

# Solid wire for MIG welding

## Solids wire for stainless steel

Product name	Specification		Shield gas	Application and features
	JIS	AWS		
MGC-308(L)	Y308(L)	ER308(L)	Ar+2%O <sub>2</sub>	For MIG welding of low carbon 18%Cr-8%Ni Steel (SUS304L)
MGC-308LSi	Y308LSi	ER308LSi	Ar+2%O <sub>2</sub>	For MIG welding of SUS304L. The arc stability, bead width and blowhole resistibility is good because of high Si. It can be applied to multi-layer welding.
MGC-309(L)	Y309(L)	ER309(L)	Ar+2%O <sub>2</sub>	For MIG welding of low carbon 18%Cr-8%Ni clad steel, SUS309S, and dissimilar metals such as low alloy steel or mild steel to stainless steel
MGC-309LSi	Y309LSi	ER309LSi	Ar+2%O <sub>2</sub>	For MIG welding of SUS309S, 18%Cr-8%Ni Clad steel and dissimilar metals to stainless steel. The arc stability, bead width and blowhole is good because of high Si. It can be applied to multi-layer welding.
MGC-310	Y310	ER310	Ar+2%O <sub>2</sub>	For MIG welding of 25%Cr-20%Ni Steel (SUS310S)
MGC-316(L)	Y316(L)	ER316(L)	Ar+2%O <sub>2</sub>	For MIG welding of low carbon 18%Cr-12%Ni-Mo steel (SUS316L) and SUS316

Dia. ( $\varnothing$ mm)	Typical chemical composition of weld metal(%)						Typical mechanical properties of weld metal		
	C	Mn	Si	Cr	Ni	Mo	TS N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	EL (%)	IV J (kgf-m)
0.9 1.0 1.2 1.6	0.04 (0.021)	1.75	0.94	19.74	9.91	-	570(58)	42	0°C: 98(10) -196°C 59(6.0)
1.0 1.2 1.6 2.0	0.020	1.75	0.84	19.91	10.06	-	580(59)	42	-
1.0 1.2 1.6	0.06 (0.021)	1.77	0.36	23.86	12.83	-	580(59)	40	0°C 130(13) -20°C
1.0 1.2 1.6 2.0	0.022	1.80	0.85	23.70	12.95	-	580(59)	40	-
1.0 1.2 1.6	0.09	1.76	0.35	26.73	20.75	-	600(61)	38	0°C 78(8.0)
0.9 1.0 1.2 1.6	0.05 (0.021)	1.73	0.39	19.10	12.43	2.35	560(57)	42	0°C: 120(12) -120°C

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Product name	Specification		Shield gas	Application and features
	JIS	AWS		
MGC-316LSi	Y316LSi	ER316LSi	Ar+2%O <sub>2</sub>	For MIG welding of SUS316L and SUS316. The arc stability, bead width and blowhole resistibility is good because of high Si. It can be applied to multi-layer welding.
MGC-317(L)	Y317(L)	ER317(L)	Ar+2%O <sub>2</sub>	For MIG welding of low carbon 18%Cr-12%Ni-3%Mo steel
MGC-347	Y347	ER347	Ar+2%O <sub>2</sub>	For MIG welding of 18%Cr-8%Ni-Nb steel (SUS347) and 18%Cr-8%Ni-Ti Steel (SUS321)
MGC-410	Y410	ER410	Ar+2%O <sub>2</sub>	For MIG welding of 13% Cr steels (SUS403, SUS410)
MGC-430	Y430	ER430	Ar+2%O <sub>2</sub>	For MIG welding of 18% Cr steels (SVS430)
MGC-2209	-	ER2209	Ar+2%O <sub>2</sub>	For MIG welding of duplex stainless steel

- Power source: DC+(DCRP)
- Net 20kg of wire wound into rigid spool
- Flow rate of shielding gas: 20-25ℓ/min.

Dia. (ømm)	Typical chemical composition of weld metal(%)						Typical mechanical properties of weld metal		
	C	Mn	Si	Cr	Ni	Mo	TS N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	EL (%)	IV J (kgf-m)
0.9 1.0 1.2 1.6 2.0	0.022	1.75	0.84	19.20	12.50	2.15	550(59)	42	-
0.9 1.0 1.2 1.6	0.03	1.75	0.475	19.50	14.0	3.5	520(53)	30	-
1.0 1.2 1.6	0.04	1.70	0.40	19.90	9.95	Nb+Ta :0.60	640(65)	41	0°C 75(7.6)
1.2 1.6	0.09	0.42	0.33	12.68	-	-	540(55)	34	-
1.2 1.6	0.05	0.35	0.28	16.40	-	-	520(53)	28	-
0.9 1.0 1.2 1.6	0.03	1.25	0.90	22.5	8.5	3.0	690(70)	20	-