

## GEN 208 Welding Wire and Rod

GEN 208 is used for GMAW, GTAW, and SAW of Nickel 200 and 201. It can also be used in dissimilar welding applications such as joining Nickel 200 and 201 to carbon steel, stainless steel, and copper-nickel alloys. Additionally, GEN 208 is used for surfacing of steel.

### CONFORMANCES

|               |   |        |
|---------------|---|--------|
| AWS A5.14     | : | ERNi-1 |
| ASME SFA-5.14 | : | ERNi-1 |
| UNS           | : | N02061 |

### AWS CHEMICAL COMPOSITION (TYPICAL)

| %C                | %Mn                | %Ni                 | %Cu                | %Fe              | %Al               |
|-------------------|--------------------|---------------------|--------------------|------------------|-------------------|
| 0.15 max.<br>0.04 | 1.0 max.<br>0.38   | 93.0 min.<br>95.50  | 0.25 max.<br>0.015 | 1.0 max.<br>0.18 | 1.50 max.<br>0.10 |
| %Si               | %P                 | %S                  | %Ti                | Total Others     |                   |
| 0.75 max.<br>0.57 | 0.03 max.<br>0.003 | 0.015 max.<br>0.003 | 2.0 – 3.5<br>2.95  | 0.50 max.        |                   |

### TYPICAL WELD METAL MECHANICAL PROPERTIES

|                  |   |            |         |
|------------------|---|------------|---------|
| Tensile Strength | : | 65,000 psi | 448 MPa |
| Yield Strength   | : | 36,000 psi | 248 MPa |
| Elongation       | : | 28 %       |         |

### TYPICAL WELDING PARAMETERS\*

| Process       | Diameter |        | Voltage | Amperage  | Gas/Flux        |
|---------------|----------|--------|---------|-----------|-----------------|
| TIG (GTAW)    | 1/16"    | 1.6 mm | 14 – 18 | 90 – 130  | 100% Ar         |
|               | 3/32"    | 2.4 mm | 15 – 20 | 120 – 175 | 100% Ar         |
|               | 1/8"     | 3.2 mm | 15 – 20 | 150 – 220 | 100% Ar         |
| MIG (GMAW)    | .035"    | 0.9 mm | 26 – 30 | 150 – 200 | 75% Ar – 25% He |
|               | .045"    | 1.1 mm | 28 – 32 | 170 – 220 | 75% Ar – 25% He |
| Sub Arc (SAW) | .093"    | 2.4 mm | 28 – 31 | 275 – 350 |                 |
|               | .125"    | 3.2 mm | 29 – 32 | 350 – 450 |                 |

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

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