

# KOBELCO

## FAMILIARC™

# DW-50

All positional flux cored wire for carbon steel



### Code Data

AWS A5.20 E71T-1CH8,1MH8/ -9CH8, 9MH8  
CWB/CSA W48-06 E491T-9-H8,9M-H8

### Outstanding Features

- Fast freezing slag formula gives DW-50 its excellent weldability not only in horizontal but in vertical and overhead welding.
- DW-50 can be used with 100%CO<sub>2</sub> or 75%Ar-25%CO<sub>2</sub> shielding gas. It has a wide welding parameter range which makes DW-50 very versatile.
- Its low fume emission formula creates a clean welding environment at any welding condition.
- Non-baked wire surface covered with special lubricant creates smooth wire feedability and extended liner life.

### Typical chemistry of weld metal and diffusible hydrogen content (100%CO<sub>2</sub> As welded)

C	Si	Mn	P	S	Diffusible hydrogen content (ml/100g)
0.05	0.70	1.27	0.010	0.009	4.7

Gas chromatography method (AWS A4.3)

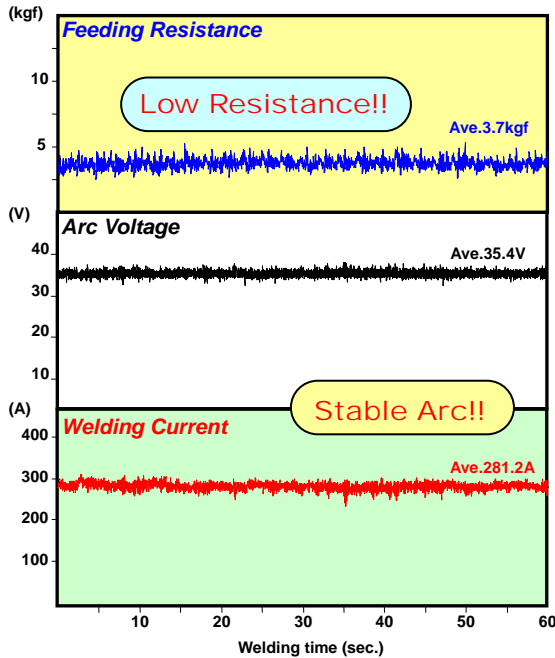
### Typical mechanical property of weld metal (100%CO<sub>2</sub> As welded)

0.2%P.S (psi)	T.S (psi)	Elongation (%)	Impact value (ft-lbs)	
			-20°F	0 °F
74,500	86,800	30	58	79

Test method: AWS A5.20, welding parameter: 300A-31V

Diameters: 0.045", 0.052", 1/16"  
Spool size: 28lbs, 44lbs, Drum: 550lbs

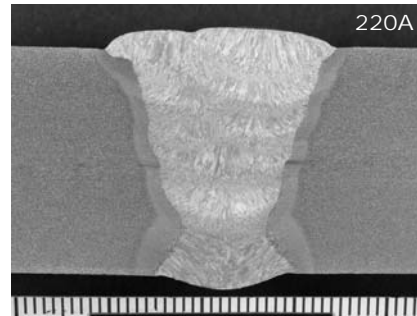
## Excellent wire feeding



### WELDING CONDITIONS

Wire Diameter: 0.045"  
 Shielding Gas: 100%CO<sub>2</sub> (40CFH)  
 Length of Cable: 19.5feet

### Macrostructure of butt joint(3G)



### Recommended welding conditions and deposition rate

Wire size (in.)	Wire feed speed (in./min)	Current (A)	Arc Voltage (V)	Deposition rate (lbs/hr)	Wire stick-out (in.)
0.045	140	120	23-26	4.0	3/4"
	200	160	25-28	6.0	
	290	200	27-30	8.0	
	330	220	27-30	9.0	
	400	250	28-30	10.5	
0.052	120	140	24-27	3.5	3/4"
	175	180	24-27	5.5	
	265	240	26-28	8.5	
	300	260	27-29	10.0	1"
	395	300	29-31	11.5	
1/16	100	180	24-27	4.5	3/4"
	165	240	25-28	7.0	
	190	260	26-29	8.0	
	250	300	29-31	10.0	1"
	300	340	30-32	11.5	

Tables shown are approximate values that will vary with changes in welding conditions.  
 Voltages shown are for 100%CO<sub>2</sub> shielding gas. For 75%Ar-25%CO<sub>2</sub> use two volts less than shown.  
 \*DC-Electrode positive \*\*Arc voltage is measured at wire feeder.