

EXECUTIVE 80S/90S-D2

LOW ALLOY

SOLID WIRE TECHNICAL DATA SHEET

DESCRIPTION

Executive 80S/90S-D2 is designed to weld a variety of carbon and low alloy, higher strength steel using MIG and TIG welding processes for service in both the as welded and PWHT conditions. The wire offers a balanced chemistry that includes increased levels of manganese and silicon for better arc stability and good tolerance to rust and mill scale.

Executive 80S/90S-D2 filler metal is produced using high quality raw materials and tightly controlled chemistry to provide top quality, exceptionally clean wires that deliver smooth feedability and the results fabricators demand. It has the same chemistry for both classifications with the difference being a change in shielding gas and mechanical properties. Using an argon based gas mixture in the MIG process results in higher values that meet ER90S-D2 classification.

APPLICATIONS & FEATURES

Executive 80S/90S-D2 is used for welding variety of medium carbon, low-alloy and higher strength steels for service in both the as welded and PWHT conditions.

Typical materials include ASTM A 182, A 217 along with AISI 4130.

TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

С	Mn	Si	Мо	Р	S	Cu
0.07	1.70	0.70	0.50	0.01	0.01	0.2

Tensile Strength: 80,000 PSI* min **Yield Strength:** 68,000 PSI* min **Elongation:** 17%

24 ft/lb at -20°F/ -30°C **Charpy V Notch:**

^{*}Values using 100% CO2

TYPICAL WELDING PARAMETERS										
Diameter	Voltage	Amperage	Speed (in/min)	Shielding Gas / Flux						
.035"	14-20	90-160	100	100% CO ₂						
.045"	16-20	120-200	150	75% Ar / 25% CO ₂						
.035"	25-28	180-230	125	98% Ar / 2% O₂						
.045"	25-30	250-350	150	75% Ar / 25% CO₂						
.093" .125"	Direct Currer	nt; Electrode -	100% Ar							
	Diameter .035" .045" .035" .045" .093"	Diameter Voltage .035" 14-20 .045" 16-20 .035" 25-28 .045" 25-30 .093" Direct Current	Diameter Voltage Amperage .035" 14-20 90-160 .045" 16-20 120-200 .035" 25-28 180-230 .045" 25-30 250-350	Diameter Voltage Amperage Speed (in/min) .035" 14-20 90-160 100 .045" 16-20 120-200 150 .035" 25-28 180-230 125 .045" 25-30 250-350 150						

STANDARD PACKAGING

GMAW (MIG) 33-lb plastic spools 1,980-lb pallet GTAW (TIG) 10-lb plastic tube 40-lb box

CLASSIFICATION

AWS/SFA 5.28, Class ER80S-D2/ER90S-D2

