



# FRONTIARC-711

## Flux-cored wire



A mild steel flux-cored wire versatile enough to have four AWS classes: E71T-1C, E71T-1M, E71T-12C, E71T-12M achieving I.V more than 20 ft-lbs at -20°F and can be welded with 100%CO<sub>2</sub> or 75%Ar-25%CO<sub>2</sub>.

## Code Data

**AWS A5.20 E71T-1CH8, 1MH8**  
**E71T-12CH8, 12MH8**  
**CWB W48-06 E491T-9-H8, 9M-H8**

## Outstanding Features

- Welding of all position can be done with same welding current setting.
- Less spatter and good slag removability reduces the time of bead grinding operation.
- Diffusible hydrogen content is as low as that of low hydrogen type electrode and crack and blowhole resistibility is excellent.
- Fume generation is lower than conventional flux-core wire.
- Non-baked wire surface covered with special lubricant creates smooth wire feedability and extended liner life.

## Applicable and usage

- All position welding for ship hulls, bridges, chemical plant machinery, vehicles and other metal fabrication.

### Typical chemistry of all weld metal and diffusible hydrogen content

C	Si	Mn	P	S	Diffusible hydrogen content (ml/100g)
0.05	0.50	1.28	0.013	0.009	5.0

\* Data reflects use of 100%CO<sub>2</sub>

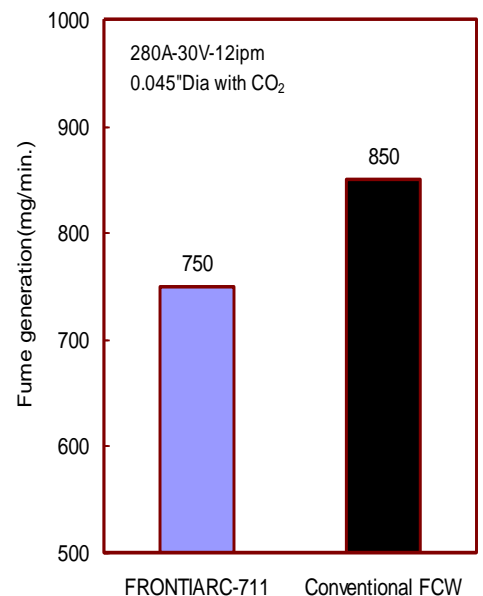
\*\*Gas chromatography method (AWS A4.3)

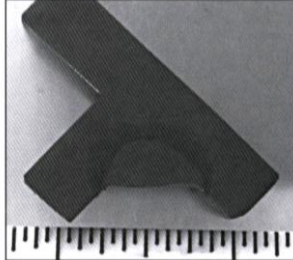
### Typical mechanical properties of all weld metal

P.S (psi)	T.S (psi)	Elongation (%)	Impact value (ft-lbs)	
			-20 °F	0 °F
74,000	82,000	29	43	72

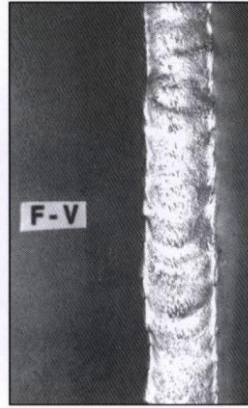
\*Data reflects use of 100%CO<sub>2</sub>

### Welding Fume Generation Rate

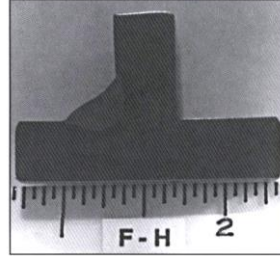




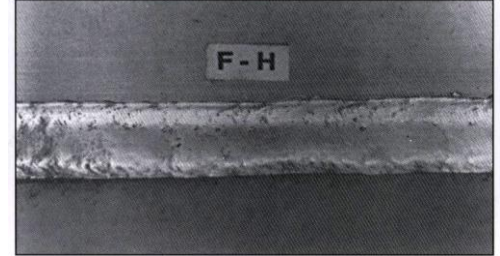
Vertical upward



Vertical upward welding:  
220 amp



Horizontal fillet



Horizontal fillet welding: 250 amp

**Bead appearance and macro cross-section. Wire diameter:0.045in.**

### 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	1"
	190	260	26-29	8.0	
	250	300	29-31	10.0	
	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.

Diameters: 0.045", 0.052", 1/16"

Spool size: 28lbs, 44lbs,55lbs, Drum: 550lbs



**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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