SERVICES REQUIRED - MANUAL BLAST CABINETS

GUYSON

COMPRESSED AIR REQUIREMENTS:

Main Supply To Blast Cabinet

The compressed air supply should in all cases be sufficient to allow the blast nozzle (or the dust collector if compressed air is additionally required) to operate efficiently at all times. Restrictions to either the flow or the pressure could affect the performance of the equipment.

The supply should be clean, dry and oil free and through pipework with a large enough bore so as not to offer restrictions to the flow. We would recommend that a minimum bore of 1" (25 mm) be used. For Multiblast equipment a minimum bore of 1 ½" pipe must be used and will vary upwards depending on the number of guns specified.

A pneumatic isolating valve is supplied and this needs to be fitted to the filter on the blast cabinet. The inlet to the filter on the rear cabinet leg is ½" BSP (Formula range), ⅜" BSP (Tiger range), ½" BSP (Euroblast suction feed range) and ¾" BSP (Euroblast pressure feed range). A direct feed rather than through quick release fittings is recommended, as these will inevitably offer further restrictions to the flow.

Additionally, supply pressure should be no more than 90 psi (6 bar) in systems using the G27 pressure pot and 90 psi (6 bar) in those using the G55 pressure pot.

The following chart indicates the airflow required for each of the airjet and nozzle options. Please use this information as a guide when specifying the compressed air supply to the blast system. Note that the compressed air supply should be capable of providing at least 50% more air volume than is required when the nozzle is new. This will ensure that the nozzle will continue to function efficiently even when worn.

AIRFLOW THROUGH GUYSON AIR JETS MEASURED IN CUBIC FEET PER MINUTE (M^3/HOUR)

		AIR PRESSURE (P.S.I.)						
Air jet bore	Blast Gun	30 (2bar)	40 (2.8 bar)	50 (3.5bar)	60 (4.1bar)	70 (4.8 bar)	80 (5.5bar)	SUCTION FEED
2.0 mm	400/500	3 5.1 m^3/h	4 6.8 m^3/h	4.5 7.7 m^3/h	5.5 9.3 m^3/h	6.5 11 m^3/h	7.5 12.7 m^3/h	
2.4 mm	400/500	4 6.8 m^3/h	5 8.5 m^3/h	7 11.9 m^3/h	8 13.6 m^3/h	9 15.3 m^3/h	11 18.7 m^3/h	
2.8 mm	400/500	6 10.2 m^3/h	8 13.6 m^3/h	10 17 m^3/h	12 20.4 m^3/h	14 23.8 m^3/h	16 27.2 m^3/h	
3.2 mm	900	7 11.9 m^3/h	9 15.3 m^3/h	11 18.7 m^3/h	14 23.8 m^3/h	16 27.2 m^3/h	17 28.9 m^3/h	
4.0 mm	900	12 20.4 m^3/h	15 25.5 m^3/h	18 30.6 m^3/h	21 35.7 m^3/h	24 40.8 m^3/h	27 45.9 m^3/h	
4.8 mm	900	18 30.6 m^3/h	22 37.4 m^3/h	27 45.9 m^3/h	32 54.4 m^3/h	37 62.9 m^3/h	42 71.4 m^3/h	

AIRFLOW THROUGH GUYSON NOZZLES MEASURED IN CUBIC FEET PER MINUTE (M^3/HOUR)

NOZZLE BORE			NOZZLE PRESSURE (P.S.I.)								
Approx. mm	inch	no	30 (2bar)	40 (2.8 bar)	50 (3.5bar)	60 (4.1bar)	70 (4.8 bar)	80 (5.5bar)	90 (6.2bar)	100 (6.9bar)	PRESSURE FEED
3	⅛	2	7 11.9 m^3/h	9 15.3 m^3/h	12 20.4 m^3/h	13 22 m^3/h	15 25.5 m^3/h	18 30.6 m^3/h	19 32.3 m^3/h	21 35.7 m^3/h	
5	3/16	3	19 32.3 m^3/h	22 37 m^3/h	25 42 m^3/h	30 51 m^3/h	35 60 m^3/h	40 68 m^3/h	43 73 m^3/h	45 76 m^3/h	
6	¼	4	34 58 m^3/h	40 68 m^3/h	50 85 m^3/h	54 92 m^3/h	60 102 m^3/h	70 119 m^3/h	75 127 m^3/h	80 136 m^3/h	
8	5/16	5	53 90 m^3/h	65 110 m^3/h	80 136 m^3/h	90 152 m^3/h	100 170 m^3/h	115 195 m^3/h	125 212 m^3/h	140 238 m^3/h	
9.5	⅜	6	74 125 m^3/h	92 156 m^3/h	110 186 m^3/h	125 212 m^3/h	145 246 m^3/h	160 272 m^3/h	175 297 m^3/h	200 340 m^3/h	

Modifications and improvements to Guyson machines are introduced from time to time as a direct result of our policy of continuous development. Consequently all designs and specifications quoted must be regarded as subject to change.