

## GEN C189 Welding Wire and Rod

GEN C189 is a deoxidized copper filler metal containing 98% copper and small amounts of silicon and phosphorus. It is generally used for welding of deoxidized and electrolytic tough pitch (ETP) copper base materials. Preheating is essential when welding thick base metal.

### CONFORMANCES

AWS A5.7	:	ERCu
ASME SFA-5.7	:	ERCu
UNS	:	C18980

### AWS CHEMICAL COMPOSITION (TYPICAL)

%Cu	%Sn	%Mn	%Si
98.0 min.	1.0 max.	0.50 max.	0.50 max.
%P	%Pb	%Al	Total Others
0.15 max.	0.02 max.	0.01	0.50 max.

### TYPICAL WELD METAL MECHANICAL PROPERTIES

Tensile Strength	:	25,000 psi min
Elongation	:	28%
Electrical Conductivity	:	30% (of IACS)

### TYPICAL WELDING PARAMETERS\*

Process	Diameter		Voltage	Amperage	Gas/Flux
TIG (GTAW)	1/16"	1.6 mm	Electrode	70 – 150	100% Ar
	3/32"	2.4 mm	Negative	150 – 200	100% Ar
	1/8"	3.2 mm	(DCEN)	230 – 390	100% Ar
MIG (GMAW)	.035"	0.9 mm	23 – 26	145 – 185	75% Ar – 25% He
	.045"	1.1 mm	26 – 29	195 – 225	75% Ar – 25% He

\*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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