



**7018**

**DESCRIPTION:** Weldcote Metals 7018 is the most efficient general purpose, iron powder-low hydrogen electrode used for welding carbon steels, free-machining steels and low alloy steels with a minimum yield strength of 50,000 psi. Weldcote Metals 7018 has a very good deposition rate, providing a quiet steady arc with low spatter and medium penetration. Weld deposits are of X-ray quality with easy slag removal, exceptional mechanical properties and a smooth uniform bead appearance. Weldcote Metals 7018 has excellent operator appeal and may be used in any position with AC or DC (reverse polarity).

**APPLICATIONS:** Weldcote Metals 7018 electrodes are used for many ASTM specifications. More specific applications would include process piping, cold rolled steels such as found in heavy machinery fabrications, fired and unfired pressure vessels, shop and field welding of bridges and structural steels, cast steels, shipbuilding, just about any medium carbon, low alloy steel where the welds are subject to X-ray inspection.

**SPECIFICATIONS:** ANSI/AWS A5.1 & ASME SFA 5.1 E7018

**CHEMICAL COMPOSITION**

CARBON	0.08
SILICON	0.60
PHOSPHORUS	0.021
MANGANESE	1.00
IRON	Balance
SULFUR	0.011

**MECHANICAL PROPERTIES**

<b>Tensile Strength</b>	71,000 psi
<b>Yield Strength</b>	81,000 psi
<b>Elongation</b>	30%

**\* RECOMMENDED WELDING PARAMETERS:**

		<b><u>3/32 X 12</u></b>	<b><u>1/8 X 14</u></b>	<b><u>5/32 x 14</u></b>
<b>AMPS</b>	Flat	<b>65-85</b>	<b>90-130</b>	<b>130-180</b>
	Vertical/overhead	<b>50-80</b>	<b>85-120</b>	<b>110-160</b>

**\* All parameters are suggested as basic guidelines and will vary depending on joint design, number of passes and other factors.**