

SUREWELD 7024

AWS A5.1: E7024

FEATURES

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° 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.

CLASSIFICATIONS AND APPROVALS

- AWS A5.1: E7024
- ASME SFA 5.1

WELDING PROCESS

- SMAW (Stick)

INDUSTRIES

- General Fabrication
- Ship and Barge Building
- Mobile Equipment
- Railcars

TYPICAL MECHANICAL PROPERTIES

As Welded	
Yield Strength	71 ksi, 490 MPa
Tensile Strength	81 ksi, 550 MPa
Reduction in Area	63%
Elongation in 2"	26%

CHARPY V-NOTCH PROPERTIES

Testing Temperature 0°F (-18°C)	
As Welded	25 ft-lb, 34 J

WELD METAL ANALYSIS

C	0.06%
Mn	0.8%
Si	0.3%
P	0.01%
S	0.018%

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DEPOSITION TABLE

Diameter in (mm)	Optimal Current Amps	Current Range Amps	Deposition Rate lb/hr (kg/hr)	Efficiency %
1/8 (3.2)	140	130 - 180	4.2 (1.9)	71.8
	180	130 - 180	5.1 (2.3)	70.7
5/32 (4.0)	180	180 - 240	5.3 (2.4)	71.3
	210	180 - 240	6.3 (2.9)	72.5
	240	180 - 240	7.2 (3.3)	69.4
3/16 (4.8)	245	250 - 290	7.5 (3.4)	69.2
	270	250 - 290	8.3 (3.8)	70.5
	290	250 - 290	9.1 (4.1)	68
7/32 (5.6)	320	300 - 340	9.4 (4.3)	72.4
	360	300 - 340	11.6 (5.3)	69.1
1/4 (6.4)	400	350 - 400	12.6 (5.7)	71.7

PART NUMBER / PRODUCT INFORMATION

Part Number	Description
812000248	SW 7024 1/8X18 22.7KG CTN
812000255	SW 7024 5/32X18 22.7KG CTN
812000263	SW 7024 3/16X18 22.7KG CTN
812000271	SW 7024 7/32X18X50#CTN
812000289	SW 7024 1/4X18 22.7KG CTN