



NOZZLE AIR, POWER & ABRASIVE REQUIREMENTS

NOZZLE # ORIFICE SIZE			NOZZLE PRESSURE						
			50 PSI (3.45 BAR)	60 PSI (4.14 BAR)	70 PSI (4.83 BAR)	80 PSI (5.52 BAR)	90 PSI (6.21 BAR)	100 PSI (6.89 BAR)	125 PSI (8.62 BAR)
#2 1/8 inch (3.2 mm)	AIR	(cu ft/min)	12	13	15	18	19	21	26
		(cu m/min)	0.34	.037	0.42	0.51	0.54	0.59	0.74
	HORSEPOWER	(hp)	1.75	2	2.5	3	3.5	4	6
		(kW)	1.30	1.49	1.86	2.24	2.61	2.98	4.47
	ABRASIVE	(lb/hr)	70	80	90	100	110	120	135
		(kg/hr)	32	36	41	45	50	54	61
#3 3/16 inch (4.8 mm)	AIR	(cu ft/min)	25	30	35	40	43	45	60
		(cu m/min)	0.71	0.85	0.99	1.13	1.22	1.27	1.70
	HORSEPOWER	(hp)	5	8	9	9.5	10	10.5	16
		(kW)	3.75	5.97	6.71	7.08	7.46	7.86	11.93
	ABRASIVE	(lb/hr)	150	170	200	215	240	260	320
		(kg/hr)	68	77	91	98	109	118	145
#4 1/4 inch (6.35 mm)	AIR	(cu ft/min)	50	55	60	70	75	80	95
		(cu m/min)	1.42	1.56	1.70	1.98	2.12	2.27	2.69
	HORSEPOWER	(hp)	10	12	13	16	17	18	25
		(kW)	7.46	8.95	9.69	11.93	12.68	13.42	18.64
	ABRASIVE	(lb/hr)	270	300	350	400	450	500	675
		(kg/hr)	122	136	159	181	204	227	306
#5 5/16 inch (8 mm)	AIR	(cu ft/min)	80	90	100	115	125	140	190
		(cu m/min)	2.27	2.55	2.83	3.26	3.54	3.96	5.38
	HORSEPOWER	(hp)	17	20	25	27	28	30	36
		(kW)	12.68	14.91	18.64	20.13	20.88	22.37	26.85
	ABRASIVE	(lb/hr)	470	530	600	675	750	825	1000
		(kg/hr)	213	240	272	306	340	374	454
#6 3/8 inch (9.5 mm)	AIR	(cu ft/min)	110	125	145	160	175	200	275
		(cu m/min)	3.12	3.54	4.11	4.53	4.96	5.66	7.79
	HORSEPOWER	(hp)	25	29	32	35	40	45	57
		(kW)	18.64	21.63	23.86	26.10	29.83	33.56	42.50
	ABRASIVE	(lb/hr)	675	775	875	975	1060	1100	1350
		(kg/hr)	306	352	397	442	481	499	612
#7 7/16 inch (9.5 mm)	AIR	(cu ft/min)	150	170	200	215	240	255	315
		(cu m/min)	4.25	4.81	5.66	6.09	6.80	7.22	8.92
	HORSEPOWER	(hp)	35	40	45	50	55	60	70
		(kW)	26.10	29.83	33.56	37.28	41.01	44.74	52.20
	ABRASIVE	(lb/hr)	900	1000	1200	1300	1400	1510	1800
		(kg/hr)	408	454	544	590	635	703	816
#8 1/2 inch (12.7 mm)	AIR	(cu ft/min)	200	225	250	275	300	340	430
		(cu m/min)	5.66	6.37	7.08	7.79	8.50	9.63	12.18
	HORSEPOWER	(hp)	45	50	55	63	70	75	95
		(kW)	33.56	37.28	41.01	46.98	52.20	55.93	70.84
	ABRASIVE	(lb/hr)	1200	1350	1500	1700	1850	2025	2525
		(kg/hr)	544	612	680	771	839	919	1145
#10 5/8 inch (16 mm)	AIR	(cu ft/min)	300	350	400	450	500	550	700
		(cu m/min)	8.50	9.91	11.33	12.74	14.16	15.58	19.82
	HORSEPOWER	(hp)	70	80	90	100	110	120	150
		(kW)	52.20	59.66	67.11	74.57	82.03	89.48	111.85
	ABRASIVE	(lb/hr)	1900	2200	2400	2700	3000	3300	4000
		(kg/hr)	862	998	1089	1225	1361	1497	1814
#12 3/4 inch (19 mm)	AIR	(cu ft/min)	430	500	575	650	700	800	1100
		(cu m/min)	12.18	14.16	16.28	18.41	19.82	22.66	31.15
	HORSEPOWER	(hp)	100	115	130	145	160	175	215
		(kW)	74.57	85.76	96.94	108.13	119.31	130.50	160.33
	ABRASIVE	(lb/hr)	2700	3100	3500	3900	4300	4700	5700
		(kg/hr)	1225	1406	1588	1769	1950	2132	2586

This table is to be used as reference only. Actual results may vary depending on specific abrasive medium used. This table is based on abrasive with a bulk density of 100 pounds per cubic foot.