GEN⁴ WELDING
CENTRAL WIRE INDUSTRIES

## GEN 308 Welding Wire and Rod

GEN 308 is used for welding a wide variety of unstabilized stainless steels such as type 301, 302, 304, 305 and 308. GEN 308 meets chemical requirements of both ER308 and ER308H. The higher carbon content, between .04% and .08%, in ER308H provide higher tensile and creep strength at elevated temperature.

### CONFORMANCES

| | | |
|---|---|---|
| AWS A5.9/A5.9M | : | ER308, ER308H |
| ASME SFA-A5.9 | : | ER308, ER308H |
| UNS | : | S30880 |

### AWS CHEMICAL COMPOSITION *(TYPICAL)*

| %C | %Cr | %Ni | %Mo | %Mn |
|---|---|---|---|---|
| 0.04 – 0.08 | 19.5 – 22.0 | 9.0 – 11.0 | 0.50 max | 1.0 – 2.5 |
| *0.05* | *20.1* | *9.7* | *0.08* | *1.8* |

| %Si | %P | %S | %Cu |
|---|---|---|---|
| 0.30 – 0.65 | 0.03 max | 0.03 max | 0.75 max |
| *0.43* | *0.02* | *0.01* | *0.11* |

### TYPICAL WELD METAL MECHANICAL PROPERTIES

| | | | |
|---|---|---|---|
| Tensile Strength | : | 90,000 psi | 620 MPa |
| Yield Strength | : | 61,000 psi | 420 MPa |
| Elongation | : | 38 % | |

### TYPICAL WELDING PARAMETERS

| Process | Diameter | | Voltage | Amperage | Gas/Flux |
|---|---|---|---|---|---|
| TIG (GTAW) | 1/16” | 1.6 mm | 14 – 18 | 80 – 150 | 100% Ar |
| | 3/32” | 2.4 mm | 15 – 20 | 150 – 250 | 100% Ar |
| | 1/8” | 3.2 mm | 16 – 20 | 200 – 375 | 100% Ar |
| MIG (GMAW) | .035” | 0.9 mm | 29 - 33 | 160 - 180 | 98%Ar – 2%$O_2$ |
| | .045” | 1.1 mm | 29 – 33 | 180 - 220 | |
| | .063” | 1.6 mm | 29 – 33 | 210 - 250 | |
| Sub Arc (SAW) | .093” | 2.4 mm | 29 – 32 | 300 – 350 | |
| | .125” | 3.2 mm | 29 – 32 | 400 – 550 | |
| | .156” | 4.0 mm | 29 - 32 | 500 - 650 | |

*All parameters are suggested as basic guidelines only and will vary depending on joint design, number of passes and other factors.

| IMPORTANT: SPECIAL VENTILATION AND/OR EXHAUST REQUIRED |
|---|
| BEFORE USE, READ AND UNDERSTAND THE SAFETY DATA SHEET (SDS) FOR THIS PRODUCT AND SPECIFIC INFORMATION PRINTED ON THE PRODUCT CONTAINER. |