

CWR-430 Welding Wire and Rod

CWR-430 is a ferritic stainless steel filler metal offering good ductility in heat-treated condition. It is generally used to weld similar alloys but can also be used for overlays and thermal spraying. Pre-heating and post weld heat treatment is required to obtain optimum mechanical properties and corrosion resistance.

CONFORMANCES

| | | |
|----------------|---|--------|
| AWS A5.9/A5.9M | : | ER 430 |
| ASME SFA-A5.9 | : | ER 430 |
| ISO 14343-B | : | SS 430 |

AWS CHEMICAL COMPOSITION (TYPICAL)

| %C | %Cr | %Ni | %Mo | %Mn |
|----------|-------------|----------|----------|--------------|
| 0.10 max | 15.5 – 17.0 | 0.60 max | 0.75 max | 0.60 max |
| %Si | %P | %S | %Cu | Total Others |
| 0.50 max | 0.03 max | 0.03 max | 0.75 max | 0.50 max |

TYPICAL WELD METAL MECHANICAL PROPERTIES

| | | |
|------------------|---|------------|
| Yield Strength | : | 59,000 psi |
| Tensile Strength | : | 77,500 psi |
| Elongation | : | 25 % |

TYPICAL WELDING PARAMETERS

| Process | Diameter | | Voltage | Amperage | Gas/Flux |
|---------------|----------|--------|---------|-----------|--------------------------|
| TIG (GTAW) | 1/16" | 1.6 mm | 14 – 17 | 90 – 130 | 100% Ar |
| | 3/32" | 2.4 mm | 15 – 20 | 125 – 175 | 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 | 98%Ar – 2%O ₂ |
| Sub Arc (SAW) | .093" | 2.4 mm | 28 – 33 | 250 – 450 | |
| | .125" | 3.2 mm | 29 – 34 | 300 – 500 | |

*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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| 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. |

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