

DM7024 Premium Electrode

Classification: E7024

AWS A 5.1 / ASME SFA 5.1

***DuraMax DM7024 is a IRON POWDER, TITANIA COATED
TYPE WELDING ELECTRODE***

CHARACTERISTICS, FEATURES & APPLICATIONS

DURAMAX E7024 electrode coverings contain large amounts of iron powder in combination with ingredients similar to those used in E6013 electrodes. The coverings on DM7024 are very thick and usually amount to about 50% of the weight of the electrode, resulting in higher deposition efficiency. The DM7024 electrodes are well suited for making fillet welds in the flat or horizontal position. Weld face is slightly convex to flat, with a very smooth surface and a very fine ripple. These electrodes are characterized by a smooth, quiet arc, very low spatter, and low arc penetration. They can be used with high travel speeds. Electrodes of this classification can be operated on AC, DCEP or DCEN. DM7024 is an excellent choice for earthmoving equipment, railroad cars, mining machinery, structurals, plate fabrication, shipbuilding, and mobile trailers.

Typical Chemical Composition (%)

C	Mn	Si	S	P	Ni	Cr	Mo	V
0.15 max	1.25 max	0.90 max	0.035 max	0.035 max	0.30 max	0.20 max	0.30 max	0.08 max

Mn + Ni + Cr + Mo + V = 1.50 max

Typical Mechanical Properties as Welded

Tensile Strength (n/mm ²)	Yield Strength (n/mm ²)	Elongation (%) 1=4d	Hardness	Ferrite WRC (FN)	CVN Impacts (J)
					@ -20 °C
490 min	400 min	17% min	-----	-----	≥ 27 J

Sizes available and recommended currents (DC)

SIZE	3/32	1/8	5/32	3/16
AMPS	100 - 145	140 - 190	180 - 250	230 - 305

POLARITY: DCEP, DCEN or AC

DCEP: DC, Electrode Positive (reverse polarity) has the most weld penetration

DCEN: DC, Electrode Negative (straight polarity) has the least weld penetration

AC: medium weld penetration (can be more spatter)

WELDING POSITIONS: Flat, Horizontal, Overhead, Vertical-up and Vertical-down positions

USE LESS AMPS ON THIN METAL; MORE AMPS ON THICK METALS