

# Techalloy® 308/308H

AWS ER308H



## CONFORMANCES

AWS ER308H

UNS S30880

**Techalloy® 308/308H** electrodes are used to weld unstabilized austenitic stainless steels such as 302, 304H and 305. Techalloy® 308/308H electrodes provide a high carbon deposit (minimum of .04% carbon) for high temperature applications. Typical applications include chemical, petrochemical industries as well as distillery, dairy and restaurant equipment.

Applications: Chemical Process & Petrochemical, Catalytic Crackers, Pulp and Paper

## 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
0.030	(0.8)	MG308H030667		
0.035	(0.9)	MG308H035667		
0.045	(1.2)	MG308H045667		
1/16	(1.6)	MG308H062667	TG308H062638	
3/32	(2.4)		TG308H093638	SA308H093726
1/8	(3.2)		TG308H125638	SA308H125726

**DEPOSIT COMPOSITION**

	%C	%Cr	%Ni	%Mo	%Mn
<b>Requirements</b> AWS ER308H	0.04 - 0.08	19.5 - 22.0	9.00 - 11.00	0.50 max.	1.0 - 2.5
<b>Typical Performance</b> Techalloy® 308/308H	0.06	19.9	9.7	0.07	1.8
	%Si	%P	%S	%Cu	FN
<b>Requirements</b> AWS ER308H	0.30 - 0.65	0.04 max.	0.03 max	0.75 max.	Not Required
<b>Typical Performance</b> Techalloy® 308/308H	0.44	0.02	0.006	0.10	5 - 12

**TYPICAL OPERATING PROCEDURES**

Process	Diameter in (mm)	Voltage (volts)	Amperage	Gas Flow	Gas
MIG	0.030 (0.8)	26-29 28-32 29-33	160-210	30-50 CFH	98/99% Argon + 2/1% Oxygen 97% Argon + 3% CO <sub>2</sub>
	0.035 (0.9)		180-250		
	0.045 (1.2)		200-280		
	0.062 (1.6)				
TIG	1/16 (1.6)	90-130 120-175 150-220	90-130	20-40 CFH	100% Argon
	3/32 (2.4)		120-175		
	1/8 (3.2)		150-220		
SAW	3/32 (2.4)	28-30 29-32	275-350		Lincolnweld® P2007
	1/8 (3.2)		350-450		

Material Safety Data Sheets (MSDS) are available on our website at [www.techalloy.com](http://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.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change - This information is accurate to the best of our knowledge at the time of printing. Please refer to [www.lincolnelectric.com](http://www.lincolnelectric.com) for any updated information.