

# AX-5356 AX-AIMg5

## Standard

EN ISO 18273	S Al 5356 (AlMg5)
Material number AWS	3.3556 ER5356
A.5.10	

## Area of application

Filler rod/wire electrode of aluminium-magnesium alloys for TIG or MIG welding of aluminium alloys.

## Special hints

With large workpieces and wall thicknesses above 15mm, preheat the area of the welding groove to 150°C.

## Typical analysis in %

Al Basis	Mg	Mn	Cr	Ti			
	5	0.35	0.1	0.15			

## Important base materials

EN AW-5005 (AlMg1), EN AW-5754 (AlMg3), EN AW-5019 (AlMg5), EN AW-5086 (AlMg4), EN AW-5454 (AlMg3Mn), EN AW-6061 (AlMg1SiCu), EN AW-6082 (AlSi1MgMn), EN AC-51100 (G-AlMg3), EN AC-51300 (G-AlMg5), EN AC-51400 (G-AlMg5Si)

## Material properties

Welding process	TIG/MIG	Mechanical properties of the weld metal as per DIN EN 1732-3
Shielding gas	argon I1 at 20°C	
Test temperature		1732-3
0.2%-yield strength $R_{p_{0.2}}$	[MPa]	110
Tensile strength $R_m$	[MPa]	250
Elongation A ( $L_0 = 5d_0$ ) %	[%]	18
Electrical conductivity	[S*m/mm <sup>2</sup> ]	15-19
Thermal conductivity	[W/(m*K)]	110-150
Thermal expansion coefficient	[1/K]	23.7*10 <sup>-6</sup>

## Applicable shielding gases (EN ISO 14175)

TIG: argon I1, MIG: argon I1 and argon-helium mixtures I3

## Approval

(Request current scope if required)

## Product forms (as per EN ISO 544) (other dimensions available on request)

Spool	Ø mm	0.8	1.0	1.2	1.6	2.4	
Rod	Ø mm x1000mm	1.6	2.0	2.4	3.2	4.0	5.0