



# TENALLOY 120

**LOW ALLOY STEEL (High Strength)**



Welding Electrode for joining high strength Steel

**CLASSIFICATION : AWS A/SFA 5.5**

E12018M

**KEY FEATURES :**

- Basic type coating
- Ni-Mn-Mo-Cr alloyed electrode
- Excellent crack resistance
- Excellent toughness at subzero temperature
- Radiographic quality weld metal

**WELDING POSITION :**

**AC (70 OCV)/ DCEP**

**TYPICAL APPLICATIONS :**

- Welding of high tensile steels and fine grained steels like HY 80, HY 90, HY 100
- Joining high strength, low alloy or micro-alloyed steels to themselves or to lower strength steels, including carbon steels

**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>Ni</b>	<b>Mo</b>
Specification	0.10 max	1.30-2.25	0.60 max	1.75-2.50	0.30-0.55
	<b>Cr</b>	<b>V</b>	<b>S</b>	<b>P</b>	
Specification	0.30-1.50	0.05 max	0.030 max	0.030 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 -50°C, J</b>
Specification	As Welded	830 min	745-830	18 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>
2.5 x 350	60-90	215	4	23
3.15 x 450	100-140	113	4	44
4.0 x 450	140-180	78	4	63
5.0 x 450	190-250	51	4	96

