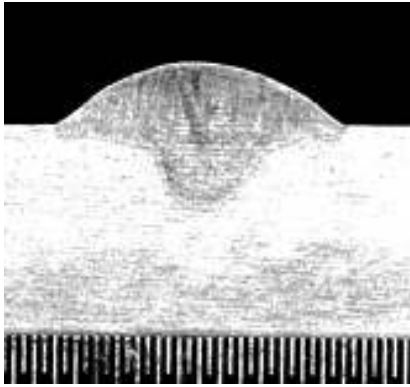


Metal Cored Wire for Stainless Steel

MC Series

● Characteristics

TASETO MC wires are metal cored wire for stainless steel welding with high deposition rate. Its metal transfer is similar to MIG welding with Ar-20%CO₂ shielding gas, so MC wires provide deep penetration and defect free welds. As MC wires generate thin and easy removable slag, it is suitable for multi-layer welding of thick plate. You can perform high efficiency in joint or fillet welding of stainless steel.



Bead on plate welding



Fillet welding

Fig.1 Macrostructure of cross section (220A-30cm/min)

● Wire diameter and power source

1.2 mm and 1.6 mm of wire diameter are available. Constant potential DC power source such as MAG and MIG power source is applicable. It is noted that pulsed power source is not suitable for welding with MC wires.

● Shielding gas

Shielding gas is limited to Ar-20%CO₂ gas only.

TASETO Welding Materials

Stainless Steel Electrodes

For Flux Cored Arc Welding

● Deposition rate (Wire diameter : 1.2mm)

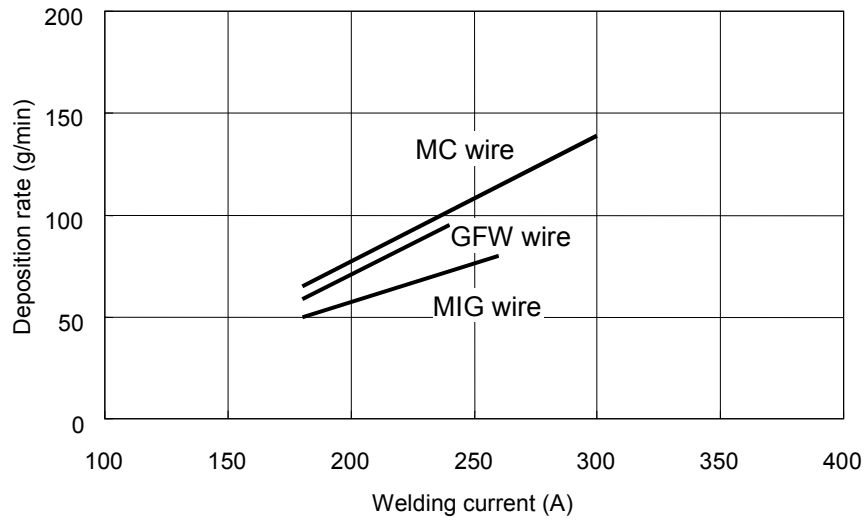


Fig.2 Deposition rate

● Recommended welding conditions

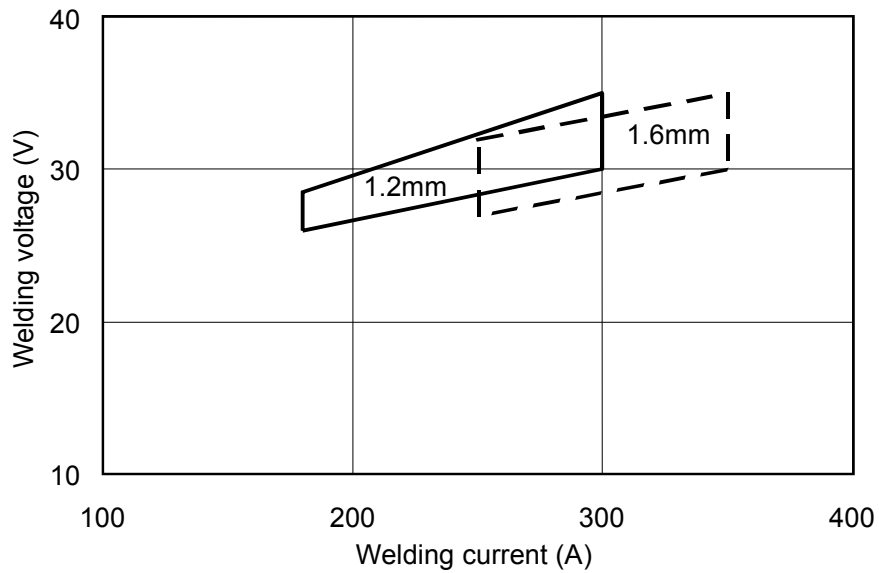


Fig.3 Recommended welding condition

TASETO Welding Materials

Stainless Steel Electrodes

For Flux Cored Arc Welding

● Penetration Depth (Wire Diameter : 1.2mm)

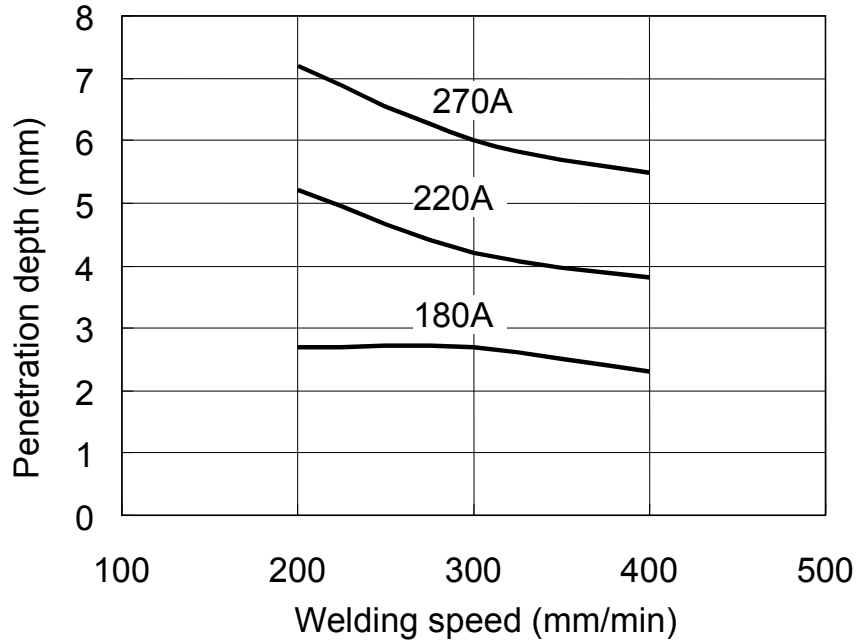


Fig.4 Penetration depth in various welding parameters

● Leg length of Fillet weld (Wire Diameter : 1.2mm)

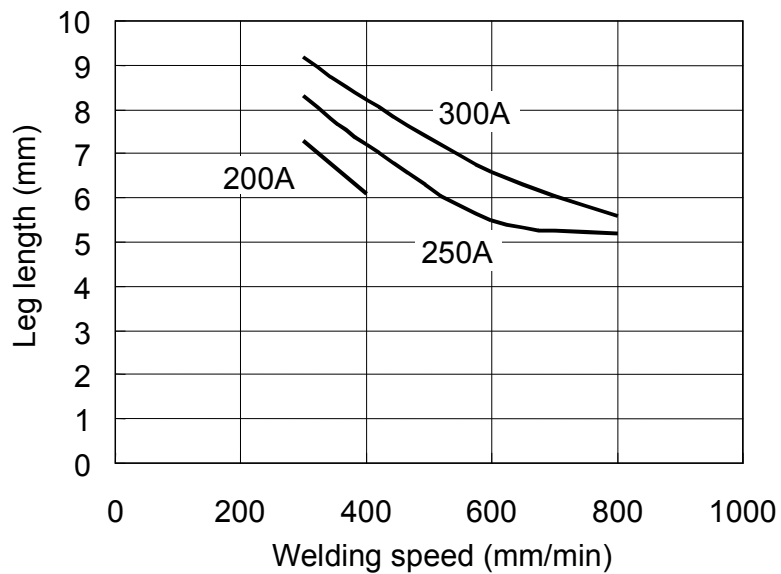


Fig.5 Leg length in horizontal fillet welding with various welding parameters

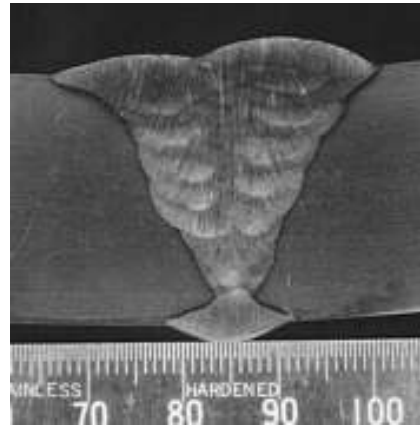
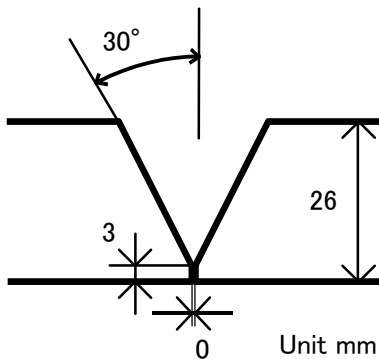
TASETO Welding Materials

Stainless Steel Electrodes

For Flux Cored Arc Welding

● Typical Welded Joint of Type 304L with MC308L (Wire Diameter 1.2mm)

Power source and polarity	DCEP
Welding current	250A
Welding voltage	32V
Welding speed	20~40cm/min
Shielding gas and flow rate	Ar+20%CO ₂ 20L/min
Wire extension	20mm
Interpass temp.	≤150°C



● Typical Compositions and Mechanical Properties

Trade name	JIS Z 3323	AWS A5.22	Chemical compositions(%)									
			C	Si	Mn	P	S	Ni	Cr	Mo	Cu	Nb
MC308L	TS308L-MM0	EC308L	0.032	0.45	1.58	0.028	0.009	9.79	19.62	0.02	0.02	—
MC316L	TS316L-MM0	EC316L	0.033	0.39	1.66	0.026	0.004	12.47	19.31	2.35	0.01	—
MC347	TS347-MM0	EC347L	0.042	0.41	1.51	0.025	0.005	9.90	19.98	0.03	0.02	0.63
MC309L	TS309L-MM0	EC309L	0.035	0.38	1.62	0.027	0.003	12.29	23.96	0.01	0.02	—
MC309MoL	TS309LMo-MM0	EC309LMo	0.035	0.44	1.68	0.027	0.003	12.26	22.84	2.45	0.01	—

Trade Name	Tensile Strength (MPa)	5D Elongation (%)
MC308L	606	39.8
MC316L	585	36.2
MC347	635	36.8
MC309L	604	34.4
MC309MoL	695	32.0