

STAINLESS STEEL WELDING WIRE : Technical Data

Product MIG/TIG	Nearest to AWS A 5.9	Nearest to DIN 8556	General Description	Chemical Analysis (%)*		
MS M-308L MS T-308L	ER 308L	SG-1.4316	most frequently used for welding base metals of similar composition 0.03% maximum carbon increases resistance to intergranular corrosion.	C 0.03 Ni 9.0-11.0	Si 0.65	Cr 19.5-22.0
MS M-308LSi MS T-308LSi	ER 308LSi	SG-1.4316	similar usage as 308L, but the 0.65-1.00% silicon content improves wetting behavior in the gas shielded welding process.	C 0.03 Ni 9.0-11.0	Si 0.65-1.00	Cr 19.5-22.0
MS M-309L MS T-309L	ER 309L	SG-1.4332	used for welding metals with dissimilar composition 0.03% maximum carbon increases resistance to intergranular corrosion.	C 0.03 Ni 12.0-14.0	Si 0.65 Mo 0.75	Cr 23.0-25.0
MS M-309LSi MS T-309LSi	ER 309LSi	SG-1.4332	similar usage as 309L, but the 0.65-1.00% silicon content improves wetting behavior in the gas shielded welding process.	C 0.03 Ni 12.0-14.0	Si 0.65 Mo 0.75	Cr 23.0-25.0
MS M-316L MS T-316L	ER 316L	SG-1.4330	used principally for welding molybdenum-bearing austenitic materials containing maximum 0.03% carbon.	C 0.03 Ni 11.0-14.0	Si 0.65 Mo 2.0-3.0	Cr 18.0-20.0
MS M-316LSi MS T-316LSi	ER 316LSi	SG-1.4330	similar usage as 316L, but the 0.65-1.00% silicon content improves wetting behavior in the gas shielded welding process.	C 0.03 Ni 11.0-14.0	Si 0.65 Mo 2.0-3.0	Cr 18.0-20.0
MS M-310 MS T-310	ER 310	SG-1.4842	suitable for welding of similar composition (26.5%Cr-21%Ni) or clad part of a 18%Cr-8%Ni stainless steel.	C 0.15 Ni 20.0-22.5	Si 0.65	Cr 25.0-28.0
MS M-312 MS T-312	ER 312	SG-1.4337	suitable for welding of dissimilar metals such as stainless steel, carbon steel and low alloy steel, MS M-312 has excellent usability and weldability. Owing to the austenite structure containing large contents of ferrite, MS M-312 has good crack resistibility	C 0.15 Ni 8.0-10.5	Si 0.65	Cr 28.0-32.0
MS M-347 MS T-347	ER 347	SG-1.4551	suitable for welding of 316, 316L and 318 stainless steel. With Nb(Cb) added as a stabilizer and reduce the possibility of intergranular chromium carbide precipitation	C 0.08 Ni 9.0-11.0	Si 0.65	Cr 19.0-21.5
MS M-430 MS T-430	ER 430	SG-14015	suitable for welding 430, 405 stainless steel. The MS M430 classification usually requires preheating and post-weld heat treatment	C 0.10 Ni 0.60	Si 0.50	Cr 15.5-17.0
MS M-307Si MS T-307Si	ER 307Si	-	For welding for the joining of armour plate, austenitic manganese steels, ferritic chromium stainless steels and dissimilar steels. The wire also suitable for buffer layering prior to hardfacing. The weld deposit is work hardenable and heat resistance up to 850°C	C 0.12 Ni 8.0-9.4	Si 0.65-0.95	Cr 17.2-19.8