

Merit® JM™-90 (JM-80D2)

Key Features

- Excellent weldability – Stable arc, low spatter, low clean up, suitable for both short-circuit transfer and high current spray transfer.
- Superb feedability – Unique manufacturing technology results in a clean wire surface, smooth copper coating layer and an even amount of feeding lubricant. These advantages ensure lower friction during wire feeding and better electrical conductivity.

Typical Applications

- For welding of 550-620 MPa tensile grade high strength low alloy steel. Good impact values at -30°C. Widely used for heavy fabrication, pressure vessel and power generation applications.

Conformances

AWS A5.28/A5.28M: ER80S-D2, ER90S-D2

Welding Positions



Shielding Gas

- 75-95% Argon / 5-25% CO₂
- Flow Rate: 15-20 L/Min

Diameter / Packaging / Settings

Diameter mm	Part Number	Packaging	WFS ipm	Voltage volts	Current amps	CTWD mm
0.9	CTJIM900090S015W01	Plastic Spool 15kg	100-550	17-28	80-250	10-20
0.9	CTJMER90090P250W00	Drum 250kg	100-550	17-28	80-250	10-20
1.0	CTJIM900100S015W01	Plastic Spool 15kg	100-600	17-30	80-275	10-20
1.2	CTJIM900120S015W01	Plastic Spool 15kg	125-500	19-30	145-340	12-25
1.2	CTJIM900120P250W00	Drum 250kg	125-500	19-30	145-340	12-25

Mechanical Properties - As required per AWS A5.28

	Yield Strength MPa	Tensile Strength MPa	Elongation %	Charpy V-Notch J @ -30°C
Requirements - AWS	470 min	550 min	17 min	27
Typical Results	560	650	24	96

Wire Composition

	%C	%Mn	%Si	%Ni	%Mo	%S	%P	%Cr
Requirements - AWS	0.07-0.12	1.60-2.10	0.50-0.80	≤0.15	0.40-0.60	≤0.025	≤0.025	-
Typical Results	0.10	1.72	0.60	0.015	0.43	0.012	0.014	0.079