



GB/T 10858 S Al 5554

AWS A5.10 ER5554

EN ISO 18273 S Al 5554

AK ER5554

TIG/MIG

Description:

ER5554 is an Al-Mg-Mn filler developed to match 5454-type aluminum. Compared with higher-magnesium fillers, it keeps Mg lower to better align with the base alloy, and it is specifically recommended for service at 150°F / 65°C and above where chemistry match and service stability matter.

Application scenario:

Use ER5554 for 5454 and similar base metals in chemical tanks, storage vessels, rail tank cars, trailers, and other transportation equipment exposed to elevated temperatures. It is a strong choice when you want moderate strength, corrosion resistance, and reliable long-term service instead of maximum weld strength.

Typical Chemical Composition(%):

	Si	Fe	Cu	Mn	Mg	Zn	Ga V	Ti
Requirement	0.25	0.40	0.10	0.50-1.0	2.40-3.0	0.25	---	0.05-0.20
Actual Result	0.15	0.10	0.02	0.60	2.85	0.13	---	0.08
	Zr	Al	Be	Cr	Other			
Requirement	---	Rem.	0.0003	0.05-0.20	0.05			
Actual Result	---	Rem.	0.0001	0.12	0.01			

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement				
Actual Result	230		20	