

# Solid wire for TIG welding

## Solid wire for stainless steel

Product Name	Specification		Shield gas	Application and features
	JIS	AWS		
TGC-308H	Y308H	ER308H	Ar	For welding of 18%Cr-8%Ni steel (SUS304)
TGC-308(L)	Y308(L)	ER308(L)	Ar	For welding of low carbon 18%Cr-8%Ni steel (SUS304L)
TGC-309(L)	Y309(L)	ER309(L)	Ar	For welding of 22%Cr-12%Ni steel (SUS309S), 18%Cr-8%Ni clad steel and dissimilar steels such as low alloy steel or mild steel to stainless steel.
TGC-310	Y310	ER310	Ar	For welding of 25%Cr-20%Ni steel (SUS310S)
TGC-316(L)	Y316(L)	ER316(L)	Ar	For welding of low carbon 18%Cr-12%Ni-Mo steel (SUS316L)
TGC-347	Y347	ER347	Ar	For welding of 18%Cr-8%Nb steel (SUS347) and 18%Cr-8%Ni-Ti Steel (SUS321)
TGC-410	Y410	ER410	Ar	For welding of 18%Cr steel (SUS403, SUS410)
TGC-430	Y430	ER430	Ar	For welding of 13%Cr steel (SUS430)

Dia. (Ømm)	Typical chemical composition of weld metal (%)						Typical mechanical properties of weld metal			Tip color
	C	Mn	Si	Cr	Ni	Mo	TSN/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	EL (%)	IV J (kgf-m)	
1.2 1.6 2.0 2.4 3.2	0.05	1.85	0.35	19.85	10.14	-	580(59)	43	0°C 150(15) - 196°C39(4.0)	Yellow
1.2 1.6 2.0 2.4 3.2	0.05 (0.022)	1.80	0.38	19.96	9.95	-	570(58)	45	0°C 160(16) -196°C 78(8.0)	Red
1.2 1.6 2.0 2.4 3.2	0.06 (0.023)	1.96	0.40	23.50	13.30	-	570(58)	40	0°C 130(13)	Yellow -Green
1.6 2.0 2.4 3.0	0.09	1.90	0.36	26.73	20.90	-	610(62)	41	0°C 110(11)	Gold
1.2 1.6 2.0 2.4 3.2	0.05 (0.020)	1.85	0.36	19.10	12.38	2.28	550(56)	44	0°C 140(14) - 196°C49(5.0)	Green
1.2 1.6 2.0 2.4 3.2	0.05	1.80	0.39	19.55	9.57	Nb 0.80	640(65)	40	0°C 88(9.0)	Blue
1.6 2.0 2.4 3.2	0.09	0.38	0.33	12.75	-	-	530(54)	37	-	Purple
1.6 2.0 2.4 3.2	0.05	0.35	0.34	16.35	-	-	530(54)	27	-	Light -Brown