Inweld 4043

AWS A5.10 ER4043

Chemical Composition of Inweld 4043

Fe	Al	Zn	Ti	Mg	Mn	Si	Be	S	Cu	Other
0.08	Balance	0.10	0.20	0.05	0.05	4.5-6.0	0.08	---	0.30	0.15

Single values are maximum unless otherwise specified.

Description and Applications

Inweld 4043 is a silicon-aluminum wire for welding of 5052 and 6063 types; in some cases, other aluminums are also welded with this type. Silicon content is 5%. Inweld 4043 can also be used for welding 3003, 3004, 6061, and casting alloys 43, 355, 356, and 214. Brazing of 1100 and 3003 can be accomplished with free flowing 4043 composition. The post-anodizing color tint is gray.

Typical Weld Metal Properties

	AWS Spec
Tensile Strength:	27,000 psi
Yield Strength:	17,000 psi
Elongation:	8%

Recommended Parameters

GMAW (DCEP – Electrode+) Spray

Wire Diameter	Voltage	Amperage	Wire Feed IPM
0.030”	15-24	60-175	25-45
0.035”	15-27	70-185	25-40
3/64”	20-29	125-260	24-35
1/16”	24-30	170-300	28-38
3/32”	26-31	275-400	14-20

GTAW (DCEN – Electrode-)

Filler Wire Size	Tungsten Dia.	Voltage	Amperage	Argon (CFH)
1/16”	1/16”	15	60-80	20
3/32”	3/32”	15	125-160	20
1/8”	1/8”	15	190-220	20
5/32”	5/32”	15	200-300	25
3/16”	3/16”	15-20	330-380	25