

Injector Selection Table for Coke Oven Gas

Gas at 10 Lbs. Pressure; Approximate Mixture Pressure of 2.0" w.c.*;
595 B.T.U.; .42 Specific Gravity; 5.2 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						
50	H3 —60	.101	.156	.168	.210	.126
75	H4 —55	.168	.242	.28	.350	.210
100	H4 —53	.224	.322	.374	.466	.280
125	H5 —51	.280	.403	.467	.594	.350
150	H5 —50	.304	.436	.506	.634	.380
175	H5 —48	.344	.494	.575	.716	.430
200	H6 —47	.392	.565	.654	.816	.490
250	H6 —43	.495	.710	.826	1.03	.620
300	H8 —40	.600	.860	1.00	1.25	.750
350	H8 —37	.68	.975	1.13	1.42	.85
400	H8 —33	.80	1.15	1.33	1.67	1.00
450	H8 —31	.9	1.30	1.51	1.88	1.13
500	H8 — $\frac{1}{8}$.974	1.42	1.64	2.05	1.23
550	H8 —30	1.03	1.50	1.73	2.17	1.30
600	H10—29	1.16	1.67	1.93	2.42	1.45
650	H10—27	1.30	1.87	2.18	2.72	1.63
700	H10—26	1.39	2.00	2.32	2.90	1.74
750	H10—23	1.49	2.14	2.48	3.10	1.86
800	H10—21	1.59	2.29	2.65	3.30	1.98
850	H10—19	1.73	2.48	2.88	3.60	2.16
900	H12—18	1.81	2.6	3.02	3.78	2.26
950	H12— $1\frac{1}{64}$	1.85	2.66	3.10	3.87	2.32
1000	H12—16	1.97	2.83	3.28	4.10	2.46
1100	H12— $\frac{3}{16}$	2.20	3.17	3.68	4.60	2.76
1200	H12—12	2.24	3.22	3.74	4.67	2.80
1300	H12—8	2.49	3.58	4.16	5.18	3.11
1400	H16—5	2.67	3.82	4.42	5.54	3.32
1600	H16— $\frac{1}{32}$	3.00	4.32	4.88	6.25	3.76
1800	H16—A	3.44	4.94	5.73	7.16	4.30
2000	H16—D	3.80	5.46	6.34	7.90	4.75
2250	H16—G	4.28	6.15	7.14	8.90	5.35
2500	H16—J	4.80	6.9	8.02	10.00	6.01
2750	H20—L	5.38	7.56	8.80	11.00	6.60
3000	H20—N	5.72	8.22	9.55	11.92	7.16
3500	H20—P	6.56	9.45	10.9	13.80	8.20
4000	H24—S	7.60	10.9	12.7	15.80	9.50
4500	H24—U	8.50	12.3	14.2	17.75	10.63
5000	H24—W	9.35	13.5	15.6	19.50	11.70
5500	H24— $1\frac{1}{32}$	10.35	14.9	17.3	21.60	12.96

*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 Factor316	.447	.548	.632	.709	.775	.836	.895	.95	1.00	1.05	1.09	1.14	1.18	1.225