

## GEN 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	:	ER430
ASME SFA-A5.9	:	ER430
UNS	:	S43080

### AWS CHEMICAL COMPOSITION (TYPICAL)

%C	%Cr	%Ni	%Mo	%Mn
0.10 max 0.025	15.5 – 17.0 16.13	0.60 max 0.32	0.75 max 0.055	0.60 max 0.37
%Si	%P	%S	%Cu	
0.50 max 0.28	0.03 max 0.023	0.03 max 0.004	0.75 max 0.23	

### TYPICAL WELD METAL MECHANICAL PROPERTIES

Tensile Strength	:	77,500 psi	534 MPa
Yield Strength	:	59,000 psi	407 MPa
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 <sub>2</sub>
	.045"	1.1 mm	29 – 33	180 – 220	98%Ar – 2%O <sub>2</sub>
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.

<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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