SERVICES REQUIRED - MANUAL BLAST CABINETS

GUYSON MANUAL BLAST SYSTEMS

All Guyson blast systems are generally delivered on curtain sided vehicles and will require unloading using a fork lift truck. If special arrangements have already been made regarding delivery, these will be detailed on the order acknowledgement.

All items will be shrink wrapped and strapped on to wooden pallets. Tall or top heavy items may be laid down on their side for transit. If you require further details regarding the packaging sizes or weights of your consignment, please contact Customer Service.

No special foundations are required for this equipment. All that is required is a clean, dry and level floor. Please note that during maintenance and unloading, dust may escape from the blast system, so when consideration is given to siting, bear this in mind.

Only suitably qualified personnel should make the connections to services and the electrical supply, fitted by the customer, must comply to BS7671.

The following lists cover the electrical and compressed air supplies required for your new machine.

ELECTRICAL REQUIREMENTS		
CABINET LIGHTING		
Electric supply	Single phase, 230 volt, 50 Hz	
Euroblast Range - External LED	Electric supply LED link light	Single phase, 230 V, 50 Hz 7 W
Formula Range - Internal bulkhead light fitting	Electrical supply LED Light	Single phase, 230 V, 50 Hz 7.5 W
Fuse rating	2 amp	

DUST COLLECTORS & CYCLONES

Model	Phase	Voltage	Cycle (Hz)	Power (kW)	Full load current* (amps)
21 Dust Collector	1	230	50	0.37	3.0
41 Dust Collector	1	230	50	0.37	3.0
41 Dust Collector	3	400	50	0.37	1.4
C400 Dust Collector	1	230	50	0.75	5.5
C400 Dust Collector	3	400	50	0.75	2.0
C600 Dust Collector	1	230	50	0.75	5.5
C600 Dust Collector	3	400	50	0.75	2.0
C800 Dust Collector	3	400	50	1.5	3.6
75/16 Cyclone	1	230	50	0.55	4.7
75/16 Cyclone	3	400	50	0.55	1.5
CY600/12 Cyclone	3	400	50	1.5	3.6
GC20-K5 Dust Collector	3	400	50	2.20	6.5

** Fuses should be sized to comply with the full load current. When sizing fuses, smallest fuse rating should be used to suit motor and starting characteristics.*

SUPPLY TO C400 and C800 DUST COLLECTORS

These items require a supply of clean, dry and oil free compressed air to the regulator on the manifold, to operate the filter cartridge pulse cleaning. The supply should be at a pressure of between 40 and a maximum of 50 psi with a minimum flow rate of 2 cfm. A ¼" BSP inlet fitting is supplied on the C400 and a ½" BSP inlet fitting on the C800.

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.

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.