



NOZZLE AIR, POWER & ABRASIVE REQUIREMENTS

NOZZLE # ORIFICE SIZE			NOZZLE PRESSURE								
			50 PSI	60 PSI	70 PSI	80 PSI	90 PSI	100 PSI	125 PSI		140 PSI
			(3.45 BAR)	(4.14 BAR)	(4.83 BAR)	(5.52 BAR)	(6.21 BAR)	(6.89 BAR)	(8.62 BAR)		(9.65 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	230	
		(cu m/min)	2.27	2.55	2.83	3.26	3.54	3.96	5.38	6.51	
	HORSEPOWER	(hp)	17	20	25	27	28	30	36	60	
		(kW)	12.68	14.91	18.64	20.13	20.88	22.37	26.85	44.85	
	ABRASIVE	(lb/hr)	470	530	600	675	750	825	1000	1125	
		(kg/hr)	213	240	272	306	340	374	454	510	
#6 3/8 inch (9.5 mm)	AIR	(cu ft/min)	110	125	145	160	175	200	275	315	
		(cu m/min)	3.12	3.54	4.11	4.53	4.96	5.66	7.79	8.91	
	HORSEPOWER	(hp)	25	29	32	35	40	45	57	65	
		(kW)	18.64	21.63	23.86	26.10	29.83	33.56	42.50	48.59	
	ABRASIVE	(lb/hr)	675	775	875	975	1060	1100	1350	1840	
		(kg/hr)	306	352	397	442	481	499	612	835	
#7 7/16 inch (9.5 mm)	AIR	(cu ft/min)	150	170	200	215	240	255	315	405	
		(cu m/min)	4.25	4.81	5.66	6.09	6.80	7.22	8.92	11.46	
	HORSEPOWER	(hp)	35	40	45	50	55	60	70	90	
		(kW)	26.10	29.83	33.56	37.28	41.01	44.74	52.20	67.28	
	ABRASIVE	(lb/hr)	900	1000	1200	1300	1400	1510	1800	2540	
		(kg/hr)	408	454	544	590	635	703	816	1152	
#8 1/2 inch (12.7 mm)	AIR	(cu ft/min)	200	225	250	275	300	340	430	540	
		(cu m/min)	5.66	6.37	7.08	7.79	8.50	9.63	12.18	15.28	
	HORSEPOWER	(hp)	45	50	55	63	70	75	95	120	
		(kW)	33.56	37.28	41.01	46.98	52.20	55.93	70.84	89.70	
	ABRASIVE	(lb/hr)	1200	1350	1500	1700	1850	2025	2525	3240	
		(kg/hr)	544	612	680	771	839	919	1145	1470	
#10 5/8 inch (16 mm)	AIR	(cu ft/min)	300	350	400	450	500	550	700	880	
		(cu m/min)	8.50	9.91	11.33	12.74	14.16	15.58	19.82	24.90	
	HORSEPOWER	(hp)	70	80	90	100	110	120	150	190	
		(kW)	52.20	59.66	67.11	74.57	82.03	89.48	111.85	142.02	
	ABRASIVE	(lb/hr)	1900	2200	2400	2700	3000	3300	4000	5200	
		(kg/hr)	862	998	1089	1225	1361	1497	1814	2359	
#12 3/4 inch (19 mm)	AIR	(cu ft/min)	430	500	575	650	700	800	1100	1255	
		(cu m/min)	12.18	14.16	16.28	18.41	19.82	22.66	31.15	35.52	
	HORSEPOWER	(hp)	100	115	130	145	160	175	215	245	
		(kW)	74.57	85.76	96.94	108.13	119.31	130.50	160.33	183.13	
	ABRASIVE	(lb/hr)	2700	3100	3500	3900	4300	4700	5700	7375	
		(kg/hr)	1225	1406	1588	1769	1950	2132	2586	3345	

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.