Arcaloy T-409Ti

AWS A5.22 E409T0-G

Application

 Arcaloy T-409Ti is a composite wire designed to match the corrosion resistance and mechanical properties of type 409Ti stainless steel. This material is widely used in automotive exhaust systems.

Benefits

 Since Arcaloy T-409Ti is a composite wire rather than a solid wire, small additions of easily ionized materials can be added to the wire core to act as arc stabilizers. Because of the presence of these arc stabilizers, the wire will exhibit smoother operation and lower spatter at a given amperage and voltage than will be seen with a comparable solid wire. Deposition efficiency will essentially match the solid wire, but at a given amperage and voltage, the composite wire will give a somewhat higher deposition rate.

	Optimum Parameters		Operating Range	
Wire Dia.	Amperes	Volts	Amperes	Volts
0.045"	230	24	200~260	22~28
0.052"	250	25	220~280	23~29

• For best results, set wire feed speed and adjust voltage to get the smoothest operation. Run DC+(reverse polarity) and a 1/2" to 5/8"(12.7mm to 15.9mm) stickout. Weld using 98% argon 2% oxygen shielding gas at 35 CFH(16.5ℓ/min).

Typical Mechanical Properties of All Weld Metal

Yield Point	Tensile Strength
N/mm²{kgf/mm²}	N/mm²{kgt/mm²}
410 {42}	530 {54}

Typical Undiluted Weld Metal Analysis %

С	Mn	Si	Р	S	Cr	Ti
0.02	0.41	0.56	0.009	0.006	11.8	0.90