

# S-308L.16N[17]

Type : Rutile, Rutile-acid



## Conformances

AWS A5.4/ ASME SFA5.4 E308L-16  
 JIS Z3221 ES308L-16 / EN ISO 3581-A-E 19 9 L R  
 AWS A5.4 / ASME SFA5.4 E308L-17  
 JIS Z3221 ES308L-17 / EN ISO 3581-A-E 19 9 L R  
 KR RD308L  
 ABS AWS A5.4 E308L-16  
 AWS A5.4 E308L-17  
 LR 304L  
 BV 308L

DNV-GL NV 308L  
 NK KD308L  
 CWB CSA W48 E308L-16  
 TÜV EN ISO 3581-A - E 19 9 L  
 DB DIN EN ISO 3581-A-E 199 L R  
 CE  
 CCS 304L

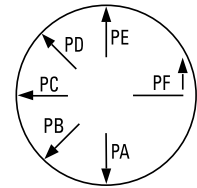
## Applications

- Stainless steel (low carbon 18%Cr-8%Ni)

## Features

- Good resistance to corrosion and oxidizing environments
- Easy to remove slag
- Good bead appearance
- High moisture resistance (17 type)

## Welding Position



## Current

AC or DC ±

## Redrying Conditions

350°C (662°F) X 1hr

## Diameter / Packaging

| Diameter   | Length   | Standard   |             | Vacuum        |              |            |             | P.V.C        |             |
|------------|----------|------------|-------------|---------------|--------------|------------|-------------|--------------|-------------|
|            |          | packet     | carton      | packet        | carton       | packet     | carton      | packet       | carton      |
| mm (in)    | mm (in)  | 5kg(11lbs) | 20kg(44lbs) | 1.5kg(3.3lbs) | 15kg(3.3lbs) | 5kg(11lbs) | 20kg(44lbs) | 2.5kg(11lbs) | 10kg(22lbs) |
| 2.0 (5/64) | 300 (12) |            |             |               |              |            |             |              | ✓           |
| 2.6 (3/32) | 300 (12) |            |             |               |              |            |             |              | ✓           |
| 3.2 (1/8)  | 350 (14) |            |             |               |              |            |             |              | ✓           |
| 4.0 (5/32) | 350 (14) |            |             |               |              |            |             |              | ✓           |
| 5.0 (3/16) | 350 (14) |            |             |               |              |            |             |              | ✓           |

SMAW

SAW

GMW

GTAW

FCAW

Non-FERROUS

APPENDIX

### Typical Chemical Composition of All-Weld Metal (%)

| Product name | C    | Si   | Mn   | P     | S     | Cr   | Ni   |
|--------------|------|------|------|-------|-------|------|------|
| S-308L.16N   | 0.02 | 0.67 | 0.87 | 0.028 | 0.018 | 19.2 | 10.0 |
| S-308L.17    | 0.02 | 0.63 | 0.98 | 0.028 | 0.017 | 19.0 | 9.9  |

### Typical Mechanical Properties of All-Weld Metal

| Product name | TS<br>MPa(lbs/in <sup>2</sup> ) | EL<br>(%) |
|--------------|---------------------------------|-----------|
| S-308L.16N   | 561 (81,500)                    | 44.0      |
| S-308L.17    | 570 (82,800)                    | 49.0      |

### Typical Welding Parameters / Amp.(A)

| Diameter mm (in) | 2.0 (5/64) | 2.6 (3/32) | 3.2 (1/8) | 4.0 (5/32) | 5.0 (3/16) |
|------------------|------------|------------|-----------|------------|------------|
| Length mm (in)   | 300 (12)   | 300 (12)   | 350 (14)  | 350 (14)   | 350 (14)   |
| F & HF           | 25-55      | 50-85      | 70-115    | 95-145     | 135-180    |
| V-up, OH         | 20-50      | 45-80      | 65-110    | 85-135     | -          |