GEN 630 Welding Wire and Rod

GEN 630 is designed primarily for welding ASTM A564 Type 630 (17-4PH) and other similar precipitation-hardening stainless steel. The chemical composition is modified to minimize the presence of ferrite networks in the martensitic microstructure which has a significant effect on mechanical properties.

CONFORMANCES

AWS A5.9/A5.9M	:	ER630
ASME SFA-A5.9	:	ER630
UNS	:	S17480

AWS CHEMICAL COMPOSITION *(TYPICAL)*

%C	%Cr	%Ni	%Mo	%Mn
0.05 max	16.0 – 16.75	4.5 – 5.0	0.75 max	0.25 – 0.75
0.02	*15.6*	*4.6*	*0.13*	*0.70*

%Si	%P	%S	%Cu	Nb+Ta
0.75 max	0.03 max	0.03 max	3.25 – 4.00	0.15 – 0.30
0.42	*0.02*	*0.02*	*3.30*	*0.25*

TYPICAL WELD METAL MECHANICAL PROPERTIES

Tensile Strength	:	150,000 psi	1034 MPa
Yield Strength	:	135,000 psi	930 MPa
Elongation	:	10 %	

TYPICAL WELDING PARAMETERS

Process	Diameter		Voltage	Amperage	Gas/Flux
TIG (GTAW)	1/16”	1.6 mm	14 – 16	90 – 140	100% Ar
	3/32”	2.4 mm	15 – 20	120 – 175	100% Ar
	1/8”	3.2 mm	16 – 20	180 – 300	100% Ar
MIG (GMAW)	.035”	0.9 mm	23 – 29	170 – 300	98%Ar – 2%O_2
	.045”	1.1 mm	24 – 30	190 – 360	98%Ar – 2%O_2
Sub Arc (SAW)	.093”	2.4 mm	28 – 32	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.

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.