

Sureweld 7024

Sureweld 7024 is a high speed, heavy-coated, iron powder electrode for high deposition rates on horizontal and downhand welding. Excellent operator appeal, produces equal 45 deg; fillets, thereby eliminating over welding. Excellent bead appearance and self-cleaning slag. This electrode has good weldability and superior mechanical properties. It is particularly useful in obtaining increased penetration with little or no root porosity in horizontal or positioned fillets. Sureweld 7024 is ideal for making high speed horizontal fillet and lap welds on mild and some alloy steels, such as earthmoving and construction equipment, truck bodies, ships, barges and railcars. Sureweld 7024 exceeds the AWS A5.1 elongation % and Charpy V-Notch requirements for 7024-1.

Specifications	
Classifications	ASME SFA 5.1 : E7024 AWS A5.1 : E7024
Approvals	ABS CWB : CSA W48 E4924
Industry	Industrial and General Fabrication Barges Mobile Equipment Railcars

Approvals are based on factory location. Please contact ESAB for more information.

Welding Current	DC+/-, AC
Alloy Type	Carbon Manganese

Typical Tensile Properties			
Condition	Yield Strength	Tensile Strength	Elongation
As Welded	490 MPa (71 ksi)	550 MPa (80 ksi)	26 %

Typical Charpy V-Notch Properties		
Condition	Testing Temperature	Impact Value
As Welded	-18 °C (0 °F)	34 J (25 ft-lb)

Typical Weld Metal Analysis %				
C	Mn	Si	S	P
0.06	0.80	0.30	0.018	0.01

Deposition Data			
Diameter	Current	Deposition Efficiency (%)	Deposition Rate @ 90% I max
3.2 x 356.0 mm (1/8 x 14.0 in.)	140-180 A	70.8 %	2.27 kg/h (5.0 lbs/h)
4.0 x 356.0 mm (5/32 x 14.0 in.)	180-240 A	69.6 %	3.18 kg/h (7.0 lbs/h)
4.8 x 457.0 mm (3/16 x 18.0 in.)	245-290 A	68.1 %	4.06 kg/h (9.0 lbs/h)
5.6 x 457.0 mm (7/32 x 18.0 in.)	300-340 A	69.4 %	5.16 kg/h (11.4 lbs/h)
6.4 x 457.0 mm (1/4 x 18.0 in.)	350-400 A	71.7 %	5.72 kg/h (12.6 lbs/h)