

# HASTELLOY<sup>®</sup> X Coated Electrodes

## Product Description:

HASTELLOY<sup>®</sup> X coated electrodes are used for the shielded metal arc welding of X alloy. The deposited weld metal has possesses an exceptional combination of oxidation resistance, fabricability and high-temperature strength. It has also been found to be exceptionally resistant to stress-corrosion cracking in petrochemical applications. X alloy exhibits good ductility after prolonged exposure at temperatures of 1200, 1400, 1600°F (650,760 and 870°C) for 16,000 hours. The filler metal is often used as a dissimilar filler metal between other solid-solution strengthened high-temperature alloys.

## Specifications:

AWS A 5.11 ENiCrMo-2 ASME SFA 5.11 ENiCrMo-2

## Composition:

<b>Nickel:</b>	Balance	<b>Silicon:</b>	1.0 max.
<b>Chromium:</b>	20.5-23.0	<b>Copper:</b>	0.50 max.
<b>Molybdenum:</b>	8.0-10.0	<b>Other:</b>	0.50 max.
<b>Iron:</b>	17.0-20.0	<b>Carbon:</b>	0.05-0.15
<b>Cobalt:</b>	0.50-2.50	<b>Sulfur:</b>	0.03 max.
<b>Tungsten:</b>	1.0 max.	<b>Phosphorus:</b>	0.04 max.
<b>Manganese:</b>	1.0 max.		

## Minimum Mechanical Properties:

<b>Tensile (psi)</b>	95,000
<b>Mpa</b>	650
<b>Elongation (%)</b>	20

## Available Product Forms and Sizes:

<b>Diameter in</b>	0.093	0.125	0.156	0.187
<b>Diameter mm</b>	2.40	3.20	4.00	4.70
<b>Length in</b>	10	14	14	14
<b>Length mm</b>	254	355.6	355.6	355.6
<b>Package Weight lbs.</b>	5	10	10	10
<b>Current (A) DCEP</b>	40-70	70-100	80-140	120-150