

Description

OK Autrod 5356 is the most widely used welding alloy and can be classified as a general-purpose type filler alloy. OK Autrod 5356 is typically chosen because of its relatively high shear strength. The 5XXX alloy base material, welded with OK Autrod 5356, with a weld pool chemistry greater than 3% Mg and service temperatures in excess of 65°C, is susceptible to stress corrosion cracking. The alloy is non-heat treatable.

Welding current

DC(+)

Classifications

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

Wire composition

Si	Mn	Cr	Cu	Ti	Zn	Fe	Mg
<0.25	0.15	0.13	<0.05	0.11	<0.10	<0.40	5.0

Typical mech. properties all weld metal

Yield stress, MPa	120
Tensile strength, MPa	265
Elongation, %	26

Approvals

ABS	ER 5356 for dim. 1.2 mm
CWB	AWS A5.10 (Item number ending with A)
DB	61.039.01
DNV	5356 (WB)
GL	S-AlMg 5
LR	WB/I-1
VdTÜV	
Ü	61.039

Welding parameters

Diameter, mm	Wire feed, m/min	Welding current, A	Arc voltage, V	Deposition rate kg weld metal/hour
0.8	5-13	60-170	13-24	0.4-1.1
0.9	5-13	60-170	13-24	0.5-1.3
1.0	7-14	90-210	15-26	0.9-1.8
1.2	6-13	140-260	20-29	1.1-2.4
1.6	4.5-7.5	190-350	25-30	1.5-2.5
2.4	3.5-5	280-400	26-31	2.5-3.7