

Inweld 308L

AWS A5.9 ER308L

Chemical Composition of Inweld 308L

| Fe | C | Cr | Ni | Mo | Mn | Si | P | S | Cu |
|---------|------|-------|------|------|------|-------|------|------|------|
| Balance | 0.03 | 19.5- | 9.0- | 0.75 | 1.0- | 0.30- | 0.03 | 0.03 | 0.75 |
| | | 22.0 | 11.0 | | 2.5 | 0.65 | | | |

Single values are maximum unless otherwise specified.

Description and Applications

Inweld 308L is similar to Inweld 308 but contains an average of 0.025% carbon producing a weld deposit with great resistance against inter-granular corrosion caused by carbide precipitation. This is probably the most popular grade among the stainless steel alloys. It is used for general purpose applications where corrosion conditions are moderate. Inweld 308L should not be used for a mild steel to stain less joining applications. Used more commonly for welding AISI types 304L, 308L, 321, and 347.

Typical Weld Metal Properties

| | <u>AWS Spec</u> |
|-------------------|-----------------|
| Tensile Strength: | 88,500 psi |
| Yield Strength: | 59,500 psi |
| Elongation: | 39% |

Recommended Parameters

GMAW (DCEP – Electrode+) 99% Argon / 1% CO₂, or a 97% Argon / 3% CO₂ Mixture For Solid Wire

| <u>Wire Diameter</u> | <u>Voltage</u> | <u>Amperage</u> |
|----------------------|----------------|-----------------|
| 0.035" | 26-29 | 160-210 |
| 0.045" | 28-32 | 180-250 |
| 1/16" | 29-33 | 200-280 |

GTAW (DCEN – Electrode -) 100% Ar 2% Thoriated

| <u>Filler Wire Size</u> | <u>Tungsten Dia.</u> | <u>Voltage</u> | <u>Amperage</u> | <u>Argon (CFH)</u> |
|-------------------------|----------------------|----------------|-----------------|--------------------|
| 1/16" | 1/16" | 12 | 80-150 | 20 |
| 3/32" | 3/32" | 12 | 150-250 | 20 |
| 1/8" | 1/8" | 12 | 200-375 | 25 |

INWELDCORPORATION.COM

Pennsylvania
3962 Portland Street
Coplay, PA 18037

North Carolina
1029 S. Marietta St.
Gastonia, NC 28054

Texas
9300 Lawndale St.
Houston, TX 77012

California
6201 Coliseum Way, Unit A
Oakland, CA 94621