	49	4	102

