

Hybrid flux cored wire for carbon steel suitable for robotic system/oscillator for structural steel industry including seismic application  
AWS A5.20 E70T-1C



## Features and typical fields of application

- MX-50R is a 70ksi class mild steel flux cored wire specifically designed for use with Kobelco's ARCMAN™ robotic system and ARCMAN™ series Portable. Hybrid slag formula gives MX-50R its excellent weldability and efficiency in flat and horizontal position.

### 【Compared to conventional Flux Cored Wire (A5.20 E70T-1C, E71T-1C)】

- Higher deposition rate
- Less slag generation

### 【Compared to conventional Metal Cored Wire (A5.18 E70C-6M)】

- Smoother bead shape with minimal sagging even in horizontal groove welding
- Straight CO<sub>2</sub> shielding gas is available

- Its low fume emission formula creates a clean welding environment at any welding condition.
- MX-50R has AWS D1.8 approval, making it a superior choice for seismic applications in the structural steel industry.

### Bead appearance



MX-50R, 0.052", Horizontal Groove Welding with ARCMAN™ series Portable with 100%CO<sub>2</sub> gas

## Mechanical properties of all-weld metal per AWS A5.20 and D1.8 Structural welding code

Code	Shielding Gas	0.2% PS (ksi)	TS (ksi)	El (%)	CVN (ft-lbs)
AWS A5.20	100%CO <sub>2</sub>	65	78	32	66 at 0°F
AWS D1.8 Low H. Ipt: 31kJ/in		67	80	29	83 at +70°F
AWS D1.8 High H. Ipt: 79kJ/in		60	77	30	91 at +70°F

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**AWS D1.8**  
Seismic Arc



### Chemical Composition of all weld metal per AWS A5.20 (%)

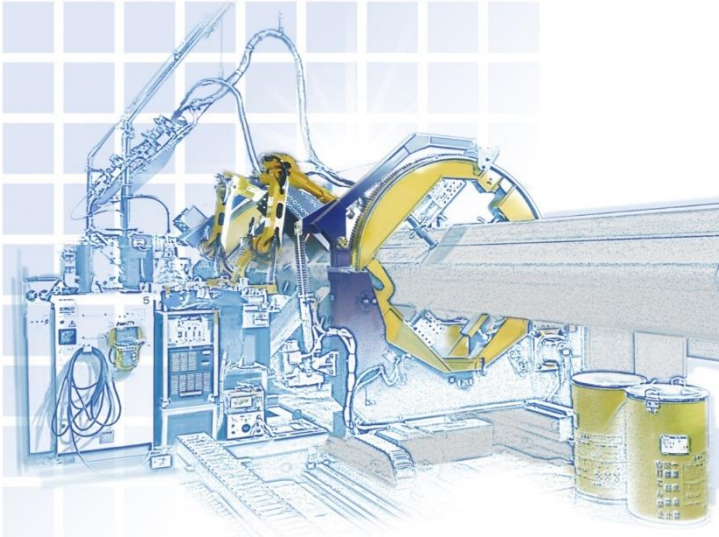
Shielding Gas	C	Si	Mn	P	S
100%CO <sub>2</sub>	0.04	0.57	1.60	0.008	0.006

### Approvals

### Available Products

AWS D1.8	Wire Dia.	0.052"	Package	33lbs spool, 550 lbs Drum
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## ARCMAN™ Welding Robot System



## ARCMAN™ series Portable



*Kobe Steel is a welding solutions company that develops all of its own Original welding robots, welding power sources, and welding wires aims to be your No.1 partner for structural steel fabrication including Seismic supplements.*

#### 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](http://www.P65Warnings.ca.gov).

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