

Top Slagless Wire for Automobiles, SM-70MT

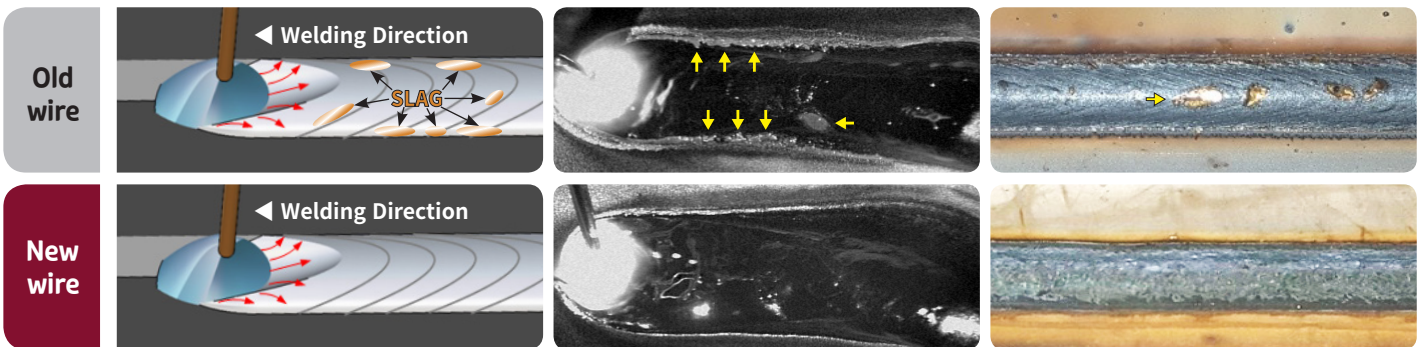
Patented

Patented in 42 countries including the United States, South Korea, and Japan

01 Excellent Weldability and Bead Appearance

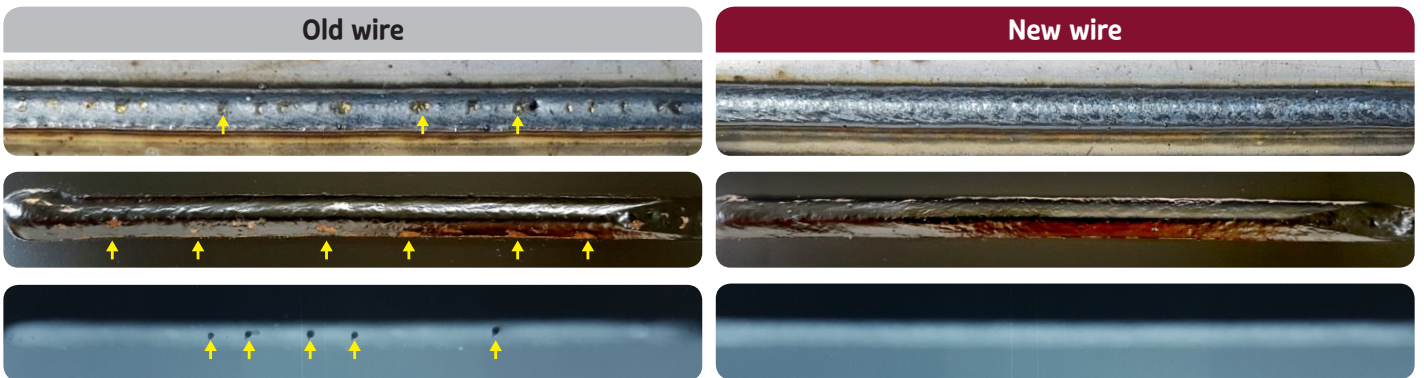
* High-speed camera : No slag observed in center and toe of molten pool

* No slag on bead surface



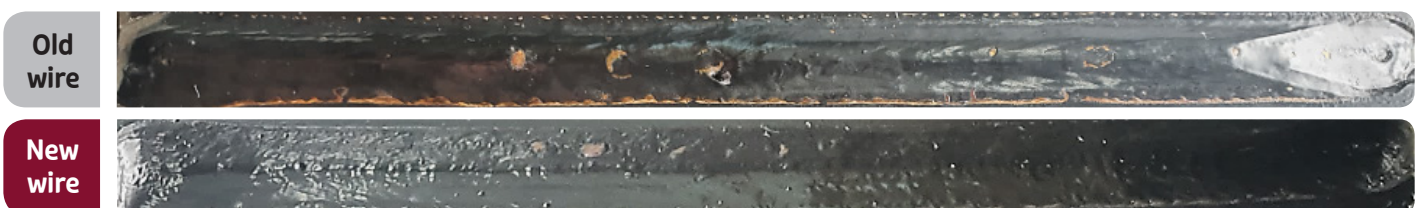
02 Electrodeposition Coating & Porosity Resistance

* RT Photo



03 Excellent corrosion resistance (Cyclic Corrosion Testing (CCT))

26 days of CCT (GMW 14872, 15357)

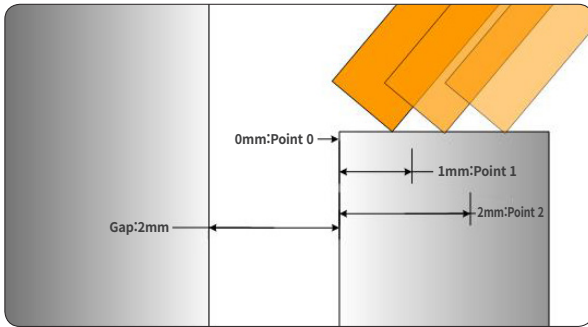


Based on the Component Rating Scale(GMW 15357), the old wire received 8 points and the new wire received 10 (the higher the points, the lower the rust generation).

Top Slagless Wire for Automobiles, SM-70MT

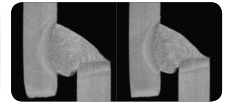
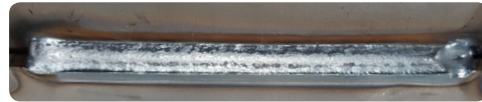
04 Gap bridging test + High speed welding available

1. Gap bridging test (Gap : 2mm)

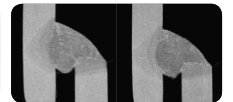
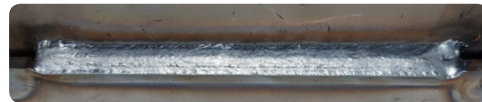


Teaching Point

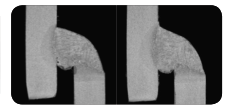
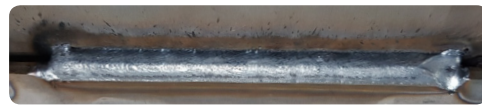
Point 00



Point 01



Point 02



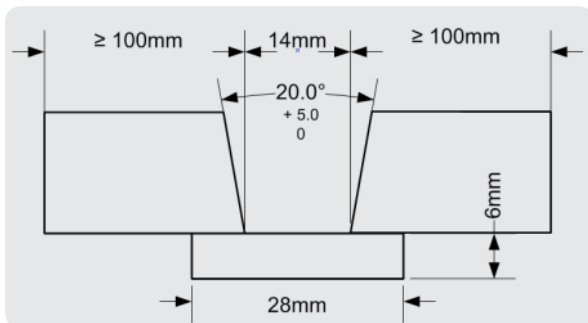
Pulse / 277A / 24V / 120cpm / Ar+20%CO₂

2. High speed welding

Mode	Pulse mode
Base metal	Hot dip galvanized steel – GI (2mmt)
Shielding gas	Ar+20%CO ₂
CTWD	15 mm

Welding speed	Bead appearance
140cpm (55ipm)	
152cpm (60ipm)	

05 Mechanical Properties of Deposited Metal



Diameter(mm)	1.2mm	
Shielding Gas	M21	Ar+20%CO ₂
	M20	Ar+10%CO ₂
Amp./ Volt.	300 / 32	
Pre-Heat(°C)	R.T.	
Interpass Temp.(°C)	150 ± 15	

Consumable		YS (MPa)	TS (MPa)	EL (%)	Temp. (°C)	Absorbed energy (J)
Old wire	M21	438	530	32	-20	168
	M21	426	512	32	-50	75
New wire	M20	545	606	28	-50	96
	EN ISO 14341-B G49A 5 M21 SZ EN ISO 14341-B G49A 5 M20 SZ		≥390	490~670	≥18	27J @-50°C
JIS Z 3312 G49A 5 M 0		≥390	490~670	≥18	27J @-50°C	

SM-70MT (GMAW)	EN ISO 14341-B G49A 5 M21 SZ EN ISO 14341-B G49A 5 M20 SZ	Diameter(mm)	0.9	1.0	1.2
	JIS Z 3312 G49A 5 M 0	Weight	Spool : 15, 20kg / Drum : 100, 250, 300, 450kg		