

ER5356

Product Description

ER5356 has a nominal composition (wt.-%) of 5 Mg, balance Al. This filler metal is a non-heat-treatable wire used to weld the 5XXX series base metals to themselves and other alloys. It has become the most commonly used of all filler alloys because of its compatibility with most base alloys.

Specifications

SFA/AWS A5.10 ER5356 ; ISO 18273 - S Al 5356 (AlMg5Cr(A))

Chemical Composition (weld metal wt %)

	Si	Mn	Cr	Cu	Ti	Zn	Fe	Be	Mg	Al	Other
min	-	0.05	0.05	-	0.06	-	-	-	4.50	BAL	-
Max	0.25	0.20	0.20	0.10	0.20	0.10	0.40	0.0003	5.50	BAL	-
Typ	0.06	0.15	0.08	0.01	0.09	0.04	0.12	0.001	5.00	BAL	-

All Welded Mechanical Properties

As welded		Min	Typical
Tensile Strength	Mpa	200	285
0.2% Proof Stress	Mpa	83	130
Elongation A4-A5	%	10	13
Impact Energy	J	--	--

Operating Parameters

Welding process	Diameter	Amperage	Volts	Shielding Gas
GTAW	1.6mm	60-80	Variable	100% Ar (AC-HF)
	2.4mm	125-160	Variable	
	3.2mm	190-220	Variable	
	4.0mm	200-300	Variable	
GMAW	0.8mm	60-175	15-24	100% Ar (DCEP)
	1.0mm	70-185	15-27	
	1.2mm	125-260	20-29	
	1.6mm	170-300	24-30	

Packaging Data

Diameter	TIG	MIG
0.8mm	-	7kgs/Coil
1.0mm	-	7kgs/Coil
1.2mm	-	7kgs/Coil
1.6mm	5kgs/tube	7kgs/Coil
2.4mm	5kgs/tube	-
3.2mm	5kgs/tube	-
4.0mm	5kgs/tube	-