

Injector Selection Table for Carburetted Water Gas

Gas at 10 Lbs. Pressure; Approximate Mixture Pressure of 4" w.c.*;
520 B.T.U.; .65 Specific Gravity; 4.37 Air-Gas Ratio

Based on 100% Air Entrainment thru Injector

Capacity CF/HR at 10 Lbs.	Catalog Number Injectors	Suggested burner area in square inches when using various types of burners at coefficient of discharge shown				100% Coefficient Discharge Burner
		Walltites 125%	Drilled Round Nose 87%	Sticktite or Ferrofix 75%	Blast Tips 60%	
25	H3 —67	.035	.0494	.0573	.076	.043
50	H3 —56	.073	.1045	.121	.155	.091
75	H3 —54	.098	.141	.164	.205	.123
100	H3 —1/16	.133	.192	.213	.279	.167
125	H4 —50	.162	.233	.270	.338	.203
150	H4 —5/64	.205	.296	.342	.428	.257
175	H4 —45	.23	.326	.378	.473	.284
200	H4 —43	.255	.366	.425	.532	.32
250	H5 —40	.32	.46	.532	.668	.40
300	H5 —36	.384	.55	.64	.80	.48
350	H5 —32	.454	.65	.756	.945	.568
400	H6 —1/8	.530	.76	.88	1.10	.66
450	H6 —29	.62	.89	1.03	1.29	.775
500	H6 —28	.665	.955	1.105	1.38	.83
550	H8 —26	.745	.107	1.23	1.55	.93
600	H8 —24	.975	1.11	1.29	1.62	.97
650	H8 —21	.85	1.22	1.41	1.77	1.06
700	H8 —19	.93	1.33	1.54	1.93	1.16
750	H8 —18	.97	1.39	1.61	2.02	1.21
800	H8 —16	1.05	1.51	1.75	2.18	1.31
850	H8 —14	1.11	1.60	1.85	2.31	1.39
900	H8 —3/16	1.21	1.69	1.96	2.45	1.47
950	H10 —10	1.25	1.80	2.09	2.62	1.57
1000	H10 —9	1.29	1.86	2.16	2.70	1.62
1100	H10 —4	1.47	2.11	2.45	3.07	1.84
1200	H10 —7/32	1.66	2.30	2.66	3.33	2.00
1300	H10 —1	1.75	2.52	2.92	3.65	2.19
1400	H10 —15/64	1.84	2.64	3.07	3.84	2.30
1600	H12 —C	1.97	2.83	3.28	4.10	2.46
1800	H12 —17/64	2.36	3.40	3.94	4.92	2.96
2000	H12 —J	2.57	3.70	4.27	5.35	3.21
2250	H16 —19/64	2.96	4.25	4.92	6.15	3.7
2500	H16 —3/16	3.28	4.70	5.45	6.83	4.1
2750	H16 —21/64	3.51	5.20	6.02	7.53	4.52
3000	H16 —11/32	3.97	5.70	6.61	8.26	4.96
3500	H16 —T	4.31	6.20	7.20	9.00	5.4
4000	H16 —X	5.3	7.60	8.8	11.00	6.6
4500	H20 —Z	5.75	8.28	9.6	12.00	7.2
5000	H20 —7/16	6.4	9.25	10.7	13.40	8.05
5500	H20 —15/32	7.4	10.6	12.3	15.30	9.25
6000	H20 —31/64	7.85	11.3	13.1	16.40	9.85

*Mixture Pressure:—The Mixture Pressure that can be developed will vary depending on piping conditions and draft and will vary directly with changes in Gas Pressure.

CORRECTION FACTORS FOR CAPACITIES AT OTHER THAN 10 LBS. PRESSURE

Pounds Pressure.....	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Correction Factor.....	.316	.447	.548	.632	.709	.775	.836	.895	.95	1.00	1.05	1.09	1.14	1.18	1.225