

## FACE



### SCHEDULE DEVELOPMENT QUICK REFERENCE GUIDE

Tube O.D. x 3.141 = Circumference

IPM (4 to 7) ÷ Circumference = RPM

Time: (60 sec. ÷ RPM) + Rotation Delay + Overlap

Level 1 Amps: 1 amp/.001" wall thickness (316L)

Last Level Amps: 80% of Level 1 Amps

BCK Low Amps: 30% of Level 1 Amps

Rotation Delay: Normally 1 to 2 seconds

#### OTHER REFERENCES:

Wall	Speed	Overlap	Pri-Pulse-Bck
.250 Inch Tube Only	6.28 IPM	+1 Sec.	0.1 Sec./0.1 Sec.
.035 - .083	5 IPM	+2 Sec.	0.2 Sec./0.2 Sec.
.085 - .095	4 IPM	+3 Sec.	0.3 Sec./0.3 Sec.

#### TUNGSTEN LENGTH AND GEOMETRY

Wall Thickness	Arc Gap	Tip Dia.	Tung. Dia.
.020" - .035"	.030"	.020"	.040"
.049" - .083"	.050"	.030"	.062"
.091" - .154"	.070"	.040"	.093"

$$\frac{(\text{ROTOR O.D.} - \text{TUBE O.D.})}{\div 2} - \text{ARC GAP} = \text{TUNGSTEN LENGTH}$$

## BACK

WELD HEAD	ROTOR DIAMETER	GAS FLOW CFH	MIN. PURGE TIME (SEC.)
9-250	0.802"	6-8	20
9-500/C	1.388"	8-15	20
9-750	2.000"	10-14	20
9AFM-750	1.312"	10-14	20
9-1500	3.187"	15-25	20
9AF-1500	2.252"	15-25	20
9AFM-1500	2.031"	10-20	20
9E-1500	2.687"	25-35	30
9-2500	4.380"	25-30	30
9AF-2500	3.156"	25-30	30
9E-2500	4.280"	25-40	30
9-3500	5.380"	25-30	30
*9-3500	4.031"	25-30	30
9E-3500	5.310"	30-45	30
9-4500	6.875"	30-40	60
*9-4500	4.920"	30-40	60
9E-4500	6.280"	30-50	60
9ER-4500	5.776"	30-40	60
9-7500	10.440"	30-40	60
*9-7500	8.280"	30-40	60
9E-7500	9.375"	40-60	60
8-2000	3.452"	15-30	30
8-4000	5.310"	15-30	30
8-6625	8.093"	20-35	30

\*Using optional tungsten extender (PN - 13090796-XX)

### ARC MACHINES, INC.

10500 Orbital Way, Pacoima, CA 91331

Phone: (818) 896-9556 Fax: (818) 890-3724

[www.arcmachines.com](http://www.arcmachines.com)

[sales@arcmachines.com](mailto:sales@arcmachines.com)

MKT WELDCARD / March, 2003/E