

# AK ER5087

## TIG/MIG

### Description:

ER5087 is a 5% magnesium aluminum filler, similar to 5356, but intended for higher tensile performance on magnesium-bearing base metals. Its zirconium addition refines the weld metal, creates a finer grain structure, and reduces the tendency for solidification cracking in restrained welds.

### Application scenario:

Choose ER5087 for high-magnesium aluminum, up to about 5% Mg, when higher joint strength is required. It is well suited to marine, shipbuilding, automotive, railway, and cryogenic work where strong welds, crack resistance, and reliable MIG/TIG performance are important.

### Typical Chemical Composition(%):

	Si	Fe	Cu	Mn	Mg	Zn	Ga V	Ti
<b>Requirement</b>	0.25	0.40	0.05	0.70-1.10	4.50-5.20	0.25	---	0.15
<b>Actual Result</b>	0.20	0.25	0.01	0.85	5.10	0.10	---	0.05
	Zr	Al	Be	Cr	Other			
<b>Requirement</b>	0.10-0.20	Rem.	0.0003	0.05-0.25	0.05			
<b>Actual Result</b>	0.12	Rem.	0.0002	0.17	0.01			

### Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values ( J)
<b>Requirement</b>				
<b>Actual Result</b>	285		18	