

**Excalibur® 308/308H-16, 308L-16**

308/308H-16: AWS E308-16/E308H-16; 308L-16: AWS E308L-16



**KEY FEATURES**

- Q2 Lot® - Certificate showing actual deposit chemistry and calculated ferrite number (FN) available online
- Designed with low carbon levels to help eliminate carbide precipitation in high temperature service
- Flux coating provides smooth arc transfer and slag is self-peeling for easy removal
- Versatile electrode designed to weld several types of austenitic steels

**CONFORMANCES**

**AWS A5.4/A5.4M: 2006:**

308/308H-16	E308-16, E308H-16
308L-16	E308L-16

**ASME SFA-A5.4:**

**Same as Above**

**ABS:**

308/308H-16	E308-16, E308H-16
308L-16	E308L-16

**CWB/CSA W48-06:**

308/308H-16	E308-16, E308H-16
308L-16	E308L-16

**MIL-E-22200/2:**

308/308H-16	MIL-308-16
308L-16	MIL-308L-16

## APPLICATIONS

- A743 and A744 Type CF-8 cast material
- Type 304 stainless steels

## WELDING POSITIONS

308/308H-16, 308L-16

All, except vertical down

## DIAMETERS / PACKAGING

Diameter		Length		8 lb (3.6 kg) Easy Open Can	
in	(mm)	in	(mm)	308/308H-16	308L-16
3/32	(2.4)	12	(300)	ED033083	ED033079

  

Diameter		Length		10 lb (4.5 kg) Easy Open Can	
in	(mm)	in	(mm)	308/308H-15	308L-16
1/8	(3.2)	14	350)	ED033084	ED033080
5/32	(4.0)	14	(350)	ED033085	ED033081
3/16	(4.8)	14	(350)	ED033086	ED033082

## MECHANICAL PROPERTIES(1) – As Required per AWS A5.4/A5.4M: 2006

	Yield Strength(2)	Tensile Strength	Elongation	Ferrite
	MPa (ksi)	MPa (ksi)	%	Number
<b>Requirements</b>				
AWS E308-16, E308H-16	Not	550 (80) min.	35 min.	Not
AWS E308L-16	Specified	520 (75) min.	35 min	Specified
<b>Typical Performance(3)</b>				
As-Welded				
308/308H-16	435 - 545 (63 - 79)	595 - 640 (86 - 93)	41 - 48	2 - 4
308L-16	370 - 420 (54 - 61)	540 - 595 (78 - 86) □	50 - 55	8 - 9

**DEPOSIT COMPOSITION(1) – As Required per AWS A5.4/A5.4M: 2006**

	%C(4)	%Cr	%Ni	%Mo	%Mn
<b>Requirements</b>					
AWS E308-16, E308H-16, E308L-16 0	0.04 - 0.08(4)	18.0 - 21.0	9.0 - 11.0	0.75 max.	0.5 - 2.5
<b>Typical Performance(3)</b>					
308/308H-16	0.05 - 0.06	19.7 - 20.3	9.9 - 10.1	0.03 - 0.07	0.7 - 0.8
308L-16	0.02 - 0.03	19.5 - 19.8	9.7 - 10.3	0.04 - 0.13	0.6 - 0.9
	%Si	%P	%S	%Cu	
<b>Requirements</b>					
AWS E308-16, E308H-16, E308L-16	1.00 max	0.04 max.	0.03 max.	0.75 max.	
<b>Typical Performance(3)</b>					
308/308H-16	0.30 - 0.40	0.03	0.02	0.17	
308L-16	0.29 - 0.36	0.03	0.02	0.10	

**TYPICAL OPERATING PROCEDURES**

Polarity	Current (Amps)			
	3/32 in (2.4 mm)	1/8 in (3.2 mm)	5/32 in (4.0 mm)	3/16 in (4.8 mm)
308/308H-16, 308L-16 DC+/AC	40 - 70	60-100	90 - 140	120 - 185