

## Compressed air consumption

Make sure the compressor is suitable for the total compressed air consumption of the setup. The blast machine's consumption is primarily determined by the blast pressure and nozzle diameter as shown in the table below. Add the consumption of additional components, such as the aftercooler and blast helmet, to select the correct compressor capacity.

Compressed air consumption in m <sup>3</sup> /minute									
Nozzle	Blasting pressure in bar								
Ø mm	2	3	4	5	6	7	8	9	10
#2 = 3.2	0.19	0.28	0.38	0.47	0.57	0.66	0.76	0.85	0.95
#3 = 4.8	0.43	0.64	0.85	1.06	1.28	1.49	1.70	1.91	2.13
#4 = 6.4	0.76	1.13	1.51	1.89	2.27	2.65	3.03	3.40	3.78
#5 = 8.0	1.18	1.77	2.36	2.95	3.55	4.14	4.73	5.32	5.91
#6 = 9.5	1.67	2.50	3.33	4.17	5.00	5.83	6.67	7.50	8.33
#7 = 11.0	2.23	3.35	4.47	5.59	6.70	7.82	8.94	10.05	11.17
#8 = 12.7	2.98	4.47	5.96	7.45	8.93	10.42	11.91	13.40	14.89

Table 1a

Compressed air consumption in cfm									
Nozzle	Blasting pressure in psi								
Ø inch	30	45	60	75	90	100	115	130	145
#2 = 2/16	6.80	10.20	13.60	17.00	20.40	22.66	26.06	29.46	32.86
#3 = 3/16	15.30	22.94	30.59	38.24	45.89	50.99	58.64	66.28	73.93
#4 = 4/16	27.19	40.79	54.39	67.98	81.58	90.64	104.24	117.84	131.44
#5 = 5/16	42.49	63.73	84.98	106.22	127.47	141.63	162.88	184.12	205.37
#6 = 6/16	61.19	91.78	122.37	152.96	183.56	203.95	234.54	265.14	295.73
#7 = 7/16	83.28	124.92	166.56	208.20	209.84	277.60	319.24	360.88	402.52
#8 = 8/16	108.77	163.16	217.55	271.93	326.32	362.58	416.97	471.35	525.74

Table 1b

Regularly check your nozzle's wear; a larger orifice increases the air consumption. If your compressor can't handle it, the blasting pressure will drop and you will lose blasting efficiency!