

Techalloy® 308/308L

AWS ER308L



CONFORMANCES

AWS A5.9 ER308L
 UNS S30880/S30883
 ISO 14343:2009 (19 9 L)

Techalloy® 308/308L electrodes give a weld deposit, with reduced carbon levels (0.04% max) that offers increased resistance to inter-granular corrosion. Type 308L is ideal for welding Type 304L stainless steels.

Applications: 304 Steels

DIAMETERS / PACKAGING

Diameter in (mm)		MIG WIRE 33 lb (14.9 kg) Wire Basket	TIG WIRE 10 lb (4.5 kg) Tube 30 lb (13.6 kg) Master Carton	SAW WIRE 55 lb (25 kg) Coil
*0.035	(0.9)	MG308L035667		
*0.045	(1.2)	MG308L045667		
1/16	(1.6)	MG308L062667	TG308L062638	SA308L062726
3/32	(2.4)		TG308L093638	SA308L093726
1/8	(3.2)		TG308L125638	SA308L125726
5/32	(4.0)		TG308L156638	SA308L156726

* Bulk packaging available - Contact Lincoln Electric

DEPOSIT COMPOSITION

	%C	%Cr	%Ni	%Mo	%Mn
Requirements AWS ER308L	0.03 max	19.5 - 22.0	9.00 - 11.00	0.75 max.	1.0 - 2.5
Typical Performance Techalloy® 308/308L	0.01	19.7	9.7	0.17	1.7
	%Si	%P	%S	%Cu	FN
Requirements AWS ER308L	0.30 - 0.65	0.03 max	0.03 max.	0.75 max.	Not Required
Typical Performance Techalloy® 308/308L	0.37	0.02	0.01	0.18	8 - 14

TYPICAL OPERATING PROCEDURES

Process	Diameter in (mm)	Voltage (volts)	Amperage	Gas Flow	Gas	
MIG	0.035 (0.9)	26-29	160-210	30-50 CFH	98/99% Argon + 2/1% Oxygen 97% Argon + 3% CO ₂	
	0.045 (1.2)	28-32	180-250			
	0.062 (1.6)	29-33	200-280			
TIG	1/16 (1.6)		90-130	20 - 40 CFH	100% Argon	
	3/32 (2.4)		120-175			
	1/8 (3.2)		150-220			
	5/32 (4.0)		160-230			
SAW	1/16 (1.6)			275-350 350-450 400-550	Lincolnweld® P2007	
	3/32 (2.4)		28-33			275-350
	1/8 (3.2)		29-32			350-450
	5/32 (4.0)		30-33			400-550

Material Safety Data Sheets (MSDS) are available on our website at www.techalloy.com

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application.

CUSTOMER ASSISTANCE POLICY

The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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