SPRAY TABLE – US SYSTEM
Acetylene

WIRE	Recommended Hardware [1]			Pressure (psig)			Flowmeter Readings						Flow			Spray Rate	Spray Distance	Wire Required [6]	Coverage [6]
							2GF		2AF	3GF		3AF							
	Nozzle	Air Cap	Gears	Oxy [2]	Acet [2]	Air [2, 3]	Oxy [2]	Acet [2]	Air	Oxy [12]	Acet [12]	Air [13]	Oxy (ft^3/hr)	Acet (ft^3/hr)	Air (ft^3/hr)	(Lbs/Hr)	(inch)	(lb/ft^2 (.001"))	(ft^2(.001")/h)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Aluminum [8]	3/16	EA	Std	33	15	70	48	48	51	97	50	23.5	95	50	1424	16	5-8	0.0144	1111
	1/8	EC		30	15	70	43	40	52	87	40	24	83	40	1452	12	5-8		833
	11	J		25	15	60	33	30	48	67	30	22.5	60	30	1259	5.5	5-8		382
	15	M		25	15	55	24	24	45	47	22	21	42	22	1140	2	5-8		139
Aluminum Bronze	3/16	EA	Std	33	15	70	48	48	53	97	50	24.5	95	50	1480	19	5-8	0.0504	382
	1/8	EC		30	15	70	44	40	52	91	40	24	86	40	1452	15	5-8		299
	11	J		30	15	60	38	28	46	63	30	21.5	60	30	1206	7.5	5-8		146
Babbitt [8, 9]	3/16	EA	HS	30	15	70	38	48	53	69	40	24.5	65	40	1480	95	5-8	0.0504	1875
	1/8	EC		30	15	65	29	29	53	46	25	24.5	44	25	1435	40	5-8		799
	3/16	EA		35	15	70	43	55	53	85	60	24.5	85	60	1480	185	5-8		3680
	1/8	EC		35	15	65	28	41	53	48	40	24.5	48	40	1435	90	5-8		1770
Bond Wire [10]	1/8	EC	Std	30	15	70	44	39	52	91	48	24	86	48	1452	5	5-8	.0432	111
Copper	3/16	EA	Std	33	15	70	48	48	53	97	50	24.5	95	50	1480	30	5-8	0.0504	590
	1/8	EC		30	15	70	44	40	52	91	40	24	86	40	1452	24	5-8		486
	11	J		25	15	60	33	30	46	67	30	21.5	60	30	1206	10	5-8		201
	15	M		25	15	60	24	24	43	47	22	20	42	22	1127	6	5-8		118
Moly [4]	3/16	EA	Std	35	15	55	50	35	49	98	38	23	98	38	1241	8.5	3.5-6	0.0547	153
	1/8	EC		35	15	55	50	35	49	96	32	23	96	32	1241	7.5	3.5-6		139
	11	J		30	15	55	38	28	46	74	30	21.5	70	30	1165	4.5	3.5-6		83
Stainless [5] (1 - 5)	3/16	EA	Std	33	15	70	48	45	53	100	46	24.5	98	46	1480	16	5-8	0.0461	347
	1/8	EC		30	15	70	44	40	50	89	40	23.5	84	40	1396	11	5-8		236
	11	J		25	15	60	33	30	48	67	30	22	60	30	1259	7.5	5-8		174
Tin [11]	1/8	EC	HS	30	15	65	44	24	53	90	20	24.5	85	20	1435	40	5-8	0.0504	799
	1/8	EC		30	15	65	42	29	53	84	25	24.5	80	25	1435	95	5-8		2674
Zinc [8, 9]	3/16	EA	Std	33	15	70	48	45	51	99	47	23.5	97	47	1424	65	5-8	0.0504	1285
	1/8	EC		30	15	70	45	40	53	91	40	24.5	86	40	1480	32	5-8		625
	1/8	EC	HS	30	15	70	45	42	53	91	40	24.5	86	40	1480	45	5-8		903
	11	J		25	15	60	33	30	48	61	30	22.5	55	30	1259	20	5-8		382
	15	M		25	15	60	24	24	43	47	22	20	42	22	1127	12	5-8		243
Zinc/Alum	1/8	EC	Std	30	15	70	45	40	51	95	43	23.5	90	43	1424	25	5-8	0.036	688

Notes:

1. Refer to the Gas Head Hardware selection table for additional hardware recommendations before spraying.
2. Columns **5**, **6**, and **7** show lighting pressure only. After the gun is lit and spraying, adjust the flowmeter needle valves to obtain the flow rates listed in columns **8**, **9** and **10** or **11**, **12**, and **13**.
3. Adjust the air for running as well as for lighting to the pressure in column **7**.
4. Only Acetylene and MAPP can be used as fuel gases to spray Moly wire.
5. When spraying Stainless wires, if the molten wire tip appears ragged and uneven, correct by reducing oxygen flow by 2 or 3 points.
6. The values in columns **19** and **20** are optimum. They can be obtained by skilled operators with all equipment in first-class condition.
7. When using the fan spray air cap, spray rates will be lower than the chart values.
8. Use non-load nozzle and air cap hardware when using the reference metal in a start-stop operation. Refer to the hardware selection table.
9. For convenience, parameters for both high and reduced spray rates are given in this table for Babbitt, Tin and Zinc.
10. After spraying Bond wire, you can continue to use the EC air cap with any 1/8" overcoat wire at a slightly reduced spray rate. Use the gas flows shown above.
11. When spraying 1/8" Tin wire, use drive rolls and gears for 1/8-3/16 wire size range to avoid crushing the wire.
12. Read all FMR values on the 3GF SCFH scale.
13. Read all FMR values on the 3AF SCFM scale.

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SPRAY TABLE – US SYSTEM
Propane

WIRE	Recommended Hardware [1]			Pressure (psig)			Flowmeter Readings						Flow			Spray Rate	Spray Distance	Wire Required [5]	Coverage [5]
							2GF		2AF	3GF		3AF							
	Nozzle	Air Cap	Gears	Oxy [2]	Prop [2]	Air [2,3]	Oxy [2]	Prop [2]	Air	Oxy [11]	Prop [11]	Air [12]	Oxy (ft^3/hr)	Prop (ft^3/hr)	Air (ft^3/hr)	(Lbs/Hr)	(inch)	(lb/ft^2 (.001"))	(ft^2(.001") /h)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Aluminum [7]	3/16	EA	Std	45	40	70	69	35	53	157	33	24.5	172	34	1482	16	5-8	0.0144	1111
	1/8	EC		50	40	70	72	33	52	170	32	24.5	194	33	1452	12	5-8		833
	11	J		40	35	60	54	24	48	114	23	22.5	120	23	1260	5.5	5-8		382
	15	M		35	35	60	46	18	45	95	15	21	95	15	1182	2	5-8		139
Aluminum Bronze	3/16	EA	Std	50	40	70	70	35	53	158	34	24.5	180	35	1482	21	5-8	0.0504	403
	1/8	EC		50	40	70	68	33	53	153	34	24.5	175	35	1482	18	5-8		354
	11	J		40	35	60	54	24	48	114	23	22.5	120	23	1260	8	5-8		160
Babbitt [7,8]	3/16	EA	HS	30	30	70	60	26	53	137	21	24.5	130	20	1482	95	5-8	0.0504	1875
	1/8	EC		25	25	70	45	17	53	90	28	24.5	80	12	1482	40	5-8		799
	3/16	EA		45	35	70	72	35	53	169	35	24.5	185	35	1482	185	5-8		3680
	1/8	EC		25	20	70	50	22	53	101	20	24.5	90	17	1482	90	5-8		1770
Bond Wire [9]	1/8	EC	Std	50	45	70	68	35	53	154	35	24.5	176	38	1482	5	5-8	.0432	111
Copper	3/16	EA	Std	50	40	70	70	35	53	158	34	24.5	180	35	1482	33	5-8	0.0504	660
	1/8	EC		50	40	70	68	33	53	153	34	24.5	175	35	1482	25	5-8		521
	11	J		40	35	60	54	24	48	114	23	22.5	120	23	1260	14	5-8		278
	15	M		35	35	60	46	18	43	95	15	20	95	15	1128	8	5-8		160
Stainless [4] (1 - 5)	3/16	EA	Std	55	50	70	68	38	53	152	37	24.5	180	42	1482	20	5-8	0.0461	417
	1/8	EC		55	50	70	68	36	53	153	35	24.5	181	40	1482	12	5-8		264
	11	J		45	35	70	50	25	48	89	22	24.5	97	22	1338	8	5-8		181
Tin [10]	1/8	EC	Std	25	20	70	45	17	53	90	15	24.5	80	12	1482	40	5-8	0.0504	799
	1/8	EC		25	25	70	50	22	53	101	19	24.5	90	17	1482	95	5-8		2673
Zinc [7,8]	3/16	EA	Std	45	35	70	68	32	53	147	30	24.5	161	30	1482	60	5-8	0.0504	1125
	1/8	EC		50	40	70	68	34	53	153	34	24.5	175	35	1482	32	5-8		625
	1/8	EC	HS	50	40	70	68	34	53	153	34	24.5	175	35	1482	45	5-8		903
	11	J		40	35	60	54	24	48	114	23	22.5	120	23	1260	20	5-8		382
	15	M		35	35	60	46	18	43	195	15	20	195	15	1128	12	5-8		243
Zinc/Alum	1/8	EC	Std	50	40	70	68	34	53	154	34	24.5	176	35	1482	25	5-8	0.036	694

Notes:

1. Refer to the Gas Head Hardware selection table for additional hardware recommendations before spraying.
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3. Adjust the air for running as well as for lighting to the pressure in column **7**.
4. When spraying Stainless wires, if the molten wire tip appears ragged and uneven, correct by reducing oxygen flow by 2 or 3 points.
5. The values in columns **19** and **20** are optimum. They can be obtained by skilled operators with all equipment in first-class condition.
6. When using the fan spray air cap, spray rates will be lower than the chart values.
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8. For convenience, parameters for both high and reduced spray rates are given in this table for Babbitt, Tin and Zinc.
9. After spraying Bond wire, you can continue to use the EC air cap with any 1/8" overcoat wire at a slightly reduced spray rate. Use the gas flows shown above.
10. When spraying 1/8" Tin wire, use drive rolls and gears for 1/8-3/16 wire size range to avoid crushing the wire.
11. Read all FMR values on the 3GF SCFH scale.
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