



PROFESSIONAL PRODUCTS...
SUPERIOR RESULTS™

THE HARRIS PRODUCTS GROUP

1390, 23A90, & 8490 WELDING, BRAZING TIP FLOW CHART MAPP GAS

TIP SIZE	MAPP FLOW CFH	OXYGEN FLOW CFH	MAPP PRESS PSI	OXYGEN PRESS PSI	FLAME LENGTH INCHES	RECOMMENDED HOSE I.D. Min. In.
2	1-3	2.5-7.5	1/2-1	1/2-1	1/4"-1/2"	3/16"
3	2-4	5.0-10.0	1/2-1	1/2-1	3/8"-5/8"	3/16"
4	3-5	7.5-12.5	1/2-1	1/2-1	5/8"-7/8"	3/16"
5	4-6	10.0-15.0	1-1, 1/2	1- 1 1/2	7/8"-1", 1 3/8"	3/16"
6	5-8	12.5-20.0	1-1, 1/2	1 1/2-2	7/8"-1 3/8"	3/16"
7	6-10	15.0-25.0	1 1/2-2	2-3	1"-1 1/2"	3/16"
8	8-12	20.0-30.0	1 1/2-2	2-3	1"-1 1/2"	3/16"
9	10-16	25.0-40.0	2-3	3-5	1"-1 1/2"	3/16"
10	12-18	30.0-45.0	3-4	4-6	1"-1 1/2"	1/4"
13	15-25	37.5-62.5	6-8	8-10	1 1/4"-1 3/4"	1/4"
15	25-35	62.5-87.5	8-10	12-15	1 1/4"-1 3/4"	3/8"

NOTE: Oxygen flows are for neutral flame settings, with flame set to eliminate yellow feather on end of primary cone. At neutral flame is deep blue with longer primary zone than neutral acetylene flame. Higher flows may be used for heating with (approximately 10-20%) oxidizing flame (primary cone shorter and lighter blue). Hose sizes are suitable for hose lengths up to 25 feet. Higher pressures should be used for longer lengths. Caution: For continuous use, check allowable withdrawal rates with gas supplier, especially in low temperature operations. Heat output (BTU/Hr.) Mapp flow X 2400 (BTU/Cu.Ft.).