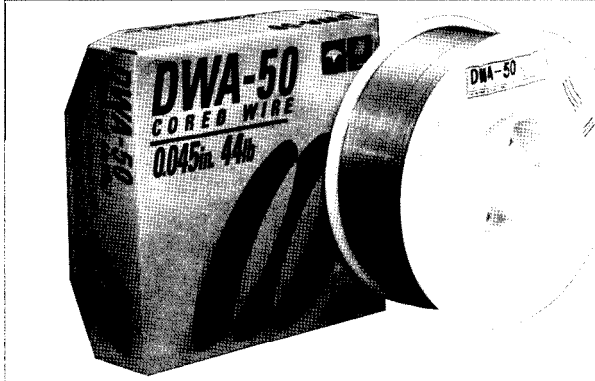


DWA-50

Flux-Cored Wire

Code Data

AWS: A5.20-95 ASME SFA 5.20
E71T-1M
ABS: 2SA, 2YSA
NK, LR, NV, BV



DWA-50

Fast freezing flux cored wire, easy to achieve flat bead without oscillation in vertical-up welding. Using Argon CO₂.

Outstanding Features

- All position welding can be achieved with excellent flat bead appearance, negligible spatter, and easy slag removal.
- High welding current in vertical up and 6G welding position can be performed easily due to fast freezing slag.
- Deposition rates are higher than solid wires of the same size.
- Generation rate of welding fumes is less than that of conventional titania based flux cored wires.
- Diffusible hydrogen content is as low as that of low hydrogen type electrode.

Typical Chemical Composition of Weld Metal and Diffusible Hydrogen Content

Chemical composition (%): 75% Argon, 25% CO₂

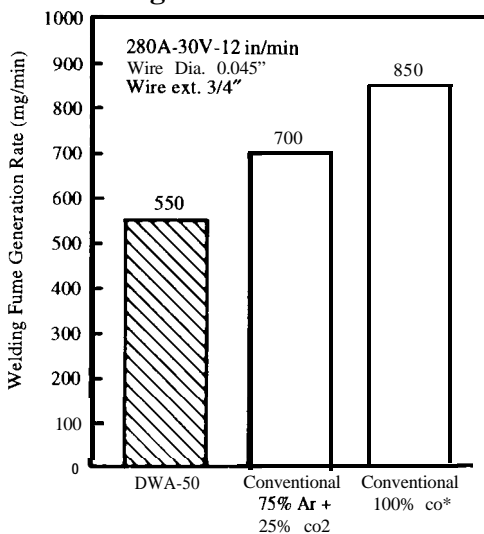
C	Mn	Si	P	S	Diffusible hydrogen content (ml/100g)
0.04	1.15	0.46	0.013	0.009	"5.0

*Testing method: Gas Chromatography method (AWS A 4-3-93)

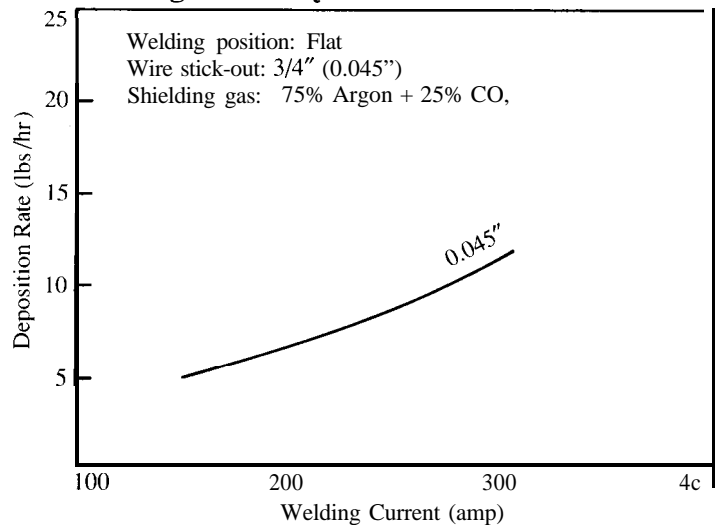
Typical Mechanical Properties of all Weld Metal

Yield Strength PSI	Tensile Strength PSI	Elongation (%)	V-Notch Impact Value ft-lbs	
			32° F	-4° F
73,000	82,000	29	75	59

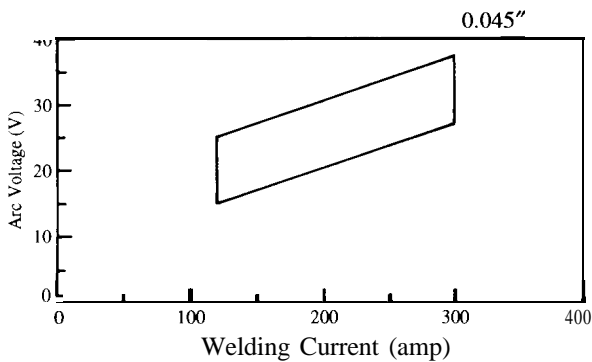
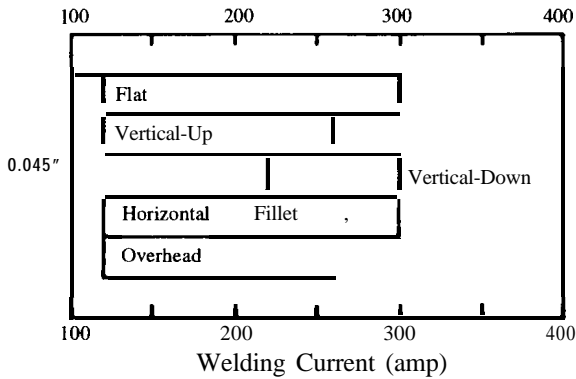
Welding Fume Generation Rate



Welding Efficiency



Recommended Current Ranges



Recommended Welding Parameters

Wire size (in)	Wire extension from contact tip (in)	Cup size (in)	Shielding gas flow rate* (cubic ft/hr)
0.045	5/8-3/4	5/8	40-50

*Recommended gas: 75% Argon + 25% CO₂

Recommended Welding Conditions

Wire Size (in)	Wire feed speed (in/min)	Current DC-EP** (amp)	Arc Voltage** (volt)	Deposition Rate (lbs/hr)
0.045	140	130	22-23	3.9
	150	140	22-24	4.2
	180	160	23-25	5.0
	220	180	24-26	6.1
	260	200	24-27	7.2
	300	220	25-27	8.4
	345	240	27-29	9.6
	420	260	27-29	11.7
	480	280	28-30	13.4
	560	300	28-31	15.6

Tables shown are approximate values that will vary with changes in welding conditions

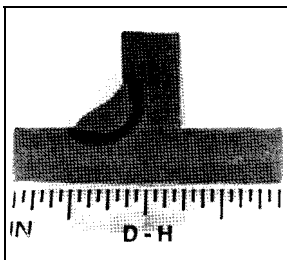
*DC-Electrode positive

**Arc voltage is measured at the wire feeder

Deposition efficiency is approximately 90%.

Type of current: DC (+) Packing: One 44 lb spool per carton. 2,640 lbs on one pallet.

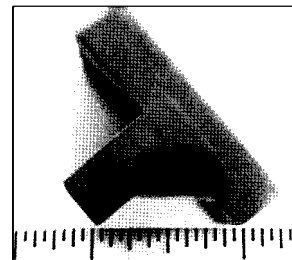
Bead appearance and macro cross-sections. Wire diameter: 0.045"



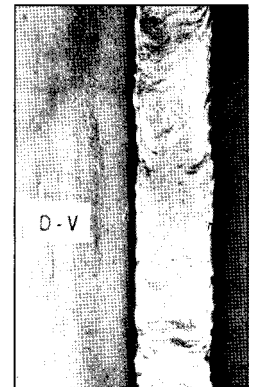
Horizontal fillet



Horizontal fillet welding: 250 amp



Vertical upward



Vertical upward welding: 220 amp