

EXECUTIVE 625 AP FC

NICKEL ALLOY

FLUX CORED WIRE TECHNICAL DATA SHEET

DESCRIPTION

Executive 625 AP FC is a nickel-chromium-molybdenum gas shielded FCAW wire that can be used for welding in all positions using 100% CO₂ or Argon/ CO₂ mixtures such as 75/25. It is the flux cored equivalent to Executive 625 and has complimentary chemistry to Alloy 625 (NiCrMo-3) providing ease of welding and increased deposition rates associated with flux cored wire. The weld puddle for Executive 625 AP FC is more fluid then other forms of this alloy and the weld exhibits excellent slag release, superior bead appearance and offers great out of position welding results. The high alloy content of 625 AP FC produces high strength weld material with excellent corrosion resistance at elevated service temperatures. The increased level of molybdenum offers excellent resistance to stress corrosion cracking, pitting, and crevice corrosion. The low iron content of Executive 625 AP FC makes it an excellent choice for overlay applications and has an operating range from cryogenic to beyond 1000°F (540°C).

APPLICATIONS & FEATURES

Executive 625 AP FC is a versatile filler metal that is used to weld dissimilar joints between nickel-chrome-molybdenum alloys and stainless, carbon or low alloy steels. It is also used when welding various nickel alloys such as 9% nickel steel, Monel®, Inconel®, 254SMO, and AL-6XN.

Executive 625 AP FC is used extensively for overlay applications as well due to its restricted low iron content which ensures the highest corrosion standard for these applications.

TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

С	Mn	Si	Cr	Ni	Мо	Cb	Fe	Р	S	Al Ti	Cu
0.018	0.35	0.30	22.5	Bal	9.2	3.75	0.80	0.01	0.002	0.10 0.10	0.05

Tensile Strength: 110,000 PSI min **Yield Strength:** 72,000 PSI min **Elongation:** 38% **Charpy Impact:** 48 ft-lb at -320°F (-196°C) **Lateral Expansion:** 35 Mils

TYPICAL WELDING PARAMETERS										
Diameter	Voltage	Amperage	Wire Feed Speed (in./min)	Stick-Out	Shielding Gas					
.045"	25-26	140-210	290-400 IPM	1/2"	100% CO ₂ or 75% Ar / 25% CO ₂					
.062"	26-27	180-260	190-275 IPM	1/2"	100% CO ₂ or 75% Ar / 25% CO ₂					

STANDARD PACKAGING

Spools 33-lb wire baskets

CLASSIFICATION

AWS/SFA A5.34, Class ENiCrMo3T1-1/4

