

## Mild and Low Alloy Steel TIG, MIG and SUB-ARC Wire

### Oxford Alloy<sup>®</sup> 70S-6

**SPECIFICATIONS**

AWS 5.18  
ASME SFA 5.18

**CLASSIFICATIONS**

AWS ER70S-6  
UNS K11140

**DESCRIPTION / APPLICATION**

Oxford Alloy ER70S-6 contains high levels of manganese and silicon for stronger deoxidizing power where stringent cleaning procedures are not possible. The high silicon content increases the fluidity of the weld pool, creating a smoother bead appearance and resulting in minimal post-weld grinding. The Oxford Alloy ER70S-6 has been designed to provide X-ray quality porosity-free welds and the highest tensile strength (as welded) of the plain carbon steel wires. This wire is excellent where poor fit-ups or rusty and oily plates may be used. Some typical applications are truck bodies, farm implements, steel castings or forgings, shaft build-ups and general shop fabrications.

AWS Chemical Composition						
C	Mn	Si	P	S	Ni	Cr
0.06-0.15	1.40-1.85	0.80-1.15	0.025 max	0.035 max	0.15 max	0.15 max
Mo	V	Cu				
0.15 max	0.03 max	0.50 max				

**TYPICAL MECHANICAL PROPERTIES**

Tensile strength: 79,750 psi 550 MPa  
Yield strength: 65,250 psi 450 MPa  
Elongation: 30%

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

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