



FUSION™ UNIVERSAL is a Modified Austenitic Stainless Steel flux cored tubular welding wire of gas shielded metal arc joining, build-up, and hardfacing. FUSION™ UNIVERSAL is a weld wire that has good impact, cavitation and corrosion resistance. Depending on the amount of impact, the weld deposit work hardens to different degrees. The weld deposit shows exceptionally high ductility and elongation. This weld wire also has exceptional crack resistance. FUSION™ UNIVERSAL is particularly designed for welding on a vast range of base metals and can be easily welded in all positions, making it ideal for maintenance welding applications. This weld wire is welded with Ar-CO2 mixtures or CO2.

Typical Deposit Characteristics

Abrasion Resistance	Moderate	
Hardness	150 – 200HB As Welded	47 – 50 HRC Work Hardened
Impact Resistance	Excellent	
Deposit Layers	Unlimited	
Surface Cross Checks	No	

Operational Characteristics / Welding Parameters

Diameter	0.045"	1/16"
Current, Amp DC	125 – 300	150 – 325
Voltage	22 – 32	24 – 32
Wire Extension, in	1/2" – 1"	1/2" – 1"
Gas Flow	25 – 40 cfh	25 – 40 cfh
Shielding Gas	Argon + 15 – 25% CO ₂ -OR- Argon + 5 – 15 % CO ₂ -OR- 100% CO ₂	
Position	All	

TYPICAL ALL-WELD METAL ANALYSIS							
C	Mn	Si	Cr	Ni	Mo	S	P
0.07	1.3	0.45	19.0	0.9	1.00	0.008	0.020

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES			
Tensile	Yield	Elongation	Impact Strength
87,000 PSI	60,000 PSI	30%+	45 Ft Lbs @ RT

Alloy Type

Austenitic stainless-steel tubular wire.

Typical Applications

- Fabrication, repair and maintenance on an extensive range of steels.
- Repair jobs where high strength and toughness are required.
- Hardfacing applications where impact and work hardening is mandatory.

Standard Sizes & Packaging

Diameter: 0.045"
 Packaging: 33 lbs. Spools