

### **Description**:

ER5356 is a 5% magnesium aluminum filler metal with increased levels of Mg, Ti and Mn along with the addition of chrome and a slight reduction in silicon when compared to ER4043. These changes work together to increase its corrosion resistance, making it the best aluminum for use in or near saltwater.

### **Typical Applications:**

XTR 5356 is an all-position non-heat treatable wire used to weld the 5XXX series alloys with some common welding applications such as boats, ships, bicycles, trucks, pressure vessels, automotive parts, and equipment. Weld deposits have good ductility and higher tensile strength although it is not suitable for temperatures sustained above 150°F (65°C).

### Chemistry:

-	Typical	AWS Spec. Single values are max.
	i y picai	ATTO OPCC. Single values are max.
Silicon (Si)	0.055	0.250
Iron (Fe	0.130	0.400
Copper (Cu)	0.002	0.100
Manganese (Mn)	0.140	0.05-0.20
Magnesium (Mg)	4.750	4.5-5.5
Zinc (Zn)	0.000	0.100
Titanium (Ti)	0.073	0.06-0.20
Beryllium (Be)	0.0001	0.0008
Chrome (Cr)	0.080	0.05-0.20



### Mechanical Properties: (As Welded)

	Typical	AWS Spec. Single values are min.
Tensile Strength	39,500	35,000 psi
Yield Strength	19,500	ns
Elongation in 2" (%)	17	ns
Post anodize color	White	-

# **Welding Positions:**

All

# Operating Parameters: MIG (GMAW), DCEP DC+

Spray ARC 100% Argon							
Typically, the wire speed is set, then adjust to voltage to the desirable performance.							
Diameter	Amperage	Voltage	Speed (IPM)	Stickout (In.)	Flow Rate (CFH)		
0.030 (.8mm)	60-175	15-24	480-625		25-30		
0.035 (.9mm)	70-185	15-27	450-750	1/2-3/4	30-35		
3/64 (1.2mm)	125-260	20-29	330-500		35-45		
1/16 (1.6mm)	170-300	24-30	250-450		45-75		

## Operating Parameters: TIG (GTAW), DCEN DC- or ACHF

Shielding gas use 100% Argon Shielding Gas Best when using XTRweld brand tungsten, Zirconiated (EWZr-X), Lanthanated (EWLa-X), or Pure (EWP)							
1/16 (1.6mm)	60-80	15	1/16 (1.6mm)	20	3/8" (6)		
3/32 (2.4mm)	85-120	15	3/32 (2.4mm)	20	3/8" (6)		
1/8 (3.2mm)	190-220	15	1/8 (3.2mm)	25	7/16" (7)		
5/32 (4.0mm)	200-300	15-17	5/32 (4.0mm)	30	1/2" (8)		
3/16 (4.8mm)	330-380	15-20	<b>3/16</b> (4.8mm)	35	5/8" (10)		



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