

## Stainless Steel Coated Electrodes

### Oxford Alloy<sup>®</sup> 309/309H-16

**SPECIFICATIONS**

AWS 5.4  
 ASME SFA 5.4

**CLASSIFICATIONS**

AWS E309/309H-16  
 UNS W30910

**DESCRIPTION / APPLICATION**

Oxford Alloy E309/309H-16 has restricted weld metal carbon content to eliminate the lowest carbon levels. It is used for welding type 309 base metal for all service temperatures designed for type 309. The Carbon content is 0.04% minimum. The Oxford Alloy E309/309H-16 is also used in applications where greater strength is required and a limited quality of ferrite. It can also be used to weld low alloy to stainless steel dissimilar joints where a lower ferrite content is desired and is acceptable. In the latter case, the service temperature should not exceed 700°F (370°C). The carbon restriction will provide higher tensile and creep strengths at elevated temperatures. This together with a typical ferrite content of about 6 FN make these electrodes suitable for the welding of 24 Cr 12 Ni wrought and cast steels designed for corrosion and oxidation resistance. This grade of material is a good choice for a multitude of welding applications including tight joints. It can also be used for carbon and low alloy steel dissimilar joints.

AWS Chemical Composition						
C	Cr	Ni	Mn	Si	P	S
0.04-0.15	22.0-25.0	12.0-14.0	0.5-2.5	1.0 max	0.04 max	0.03 max
Cu	Mo					
0.75 max	0.75 max					

**TYPICAL MECHANICAL PROPERTIES**

Tensile strength: 89,900 psi 620 MPa  
Yield strength: 55,100 psi 380 MPa  
Elongation: 40%

Please contact our sales department for more information at 800-562-3355 or 225-273-4800.

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