

DESCRIPTION

Executive 120S-1 is used to weld a variety of high yield steels such as T-1 and HY-100 using MIG or TIG welding processes where high strength and cold temperature toughness are critical. This wire produces weld deposits that exhibit superior strength and excellent mechanical properties including low temperature impact resistance down to -60°F (-51°C).

Executive 120S-1 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.

APPLICATIONS & FEATURES

Executive 120S-1 is used for welding high strength steels used in large vehicle and crane manufacturing and repair including T-1, HY-100 and other quenched and tempered steels where cold temperature impact resistance down to -60°F (-51°C) is critical.

TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

C	Mn	Si	Cr	Mo	P	S	Cu	Ni	Al	Ti	Zr	V
0.08	1.63	0.54	0.35	0.48	0.010	0.005	0.15	2.47	0.007	0.001	0.0015	0.005
Tensile Strength:		127,600 PSI min		Yield Strength:		116,000 PSI min		Elongation:		19%		
Charpy V-Notch:		72 ft/lb at -60°F / -50°C										

TYPICAL WELDING PARAMETERS

Process	Diameter	Voltage	Amperage	Speed (in/min)	Shielding Gas / Flux
GMAW - Short	.035"	14-20	90-160	100	100% CO ₂
	.045"	16-20	120-200	150	75% Ar / 25% CO ₂
	- Spray .035"	25-28	180-230	125	98% Ar / 2% O ₂
	.045"	25-30	250-350	150	75% Ar / 25% CO ₂
GTAW	.093" .125"	Direct Current; Electrode -			100% Ar

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 **ER120S-1**

