Alloy: COREWELD 4043 | Class: ER4043

ER4043 • Weld Process: MIG & TIG

CERTIFIED TO
AWS A5.10
ASME SFA A5.10

AWS CHEMICAL COMPOSITION REQUIREMENTS | DEPOSITED CHEMICAL COMPOSITION % (TYPICAL)

AWS REQUIREMENT (%)	
Si	4.5 – 6.0
Zn	0.10 max
Fe	0.80 max
Ti	0.20 max
Cu	0.30 max
Al	Remainder
Mn	0.05 max
Be	0.0003
Mg	0.05 max
Other	0.05 each – 0.15 max total

Deposited chemistry is influenced by many factors, so no typical analysis can be reported.

DEPOSITED ALL WELD METAL PROPERTIES % (AS-WELDED) | CHARPY-V-NOTCH IMPACT PROPERTIES %

Deposited all weld metal properties are influenced by many factors such as weld process used, so no typical weld metal properties can be reported.

CHARPY-V-NOTCH IMPACT
Not applicable

RECOMMENDED OPERATION OF WELDING RODS

EXAMPLE	GMAW (MIG)	GTAW (TIG)
Diameter	.030	All diameters (AC) or DCEP for thin gauge
Amps (DC)	120–150	
Volts	20–24	
Gas	Argon 30 CFH	Argon or Argon + Helium for thick base metal
Travel Speed	24–30 IPM	

APPLICATION

COREWELD 4043 ER4043 aluminum filler materials are silicon-aluminum types for welding of 6052 and 6063 types; in some cases, other aluminums are also welded with this type. Brazing of 1100 and 3003 can be accomplished with free flowing 4043 composition.

– The proper choice of aluminum filler metal mainly depends on the base metal properties to be achieved and welding technique. Post weld cracking, corrosion resistance and behavior under elevated temperature also need to be taken into consideration.

– Cracking usually can be minimized by choosing a filler metal alloy of higher alloy content than the base metal.

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