

Large diameter flux cored wire suitable for flat and horizontal position  
AWS A5.20 E70T-1C H8, 9C H8



## Features and typical fields of application

- DW-50AY is a mild steel flux cored wire for flat and horizontal fillet welding with straight CO<sub>2</sub> gas. Its high deposition rates will contribute to an increase in productivity.
- DW-50AY produces a flat and smooth bead profile and very low amounts of spatter generation.
- It has AWS D1.8 certification, making it the superior choice for welding seismic applications in the structural steel industry.

### Bead appearance



DW-50AY, 3/32", Horizontal Fillet Welding at 43.2kJ/in with 100%CO<sub>2</sub> gas

## Mechanical properties of all-weld metal as 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>	70	81	32	89 at -40°F	94 at -20°F
AWS D1.8 Low H. Ipt: 33kJ/in		81	90	29	127 at +70°F	
AWS D1.8 High H. Ipt: 81kJ/in		62	74	39	226 at +70°F	

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

Shielding Gas	C	Si	Mn	P	S
100%CO <sub>2</sub>	0.06	0.37	1.52	0.011	0.005

Large diameter flux cored wire suitable for flat and horizontal position  
AWS A5.20 E70T-1C H8, 9C H8

**AWS D1.8**  
Seismic Arc



### Diffusible Hydrogen Content as per AWS A4.3

3.6 mL/100g

### Approvals

AWS D1.8

### Recommended welding conditions and deposition rate

Wire Dia.	Wire Feed Speed (in/min)	Current (A)	Arc Voltage (V)	Deposition Rate (lbs/hr)	Wire Stick-Out
3/32"	100	350	26-30	8.9	1"
	120	400	28-33	10.7	
	140	450	30-35	12.5	
	160	500	32-37	14.3	

### Available Products

Wire Dia.	3/32"
Package	50 lbs Coil

#### 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).

**KOBELCO WELDING OF AMERICA INC.**



4755 Alpine Drive, Suite 250, Stafford, Texas 77477  
TEL: 281-240-5600 FAX: 281-240-5625  
<http://www.kobelcowelding.com>