

Slag-less type solid wire for GMAW process especially for Automotive industry

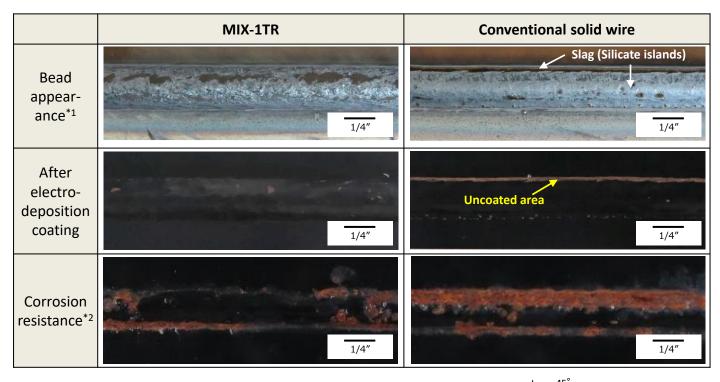
IIS 73312 G49A2M 0

## Features and typical fields of application

- ➤ MIX-1TR is a 70ksi class mild steel solid wire for Ar-CO₂ mixed gas, specially designed for automotive industry.
- ➤ Conventional solid wire is well known to inevitably generates slag (silicate islands) that deteriorates adhesion of electrodeposition coating on the bead surface. MIX-1TR is developed as the best solution to this problem in the world.

### [Features]

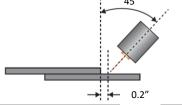
- 1) MIX-1TR contributes to improve the electrodeposition coating of weld joint compared to conventional solid wires by minimizing the generation of slag to the utmost limit and also modifying the composition of slag to have good electrical conductivity.
- 2) MIX-1TR can be used at travel speeds equal to or higher than conventional solid wires.
- 3) MIX-1TR is applicable to a wide variety of steel sheets, including galvanized steel.



- \*1: [Welding conditions]

  Lapped fillet welding, Pulsed GMAW process with 80%Ar+20%CO<sub>2</sub> mixed gas
  Parameters: 190A (263ipm)-24.0V Travel speed: 32ipm CTWD: 5/8"

  Base metal: SPH440 (t=3/32")
- \*2: 【Testing method】
  Cyclic Corrosion Testing (CCT) according to JASO M609 90 cycles (720hrs)

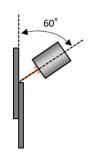




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Travel Speed	39ipm*1	47ipm*2	55ipm* <sup>3</sup>
MIX-1TR			
Conventional solid wire			



### [Welding conditions]

Lapped fillet welding, Pulsed GMAW process with 80%Ar+20%CO<sub>2</sub> mixed gas

Parameters:

- \*1) 230A -23.0V
- \*2) 270A-24.5V
- \*3) 320A-25.0V

CTWD: 5/8"

Base metal: SPH440 (t=3/32")

## Typical chemical composition of wire (%)

С	Si	Mn	Р	S	Ti
0.04	0.08	2.00	0.006	0.003	0.21

# Typical mechanical properties of weld metal per JIS Z3312

Shielding Gas	0.2% PS	TS	El	CVN at -4°F
	(ksi)	(ksi)	(%)	(ft-lbs)
80%Ar-20%CO <sub>2</sub>	77	87	30	146

### Size & Packages

Wire Dia. 0.045" Package 44 lbs spool, 660 lbs dru	Wire Dia.	0.045"	Package	44 lbs spool , 660 lbs drum	
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### DISCLAIMER

- Information in this material, such as chemical compositions and mechanical properties, is typical or an example for explaining the features and performances
  of our products, and it does not mean guarantee unless otherwise it is specified.
- Information contained herein is subject to change without notice. Please kindly contact Kobelco for latest information.



**WARNING:** This product can expose you to chemicals including Nickel and Titanium Dioxide, which are known to the State of California to cause cancer, and Chromium, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

### **KOBELCO WELDING OF AMERICA INC.**

