

		600	316	50.9	351	100.9	696	39.0
		700	371	47.0	324	99.3	685	41.3
		800	427	51.5	355	100.3	692	41.1
Synergic Gas MetalArc GMAW (MIG)	0.75/19.1	RT	RT	72.6	501	121.1	835	37.2
		200	93	66.4	458	115.3	795	39.7
		300	149	63.5	438	109.7	756	37.6
		400	204	58.3	402	104.3	719	39.3
		500	260	59.2	408	98.8	681	33.7
		600	316	59.9	413	102.8	709	42.5
		700	371	58.7	405	99.7	687	37.2
800	427	60.3	416	99.2	684	38.8		
Shielded Metal Arc(SMAW)	1.0/25.4	RT	RT	75.0	517	121.5	838	30.2
		200	93	67.2	463	114.3	788	28.6
		300	149	57.0	393	108.8	750	32.0
		400	204	58.8	405	103.7	715	30.1
		500	260	60.2	415	103.3	712	32.3
		600	316	57.5	396	101.4	699	31.2
		700	371	54.7	377	97.4	672	31.3
		800	427	54.6	376	97.6	673	30.8

All Weld Tensile Metal Data

- Bar Samples of Diameter 12.7 mm (0.5 in) from GMAW (MIG) Cruciforms

Welding Process	Consumable Diameter	Temperature		0.2% Offset Yield Strength		Ultimate Tensile Strength		Elongation
		°F	°C	ksi	MPa	ksi	MPa	
-	in/mm							%
Synergic Gas MetalArc GMAW (MIG)	0.045/1.1	RT	RT	73.8	509	110.8	764	47.7
		200	93	68.9	475	104.8	723	46.1
		300	149	64.8	447	101.6	701	50.8
		400	204	62.3	430	96.8	667	47.2
		500	260	62.6	432	93.8	647	46.0
		600	316	61.2	422	94.4	651	51.3
		700	371	59.8	412	91.6	632	49.5
		800	427	58.8	405	88.9	613	50.9