



GB/T 10858 S Al 4145

AWS A5.10 ER4145

EN ISO 18273 S Al 4145

# AK ER4145

## TIG/MIG

### Description:

ER4145 is an aluminum-silicon-copper filler with high silicon content, low melting temperature, and high fluidity. Originally developed as a brazing alloy, it is valued for smooth wetting and low susceptibility to weld cracking, especially on copper-bearing or 2xxx-series aluminum alloys.

### Application scenario:

Well suited to repair welding and joining of heat-treatable, copper-containing aluminum parts, castings, and assemblies where puddle flow and crack control are critical. It is often chosen for applications that prioritize easy wetting, clean bead appearance, and process stability over the highest possible tensile strength.

### Typical Chemical Composition(%):

	Si	Fe	Cu	Mn	Mg	Zn	Ga V	Ti
<b>Requirement</b>	9.30-10.7	0.80	3.30-4.70	0.15	0.15	0.20	---	---
<b>Actual Result</b>	9.65	0.42	3.68	0.10	0.08	0.05	---	---
	Zr	Al	Be	Cr	Other			
<b>Requirement</b>	---	Rem.	0.0003	0.15	0.05			
<b>Actual Result</b>	---	Rem.	0.0001	0.10	0.02			

### Typical Mechanical Properties:

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