

SANDBLASTING CABINET - M SUCTION SERIES
240 V / 380 V



- Warranty
- Safety
- Operation
- Service Parts
- Accessory Information
- Registration Form



INSTRUCTION MANUAL

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NOTICE TO PURCHASERS AND USERS OF OUR PRODUCTS AND THIS INFORMATIONAL MATERIAL

The products described in this material, and the information relating to those products, is intended for knowledgeable, experienced users of abrasive blasting equipment.

No representation is intended or made as to the suitability of the products described herein for any particular purpose of application. No representations are intended or made as to the efficiency, production rate, or the useful life of the products described herein. Any estimate regarding production rates or production finishes are the responsibility of the user and must be derived solely from the user's experience and expertise, and must not be based on information in this material.

The products described in this material may be combined by the user in a variety of ways for purposes determined solely by the user. No representations are intended or made as to the suitability or engineering balance of the combination of products determined by the user in his selection, nor as to the compliance with regulations or standard practice of such combinations of components or products.

It is the responsibility of the knowledgeable, experienced users of the products mentioned in this material to familiarize themselves with the appropriate laws, regulations and safe practices that apply to these products, equipment that is connected to these products and materials that may be used with these products.

It is the responsibility of the user to insure that proper training of operators has been performed and a safe work environment is provided.

Our company is proud to provide a variety of products to the abrasive blasting industry, and we have confidence that the professionals in our industry will utilize their knowledge and expertise in the safe efficient use of these products.

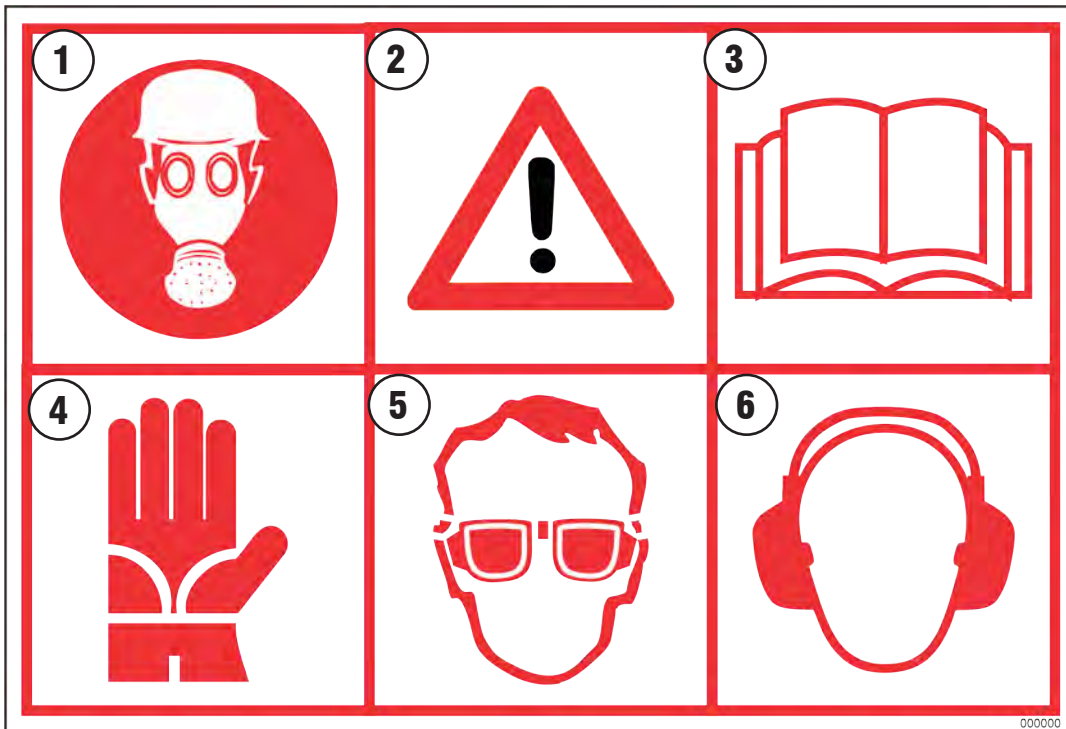
SAFETY AND WARNING

GENERAL SAFETY

1. Carefully inspect the shipping carton for any signs of transport damage. The damage to the carton often indicates possibility of transport damage to the equipment inside.
2. Carefully remove your IST SANDBLASTING CABINET from the shipping carton and skid.
3. Check your equipment immediately to ensure that it is free of transport damage. Report any transport damage to the carrier without delay for possible claim procedures. International Surface Technologies inc. is not responsible for damage to equipment after it leaves our warehouse.
4. Check the equipment and compare it with the parts you have received. If any parts are missing, contact the supplier you purchased the equipment from.

Before operating the IST SANDBLASTING CABINET, read this Instruction Manual completely. All IST products are engineered and manufactured to the highest performance standards and have been subjected to detail testing before shipment from the factory.

DANGER AND WARNING LABELS



1. Wear breathing mask
2. Observe warnings at all times.
3. Read the Instruction Manual carefully.
4. Wear rubber gloves.
5. Wear protective eyewear before use
6. Wear earing protection before use

WARNING

« READ ALL INSTRUCTIONS » Failure to follow the SAFETY RULES identified by a BULLET (●) symbol listed BELOW and other safety precautions may result in serious personal injury.

« SAVE THESE INSTRUCTIONS »

GENERAL SAFETY RULES

- **KEEP WORK AREA CLEAN.**
- **KEEP CHILDREN AWAY.** Do not let visitors come in contact with the equipment. All visitors should be kept away from the work area.

PERSONAL SAFETY

WARNING

SANDBLAST CABINET MAY EMIT POTENTIALLY HAZARD DUST AND AIRBORNE CONTAMINANTS DURING OPERATION. YOU MUST WEAR APPROPRIATE BREATHING PROTECTION AT ALL TIMES WHILE OPERATING OR STANDING AROUND THE UNIT.

- **GUARD AGAINST ELECTRIC SHOCK.** Non-skid footwear is recommended where damp or wet ground may be encountered. A ground fault circuit interrupter protected power line must be used for these conditions.
- **DRESS PROPERLY.** Do not wear loose clothing or jewelry. They can be caught in the moving parts. Wear protective hair covering to contain long hair.
- **USE SAFETY EQUIPMENT. WEAR SAFETY GOGGLES** or glasses with side shields.
- **WEAR A DUST PROOF MASK.**
- **STAY ALERT. USE YOUR COMMON SENSE.** Concentrate on what you are doing. Do not operate the unit when you are tired or under the influence of drugs.
- **DO NOT OVERREACH.** Keep proper footing and balance at all times.
- **BEFORE CONNECTING THE UNIT** be sure the power is the same as that specified on the nameplate of the Sand Blasting Cabinet. With power greater than that specified on the nameplate can seriously injure the user – as well as damage the Unit.
- **BEFORE STARTING TO WORK** you must wear earing protections, efficient for 80 dB or more.

UNIT USE AND CARE

- **DO NOT FORCE THE UNIT.** It will perform better and safer at the rate for which it was designed.
- **THE USE OF ANY OTHER ACCESSORIES** not specified in this manual may create a hazard.
- **CLOSE THE MAIN BREAKER SWITCH BEFORE SERVICING** or when not in use.
- **DO NOT ALTER OR MISUSE THE UNIT.** These units are precision built. Any alteration or modification not specified is misuse and may result in a dangerous situation.

Only trained repairmen should attempt (●) **ALL REPAIRS**, electrical or mechanical. Contact the nearest IST a repair service facility. Use only IST replacement parts; any other parts may create a hazard.

ENVIRONMENTAL CONDITIONS FOR WHICH THE EQUIPMENT IS DESIGNED

- Indoor location
- Altitude 2 000 m max
- Ambient temperature: 40 °C max.
- Relative humidity: 80 %
- Main supply voltage fluctuation +/- 10 %
- To use with non combustible dust only

INTRODUCTION

Welcome to the IST® family of sandblasting products. This booklet contains helpful information and acquaints you with the operation and maintenance of your equipment. Please read carefully and follow our recommendations to assure trouble free operation. If you have any questions, please do not hesitate to contact your distributor or our technical service.

INSTALLATION

1. Unbolt the blast cabinet from the pallet. Attach a strap or a hoist to the eyelets located on the top of the machine and move it to its final location using a lift truck or a crane.
2. Make sure the cabinet is leveled and well grounded. Do not place on a wooden floor or a rubber mat, unless a ground wire has been installed. Check with a qualified electrician.
3. Place the system to the installation location
4. Unwrap and remove the cabinet from the pallet
5. Insure there is adequate space on both sides of the cabinet for full opening of part loading/unloading and maintenance access doors.
6. Insure that there is adequate space at both sides of the system for easy access to components such as the reclaimer and dust collector
7. The dust collector should be located on a leveled area near the back of the cabinet, on the right side (while facing cabinet). Attach one end of the corrugated discharge hose to the outlet of the reclaimer and the other end to the inlet located at the bottom of the dust collector. Secure both ends with the supplied clamps. See dust collector section for more details

All IST M® series cabinets are equipped with a motorized dust collector ranging of 680 m³/h of flow rate.

PNEUMATIC CONNECTION



Connect your shop's air supply line to the air inlet. The hose should have a minimum of 12.7 mm inside diameter. Never use male-female quick couplings. Choose couplings that offer as little restriction to the airflow as possible.

To properly operate, your IST system use clean, dry air. Moisture or oil from the compressed air supply can contaminate the abrasive, and prevent it from flowing freely and cause inefficient blasting.

For detailed pneumatic connections, refer to pneumatic diagram page 33.

CAUTION If you use interlocking connections, secure them with pins. A connection that disconnects under pressure, could cause serious injury.

PROPER AIRJET/NOZZLE COMBINATIONS

Make sure you have a proper air jet/nozzle combination. Standard IST suction cabinets are equipped with 4 mm air jets and 8 mm nozzles.

A simple way to determine if you have an incorrect combination is to check the abrasive regulator at the bottom of the reclaimer when the operator's pedal is depressed. If media is being discharged out of the regulator, there is an incorrect jet/nozzle combination or an obstruction inside the gun.

AIR CONSUMPTION TABLE (m³/h)

Orifice (mm)	Nozzle ID ³	PRESSURE						(kPa ²)
		276	345	414	483	552	689 ⁰	
3.175	6.350	20	25	29	32	36	44	(m ³ /h) ¹
3.968	7.937	32	39	46	51	98	120	
4.762	9.525	78	95	109	124	138	98	
5.556	11.112	64	78	88	102	110	136	
6.350	12.700	83	98	114	129	144	160	

⁰Optimal pressure. ¹ m³/h: cubic meters per hour.

²kPa: Pressure at nozzle in kilo Pascal. ³Nozzle ID: inside diameter of nozzle (mm)

VERIFY INSTALLATION

1. Check that all pipe and hose connections are tightly fastened and air tight.
2. Check that all electrical box covers are securely installed.
3. Check that the dust drum under the dust collector is sitting firmly and is center (if equipped).
4. Turn the cabinet power switch to the "ON" position. The cabinet lights will power on and the dust collector fan and the reclaimer will start.
5. Set the blast air pressure regulator to the desired pressure.
6. Insert both hands into the cabinet gloves, take the gun and press the foot pedal. Blasting will start, wait a few second and the blast flow will stabilize.
7. Turn the cabinet power switch to the "OFF" position. Light will turn off and the dust collector fan and reclaimer will stop.

CAUTION Disable and lock out power sources before performing service or maintenance work. Do not look into the fan outlet to determine the correct motor rotation. Check that the fan exhaust is clear of tools and free of debris before checking fan rotation. To avoid personal injury, stay clear of the fan exhaust.

LOADING ABRASIVE MEDIA

WARNING

Your suction cabinet is designed to operate efficiently with most **recyclable abrasive media** on the market. However, certain types such as sand, recycled glass or silica are not recommended and should not be used in our blast cabinet.

These abrasives generate very fine dust that may block the bag's pores, obstruct the ventilation system and cause dust accumulation inside the cabinet while in use. Instead, use reclaimable abrasives such as glass beads, aluminum oxide steel grit or plastic media.


For better results for the reclaiming process, **please call one of our technical representatives** if you have to use a different **type of abrasive** from the one your equipment has been set for at the factory.

Manufactured Abrasives


NAME	TYPE	SHAPE	HARDNESS SCALE	DENSITY kg/m ³	CONTENT SILICA	DUST FACTOR	MESH SIZE	REUSE FACTOR	AVAILABILITY
Aluminium Oxide	Oxide	Irregular	8 Mohs	1922	None	Low	6-600	Good	Good
Silicon Carbide	Carbide	Angular	9 Mohs	1602-1762	None	Low	6-600	Good	Good
Glass Beads	Silica	Spherical	5-6 Mohs	1602	0 free Silica	Low	20-325	Good	Good
Plastic Grit	Polyurethane	Angular	3-4 Mohs	929-961	None	Low	12-80	Good	Good
Chilled Iron & Steel Grit	Metallic	Angular	40-68 Rc Rockwell C	4005	None	Very Low	18-200	High	Good
Chilled Iron & Steel Shot	Metallic	Spherical	40-68 Rc Rockwell C		None	Very Low	7-200	High	Good

LOADING ABRASIVE MEDIA


Follow these steps to avoid locking the drain at the bottom of the cabinet when adding a brasive media.



1. Turn on the cabinet to activate the vacuum system.



2. **SLOWLY** add **approximately** half a bag of abrasive media through the grating inside the cabinet.



NOTE: Some cabinets can hold more than half a bag when added gradually.

SHUT DOWN

1. Release the foot treadle. The blast will stop.
2. Once cleaning is finished, await 10 to 15 seconds before turning off the power switch and opening the door of the cabinet in order to allow the evacuation of dust in suspension.
3. Open the door and remove the treated parts from the blast cabinet.
4. Close air supply.
5. Turn power switch to the "OFF" position.
6. Empty the dust collector waste drum (Optional part). Replace the drum squarely on the dust drum platform and centered under the cover. The dust drum and cover must create an airtight seal.
7. Shake bags of your dust collector (disregard if your system is equipped with optional automatic bag shaker or a cartridge-type dust collector).

CHANGING THE MEDIA

When changing from one type or size of media to another, it can be extremely important to clean out the blast and recovery hoses, storage hopper, and the cabinet interior thoroughly to avoid contamination of the new media.

During normal sandblasting operation, the media should be replaced completely every 8 hours.

CLEANING THE SYSTEM

1. Turn the system off.
2. You need a container large enough to collect used media. Place the container under the AR $\frac{3}{4}$ valve (part 22, page 24).
3. Remove AR $\frac{3}{4}$ rubber plug (part 24, page 24), media will fall in your container.
4. Turn on system and press foot pedal, to make sure all media as been removed from the blast hose and nozzle.
5. Turn off system and put back AR $\frac{3}{4}$ rubber plug (part 24, page 24).
6. When cleaning is done put back everything in place.

RELOADING WITH NEW ABRASIVE MEDIA

Refer to Abrasive Loading procedure on page 9

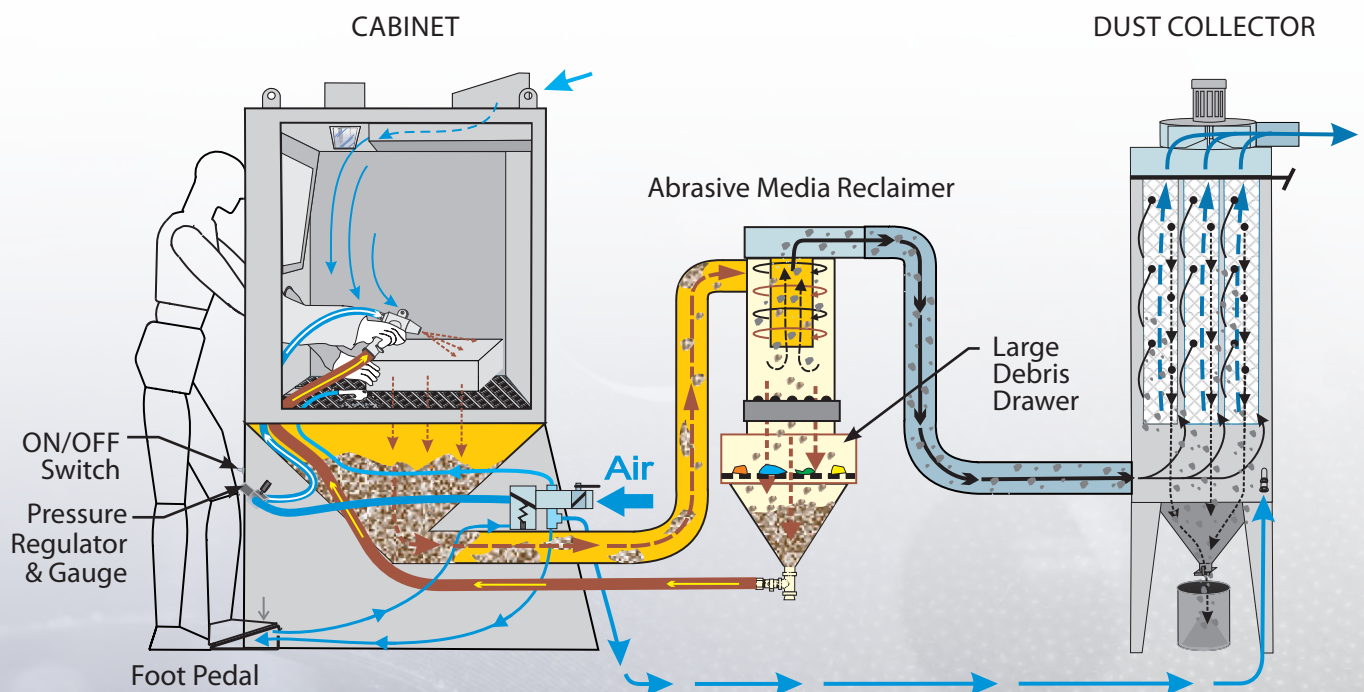
OPERATION

Turn on compressed air and turn on lightning and motor with the power switch. Compressed air must be clean, dry, and oil free.



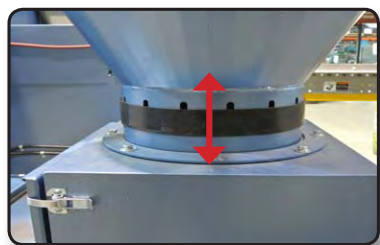
1. When using the unit, air pressure (**should not exceed 758 kPa**) Place the part to be treated inside the cabinet. The parts must be free of oil, grease, and moisture. Close and latch the cabinet load doors.
2. After closing the door, insert your hands into the two front glove openings. The blasting gun should be held firmly in one hand and the part to be treated in the other hand. The stream of abrasive should be oriented to the bottom of the working chamber.
3. Depressing blast control pedal will release compressed air flow to the blast gun. As the compressed air passes through the air jet, it creates a vacuum inside the gun and sucks up the media from the reclaimer and propels it out through the nozzle. Hold the gun or nozzle at a 90° angle to the part at a distance that produces the fastest results. The reclaimer screen will require periodic cleaning. The frequency of cleaning will depend on the volume of debris produced. See maintenance section at page 13 for more information.
4. After the media has blasted the part, the reclaiming system vacuums up the abrasive, dust and foreign material through the conduit at the bottom of the cabinet to the reclaimer. The reusable abrasive is separated from the dust and foreign material and is returned to the storage hopper for reuse. The dust bag or the cartridges of the dust collector, filters the dust and fine particles. Larger pieces of contaminants are trapped in the hopper's screen drawer.

HOW IT WORKS



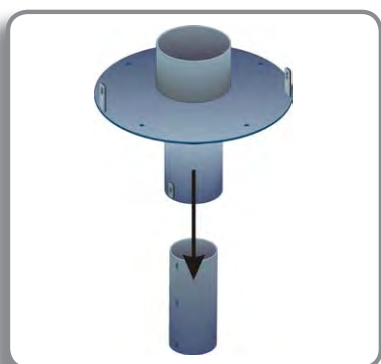
RECLAIMER

Although the reclaimer is factory set, it is possible to increase the amount of fine dust to be sucked up by the dust bag or dust collector. Just move the rubber band to adjust the obstruction of the holes located behind it. There are **two methods to change those settings**.



1. Adjustment of the SBR 3 x 25 mm rubber band

This adjustment will influence the quantity of dust that will be evacuated to the dust collector. Proceed step by step, moving the rubber band 6 mm at the time, covering or uncovering the slots behind it. **A wider opening will draw up more dust to the dust collector; a smaller opening will reduce that quantity. The equipment has to run for approx. two (2) hours** before any changes can be noticed. Repeat as needed.



2. Adjustment of the telescopic tube, inside of reclaimer

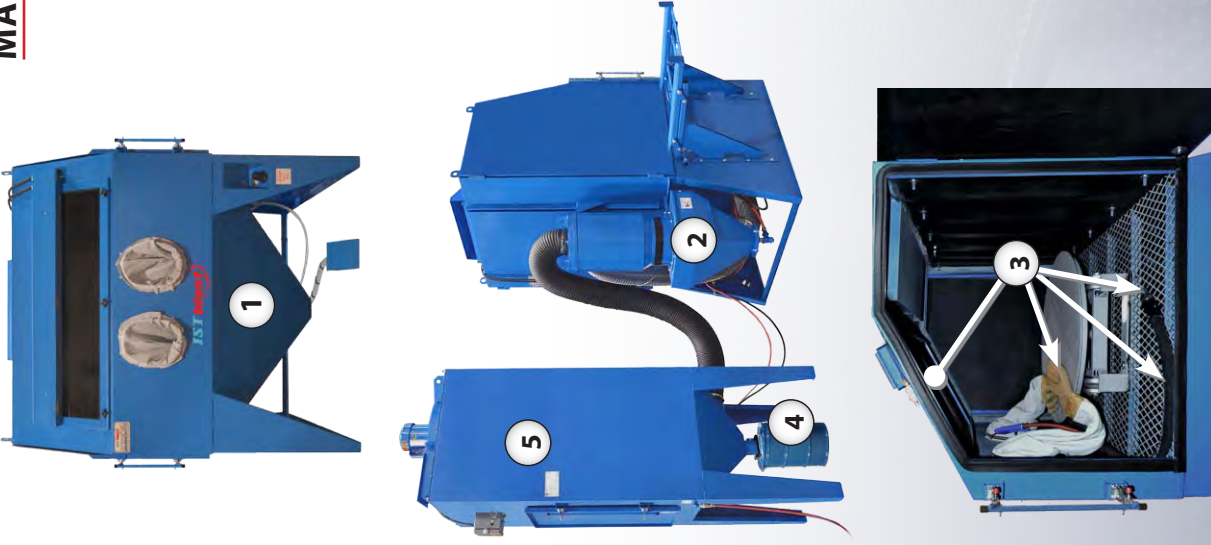
If, after a few tests, the rubber band adjustments should prove to be insufficient, you will have to proceed to the telescopic tube adjustment. This will be necessary if you have to change the abrasive type or granulometry. Proceed step by step, moving the tube up or down, 25 mm at the time. The equipment has to run for approx. two (2) hours before any changes can be noticed. Repeat as needed. Moving the tube downward will increase the quantity of dust drawn up by the dust collector, moving it up will decrease that quantity.

AR 3/4 ABRASIVE REGULATOR



Located at the bottom of the reclaimer, the AR 3/4 abrasive regulator meters the amount of media discharged from the nozzle. Be sure that nothing seals off the hole completely. You can adjust the opening using the adjustable clamp that must be located over it, covering about 2/3 of the hole. A smaller opening will bring more abrasive to the nozzle; a wider opening will bring less abrasive. A complete opening or a complete covering will interrupt the abrasive flow. To insure the performances of your equipment, the compressed air supply must be clean and dry. Oil or humidity in the compressed air will cause an abrasive jam at the abrasive regulator level, reducing and even stopping the abrasive flow.

MAINTENANCE CABINET AND DUST COLLECTOR



DAILY MAINTENANCE & OPERATION

1. Check both the quantity and quality of abrasive frequently. If required, clean out the system and reload with new media.
2. To avoid blockage, empty and clean the reclaimers screen drawer regularly.
3. Check for wear on all parts in direct contact with the blasting action: nozzle, gloves, window, plastic shield, air-jet, gun etc. Special attention must be given to nozzle, nozzle ring and rubber protector to avoid premature wear of gun. Make sure ventilation inlet is always free of obstruction.
4. Empty dust barrel or dust collector's bottom hopper regularly.
5. **Baghouse Dust Collector:** after each use, turn off the impeller and shake bags inside the dust collector. Never shake bags while the cabinet is running. Never wash bags, instead use compressed use compressed air, **blowing from the outside to the inside of the bag**, (the opposite would clog the bag's pores and make it unusable).
6. **Cartridge Dust Collector:** verify the values on the DCT1000 and replace cartridges when indicated. See next page for details.

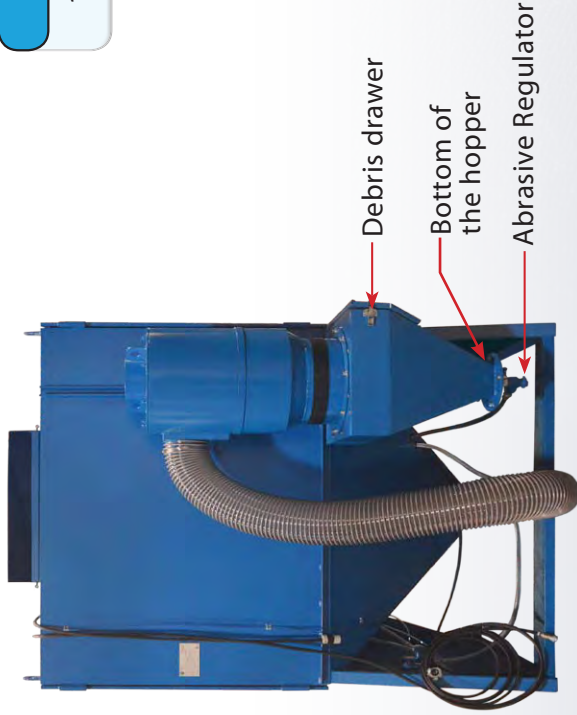
WEEKLY

- **Sandblast Nozzle:** check the I.D. using a drill bit that is 3 mm wider than the original diameter of the nozzle. If the drill bit fits in, replace the nozzle. A worn nozzle will cause a drop of abrasive pull and velocity.
- **Abrasive Hose:** check abrasive hose for wear. It has to be changed before it gets any perforation. Give a special attention to parts of the hose that are curved.
- **Couplings and Gaskets:** check on a regular basis the hose couplings and gaskets for wear.
- **Media filters:** replace bags when the dust collector is unable to evacuate the dust cloud from the cabinet.

MAINTENANCE CABINET

DAILY

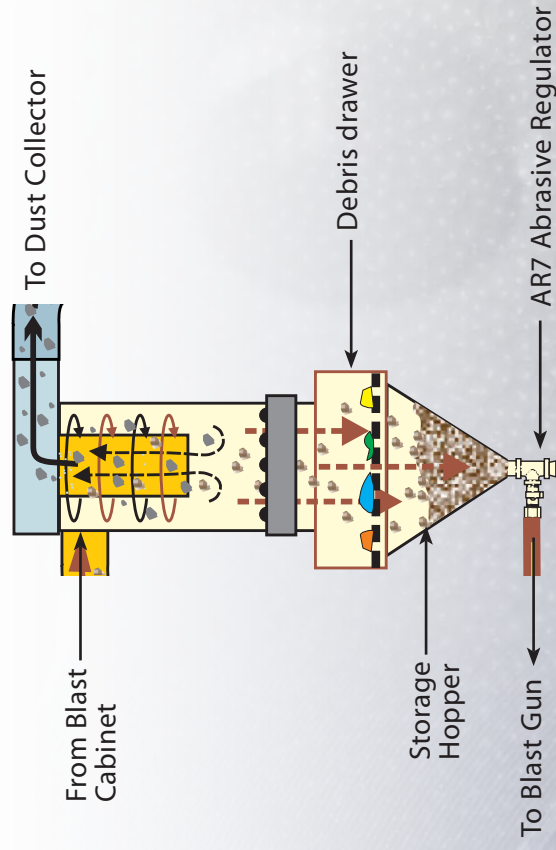
1. Auditory inspection around the recycling system to identify air leaks



MONTHLY

1. Disassembly and inspection of the AR7 abrasive regulator

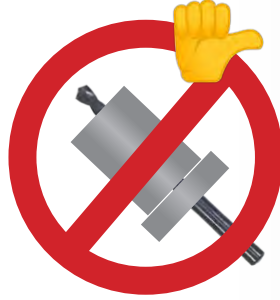
RECYCLING SYSTEM



NOZZLE AND JET MAINTENANCE

Nozzle: check the nozzle regularly for wear using a drill bit **3mm larger than the original nozzle diameter.**

GOES THROUGH



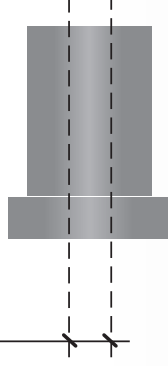
WORN NOZZLE TO BE REPLACED

DOES NOT GO THROUGH

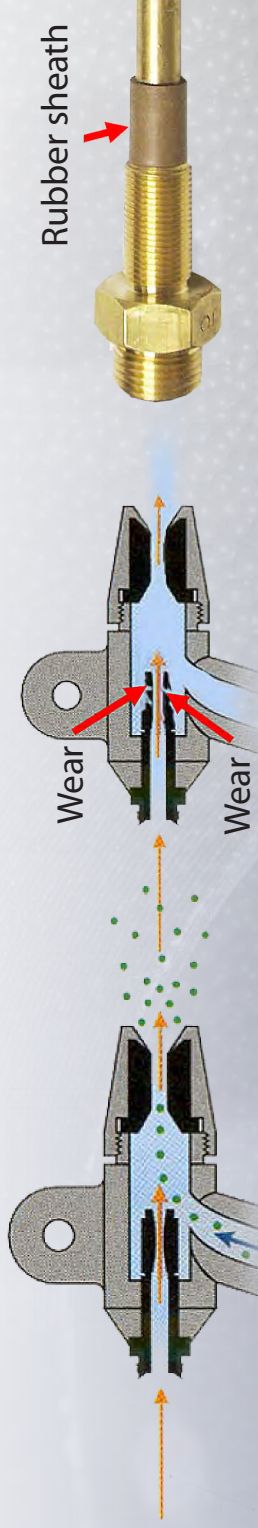


NOZZLE IN GOOD SHAPE

The diameter of the orifice should never exceed 3mm of wear.

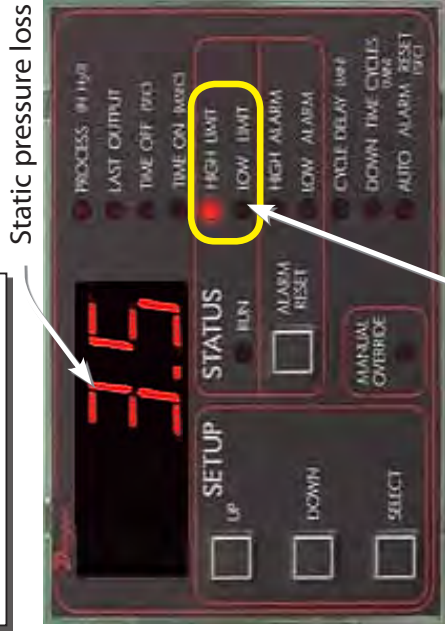


Air Jet : check regularly the wear of the injector and replace the **rubber sheath** if necessary to avoid wear from the outside.



PERIODICAL ADJUSTMENTS OF THE DCT1000 TIMER CONTROLLER

DCT1000 TIMER CONTROLLER



High limit / Low limit

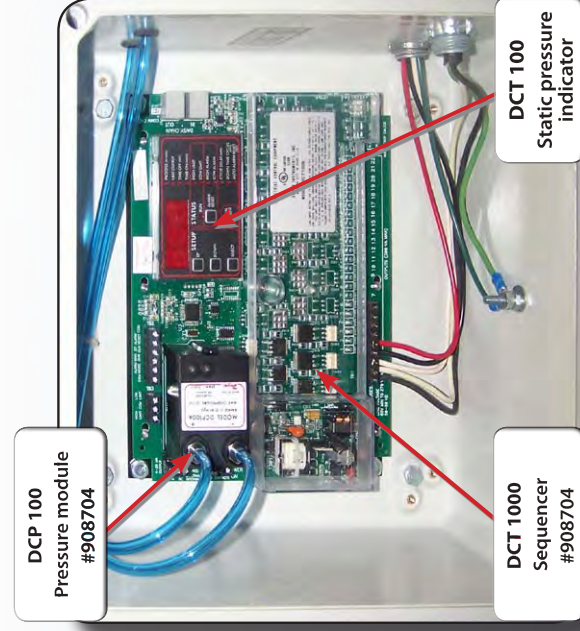
MONITORING OF PRESSURE DROPS

The DCT1000 monitors the static pressure differential between the clean and the dirty sides of cartridge filters – so-called pressure drop. As the filters load with dust, the resistance to air flow increases, and so does the pressure drop.

Brand new cartridge filter set will indicate a process value between **0.2 and 1.0**. During the first few hours of operation, dust will build up on the cartridges' pores in order to reach their optimal filtration capacities – this process is commonly referred to as the "dust cake".

High limit : 3.5
Low limit : 2.0

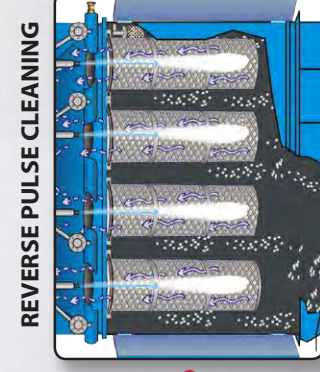
Once the new cartridges are saturated with a dust layer, the normal operating value should be between **2 and 3.5** – which are the initial **Low Limit** and **High Limit** defined in the DCT1000.



CARTRIDGE CLEANING

When the process value reaches the **High Limit**, the cleaning cycle starts emitting a series of pulses of air through each cartridge in order to dislodge exceeding amount of dust buildups. Pulses of air can be heard when the cycle is on.

During the cleaning cycle, the pressure drops should decrease on each pulse until it reaches the **Low Limit** which interrupts the cleaning cycle.



DCT1000 TIMER CONTROLLER

INITIAL VALUES

High limit : 3.5
Low limit : 2.0

Stagnant pressure drop



NEW VALUES

High limit : 3.9
Low limit : 2.4



PERIODICAL ADJUSTMENTS

Follow the procedure below in order to extend the life span of your cartridge filters while maximizing the filtration capacity of your dust collector.

When the cleaning process of the cartridges is no longer able to reach the **Low Limit** value, the cleaning cycle will run continuously.

At that moment, it is advised to increase the **Low Limit** and **High Limit** in order to extend the life span of the cartridge media to a certain limit.

Start increasing the **Low Limit** and **High Limit** of the cleaning process by 2 decimals above the stagnant value. For example, if the cleaning cycle runs continuously and the process value on the DCT1000 indicates **2.2**, set the new **Low Limit to 2.4** and the new **High Limit to 3.9**.

NEED TO REPLACE CARTRIDGES

FINAL VALUES

High limit : 8.5
Low limit : 7.0

Keep increasing moderately until your cartridges are incapable of reaching a **Low Limit of 7.0**. At that moment, it is time to change your cartridge filters and reset your process values to initial **Low Limit 2.0** and **High Limit 3.5**.

REPLACEMENT OF CARTRIDGE FILTERS

Change all your cartridge filters at the same time, regardless of their individual condition.

If you notice a damaged cartridge, immediately replace all your cartridge filters at once – if a cartridge filter is damaged and/or perforated, it may cause severe damage to your impeller and mislead the DCT1000 timer controller in its ability to control the cartridges cleaning cycles properly.

Refer to the owner's manual for parts number and changing procedure.

DCT1000 TIMER CONTROLLER

SETTINGS

Use the (Select) and (Up) (Down) keys you will be able to change the parameters.

Note: Your unit has been programmed in the factory, if you change some settings during operation be sure to write down the initial values.

PARAMETERS

Process: Value displayed during operation of the fan (inches of water restriction cartridges).

Last Output: Number of active solenoid (this value can not be changed because the system auto-detects the number of active coil connected to the card).

Time Off: downtime between each pulse (value 10 seconds).

ON Time: Time pulse valves (value 250 milliseconds).

High Limit: The value to which the cleanup will begin (value between 2.5 and 3.5).

Low limit: The value to which the cleaning will stop automatically (value between 1.5 and 2.5).

High Alarm: Value must be reached to activate alarm (High limit value 2).

Low Alarm: Value must be reached to activate alarm (value = 0).

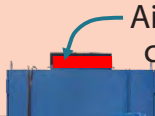
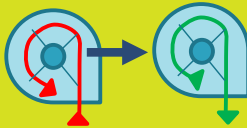
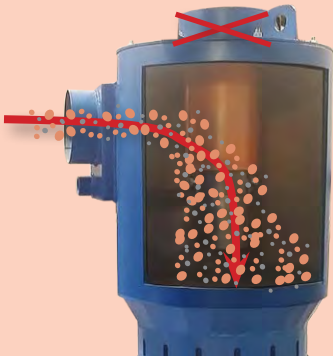

Cycle Delay: This value is to operate in manual mode (value = 0).

Down Time Cycles: This value is to operate in manual mode (value = 0).

Auto Alarm Reset: This value is to operate in manual mode (value = 0).



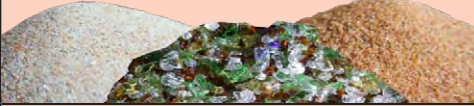
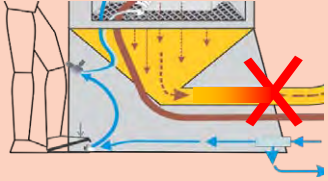
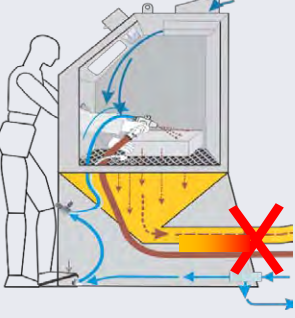

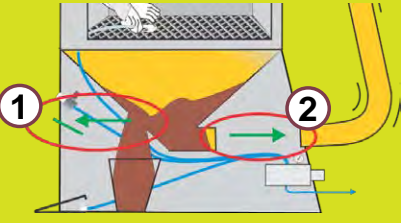
TROUBLESHOOTING

TYPE OF FAILURE	POSSIBLE CAUSE	SOLUTION
<p>Excessive dust in the cabinet (poor visibility) and / or very dusty abrasive (inefficient)</p>	 <p>Air intake behind the cabinet obstructed</p>	<p>Check the trap above the cabinet to make sure it is open and clear</p>
	<p><u>Clogged filter media:</u></p> <ol style="list-style-type: none"> 1. Dust barrel filled 2. Bags shaken during cabinet operating¹ 	<ol style="list-style-type: none"> 1. Empty the dust barrel as well as the connection hose connecting the barrel and the cyclone separator 2. Replace clogged bags²
	<p>Dust collector fan motor connected upside down (blades turn upside down)</p>	<p>Reverse motor electric connection</p> 
	<p>Inccorect adjustment of the cyclonic separator (the dust recirculates in a loop instead of being evacuated to the dust collector and mixes with the abrasive)</p> 	<ol style="list-style-type: none"> 1. If the material has changed since the cabinet was manufactured, contact an IST representative 2. If the material has not changed since the cabinet was manufactured, slightly open the rubber band around the cyclonic separator to increase the velocity, observe the results on the abrasive level after a few hours of blasting 

¹Never shake the bags while the dust collector fan is on. This forces dust to enter the pores of the media rather than lodge on the surface.


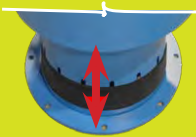

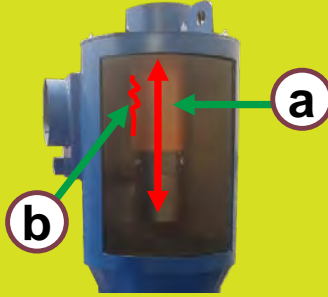
²Do not wash bags with water or by blowing compressed air through them. Both of these methods will damage the bags and make them obsolete.

TROUBLESHOOTING (CONT'D)

TYPE OF FAILURE	POSSIBLE CAUSE	SOLUTION
<p>Excessive dust in the cabinet (poor visibility) and / or very dusty abrasive (inefficient)</p>	<p>Non-recyclable abrasive³</p> 	<p>Follow abrasive drain and cleaning procedures and replace with recyclable abrasive.</p>
	<p>Suction hose (behind the cabinet) is partially or completely blocked</p> 	<p>Follow the procedures for resolving a clogged suction hose.</p>
<p>Suction hose outlet (behind the cabinet) partially or completely blocked</p> 	<p><u>Incorrect filling procedure:</u> too much abrasive or poured too quickly.</p> 	<p>Open the service door (1) and disconnect the abrasive suction hose (2) at the bottom of the hopper, remove the abrasive in excess and repeat the filling procedures properly.</p> 
	<p>Lack of pressure (kPa) (problem with the dust collector) which causes the outlet to become progressively blocked.</p>	<p>Follow the procedures for resolving a dusty cabinet as described above.</p>


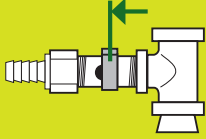
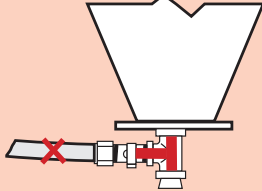
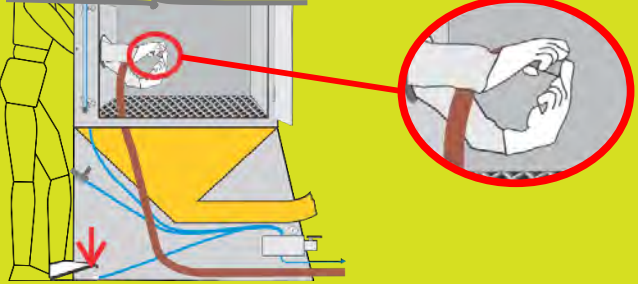
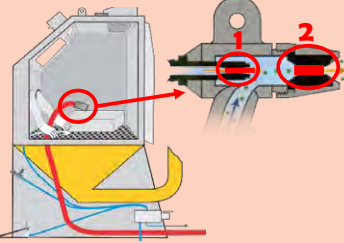
³ Never use non-recyclable abrasive in IST cabinets, such as slag, silica sand, recycled glass, or other like them. IST cabinets are designed to be used exclusively with recyclable abrasive that generates a limited amount of dust. Ask your IST representative for more information.

TROUBLESHOOTING (CONT'D)


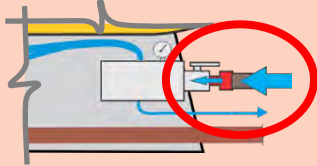

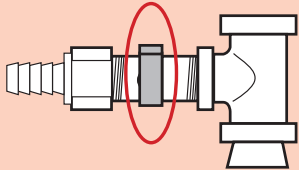
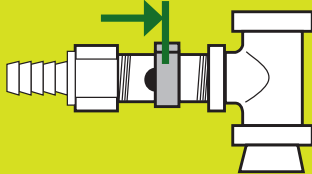
TYPE OF FAILURE	POSSIBLE CAUSE	SOLUTION
<p>"Good" abrasive ends up in the dust container of the dust collector</p> <p>Too much velocity (kPa) in the cyclone separator</p> 	<p>Incorrect adjustment of the rubber band of the cyclonic separator</p>	 <p>Cover gradually the holes with the rubber band to reduce the velocity flowing through the cyclonic separator</p>
	<p>The seal around the debris drawer is damaged or not properly installed</p>	 <p>Check the gasket around the drawer to make sure it is tight and replace if necessary.</p>
	<p>a. The central tube of the cyclonic separator is not adjusted properly due to a change of abrasive</p>	 <p>Contact your IST representative</p>
	<p>b. The central tube of the cyclonic separator is perforated at the inlet of the separator</p>	

⁴The center tube of the cyclonic separator is factory adjusted for the abrasive specified at the time of purchase. If the abrasive changes during operation, it may be necessary to readjust the inner tube to alter the movement and flow of air within the cyclonic separator.

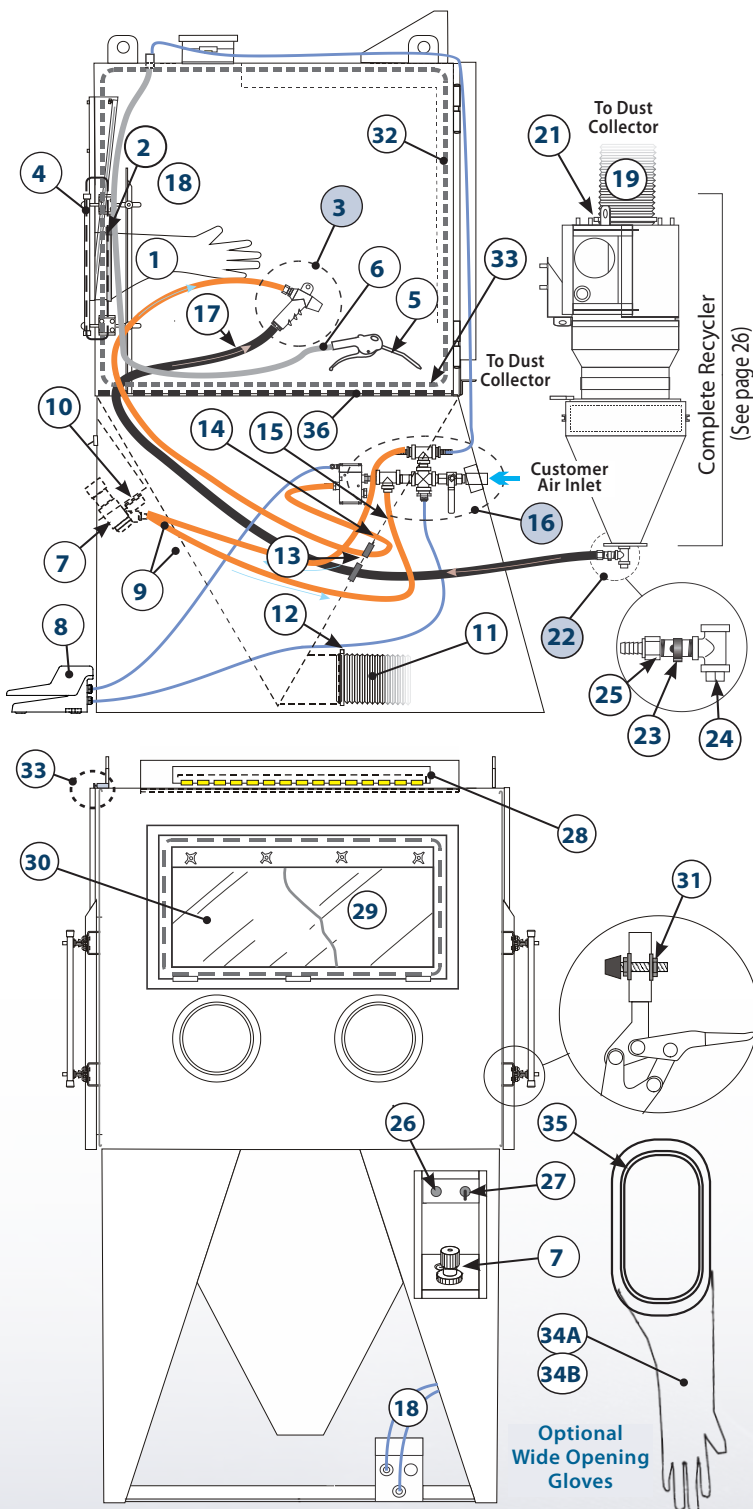
TROUBLESHOOTING (CONT'D)

TYPE OF FAILURE	POSSIBLE CAUSE	SOLUTION
<p>Lack of abrasive in the mix (the nozzle blows mainly air)</p> 	<p>Incorrect adjustment of the AR ³/₄ Abrasive Valve</p>	 <p>Slightly close the opening of the AR ³/₄ valve and test again : Less air = more abrasive</p>
	 <p>Blocked AR ³/₄ abrasive valve and/or abrasive transport hose to nozzle</p>	<ol style="list-style-type: none"> 1. Place a finger at the nozzle opening to obstruct the air outlet and activate the blaster to force air upstream of the nozzle to unblock it.  <ol style="list-style-type: none"> 2. If this does not solve the problem, disassemble the AR ³/₄ abrasive valve and transport hose in an attempt to isolate the obstruction.
	<p>Abrasive transport hose to nozzle is obstructed (gun) or improperly installed. Wrong air jet to nozzle opening ratio.</p> <p>The ratio should be 2 to 1 (nozzle inner diameter = 2 times air jet inner diameter)</p> 	<ol style="list-style-type: none"> 1. Inspect the hose for holes (especially under the screened floor if it has been exposed to abrasive blasting) and replace as necessary. 2. Remove the gun from the hose and insert it again to the bottom of the hose. <p>Disassemble the gun and check the nozzle and the air jet for wear:</p> <ol style="list-style-type: none"> 1. If the nozzle is damaged by excessive wear from the outside, replace it. 2. If the internal diameter of the nozzle exceeds 1.6 mm of its original size, replace it.

TROUBLESHOOTING (END)

TYPE OF FAILURE	POSSIBLE CAUSE	SOLUTION																																																
<p>Lack of abrasive in the mix (the nozzle blows mainly air)</p> 	<p>Air supply problem (using a quick connect or a connection that creates a restriction to the cabinet air supply)</p> 	<p>Follow cabinet air connection guidelines (see chart page 8)</p> <table border="1" style="margin: 10px auto;"> <thead> <tr> <th rowspan="2">Buse ID</th> <th colspan="6">Pression (psi)</th> </tr> <tr> <th>40</th> <th>50</th> <th>60</th> <th>70</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>1/4"</td> <td>12</td> <td>15</td> <td>17</td> <td>19</td> <td>21</td> <td>26</td> </tr> <tr> <td>5/16"</td> <td>19</td> <td>23</td> <td>27</td> <td>30</td> <td>34</td> <td>42</td> </tr> <tr> <td>3/8"</td> <td>27</td> <td>33</td> <td>38</td> <td>43</td> <td>48</td> <td>58</td> </tr> <tr> <td>7/16"</td> <td>38</td> <td>46</td> <td>52</td> <td>60</td> <td>65</td> <td>80</td> </tr> <tr> <td>1/2"</td> <td>49</td> <td>58</td> <td>67</td> <td>76</td> <td>85</td> <td>94</td> </tr> </tbody> </table> <p>And use only straight couplings as indicated in the manual</p>	Buse ID	Pression (psi)						40	50	60	70	80	100	1/4"	12	15	17	19	21	26	5/16"	19	23	27	30	34	42	3/8"	27	33	38	43	48	58	7/16"	38	46	52	60	65	80	1/2"	49	58	67	76	85	94
Buse ID	Pression (psi)																																																	
	40	50	60	70	80	100																																												
1/4"	12	15	17	19	21	26																																												
5/16"	19	23	27	30	34	42																																												
3/8"	27	33	38	43	48	58																																												
7/16"	38	46	52	60	65	80																																												
1/2"	49	58	67	76	85	94																																												
<p>Too much abrasive in the mix (the jet is jerky and discharges too much abrasive)</p> 	<p>Incorrect adjustment of the AR 3/4 abrasive metering valve</p> 	<p>Slightly open the orifice of the AR 3/4 valve : More air = less abrasive</p> 																																																

SCHEMATIC OF UNIT

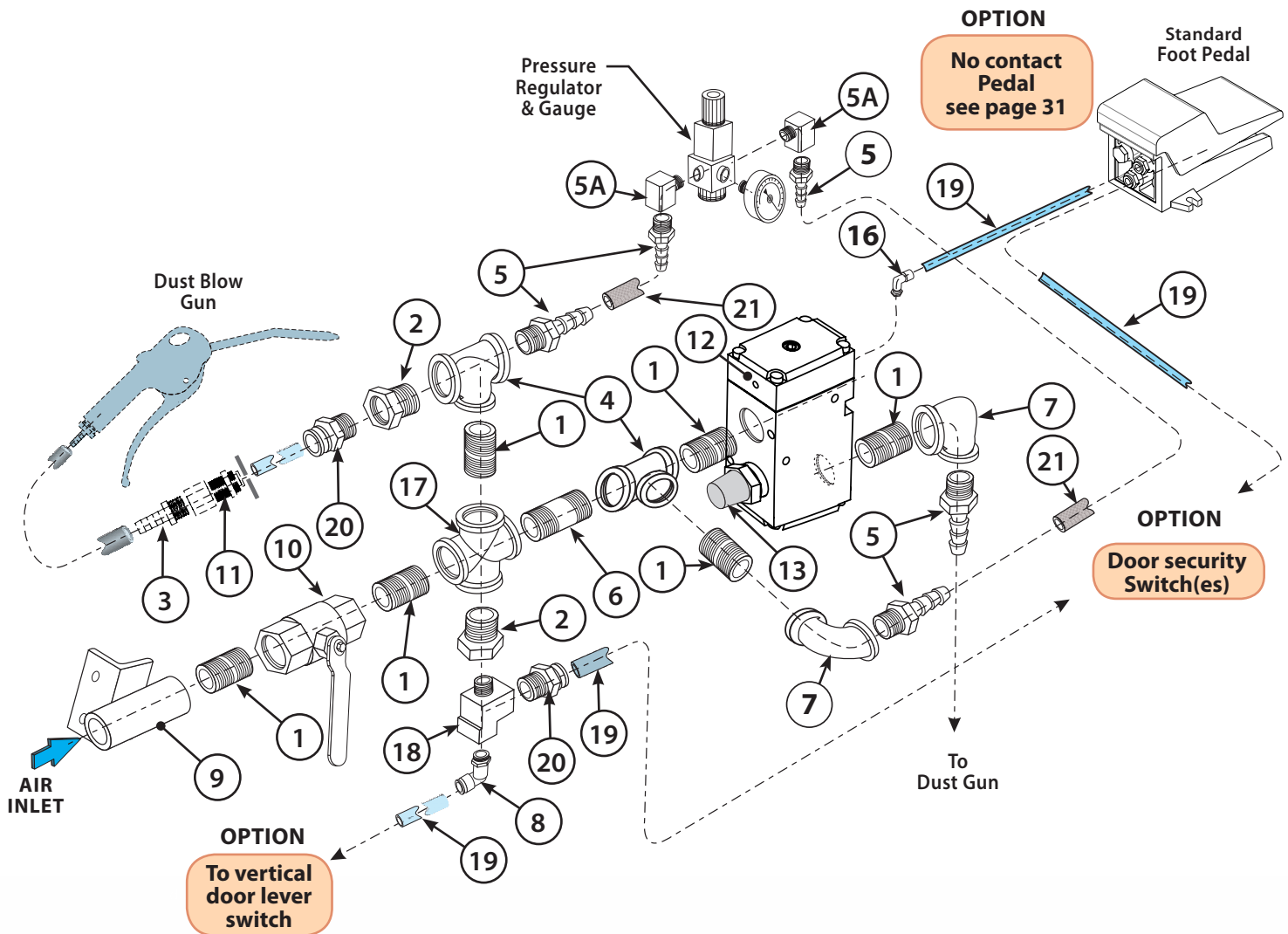


1	603212	Gloves with Nylon Sleeves, 8" ID ø x 30" long
	603205	Gloves with Leather Sleeves
2	624128	8" ø Glove Clamp
3	610120	G5 Complete Sand Blast Gun (See page 30)
4	610288	Standard Door Handle
5	610275	Dust Blow Gun
6	606147	¼" Multip. Dust Blow Gun Hose (sold per foot)
7	608022	½" Pressure Regulator
8	610345	Complete Foot Pedal (See page 31)
9	606104	½" PVC Air Hose
10	611022	¼" Pressure Gauge
	606168	5" - 600 cfm Reclaimer Hose
11	606169	6" - 900 to 1,800 cfm Reclaimer Hose
	624121	5" Clamp
12	624124	6" Clamp
	618126	Grommet for Air Hose ½"
14	618127	Grommet for Abrasive Hose ½"
15	618133	Grommet for Blow Gun hose ¼"
16		½" Pneumatic Suction Manifold (See page 25)
17	606148	½" Multipurpose Abrasive Hose
18	324571	¼" Blue Tubing Air Hose
	606169	6" - 600 cfm Suction Hose
	606171	7" - 900 cfm Suction Hose
19	606173	8" - 1200 cfm - 1800 cfm Suction Hose
	624124	6" Clamp
	624127	7" Clamp
21	624128	8" Clamp
	608010	AR ¾ Abrasive Regulator
23	608011	AR ¾" Clip
24	939143	Threaded Poly. Plug for AR ¾" Regulator
25	632960	¾" FPT x ½" Pl. adaptor
26	917863	20A-250 V AJC Fuse
	616907	Fuse Holder
27	617014	ON/OFF Switch for Auto. Shacker
28*	617161	24" Light Fixture c/w LED
	617160	48" Light Fixture c/w LED
29	610212	23¾" x 18¾" Safety Glass (cabinet less than 48")
	610211	17" x 48" Safety Glass (cabinet more than 48")
	618318	½" x ¼" G15 Window Seal type (sold per foot)
30	613038	23¾" x 18¾" RPW 50 Acetate Glass Protector
	613035	RPW 1748 Acetate Glass Protector (cabinet more than 48")
31	910223	Toggle Stem
32	618322	Type "P" Door Rubber Gasket
33	600116	Optional: Complete Door Security Switch
34A	603217	Nylon Sleeve Gloves Wide 10" ID x 30" Lg.
34B	603218	Nylon Leather Gloves Wide 10" ID x 30" Lg.

35	624137	10" Wide Gloves Clamp
	610453	28" x 44"
	610458	36" x 36"
36	610459	36" x 48"
	610462	42" x 48"
	610463	48" x 48"
	610469	48" x 60"
	610465	60" x 60"

Expanded Steel Floor

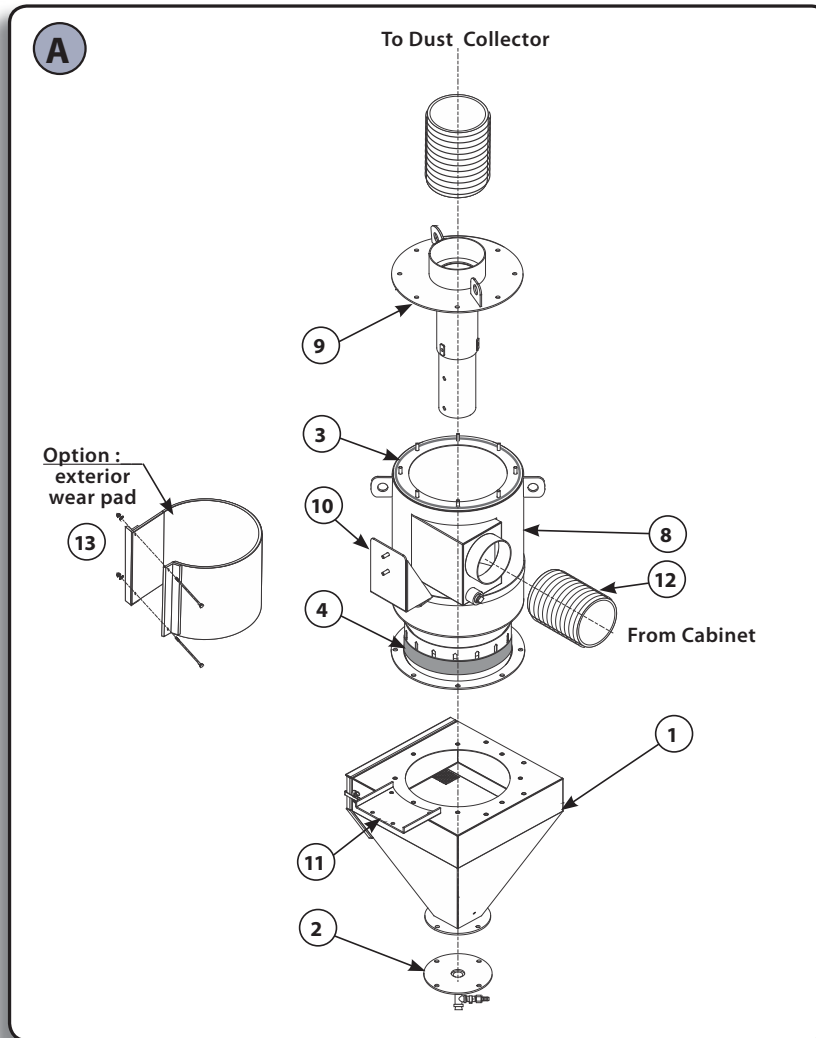
PNEUMATIC TREE - EXPLODED VIEW



PARTS LIST

1	630301	1/2" NPT Nipple	11	324503	1/4" MTP x 1/4" TU Bulkhead Push-in
2	632745	1/2" NPTx 1/4" NPT Reductor	12	608519	1/2" FPT Pilot Valve
3	632270	1/4" NPT x 1/4" Hose Barb Fitting	13	608287	1/2" MPT Muffler
4	630328	1/2" FPT PA "T"	16	324561	1/8" NPT 1/4" TU @ 90° Push-in Fitting
5	632760	1/2" NPT x 1/2" Hose Barb Fitting	17	630327	1/2" Cross
5A	632730	1/2" PL MF Elbow Fitting	18	632226	1/4" T « Street »
6	630317	1/2" MPT x 3" Lg. Nipple	19	324571	1/4" Polyester Blue Tube
7	630340	1/2" FF PA Elbow	20	324558	1/4" MTP 1/4" TU Push-in Fitting
8	324560	1/4" NPT 1/4" TU @ 90° Push-In Fitting	21	606104	1/2" Clear Nylon Hose
9	610390	1/2" NPT Inlet Ring			
10	608102	1/2" FPT Ball Valve			

RECYCLING SYSTEM - EXPLODED VIEW & PARTS LIST

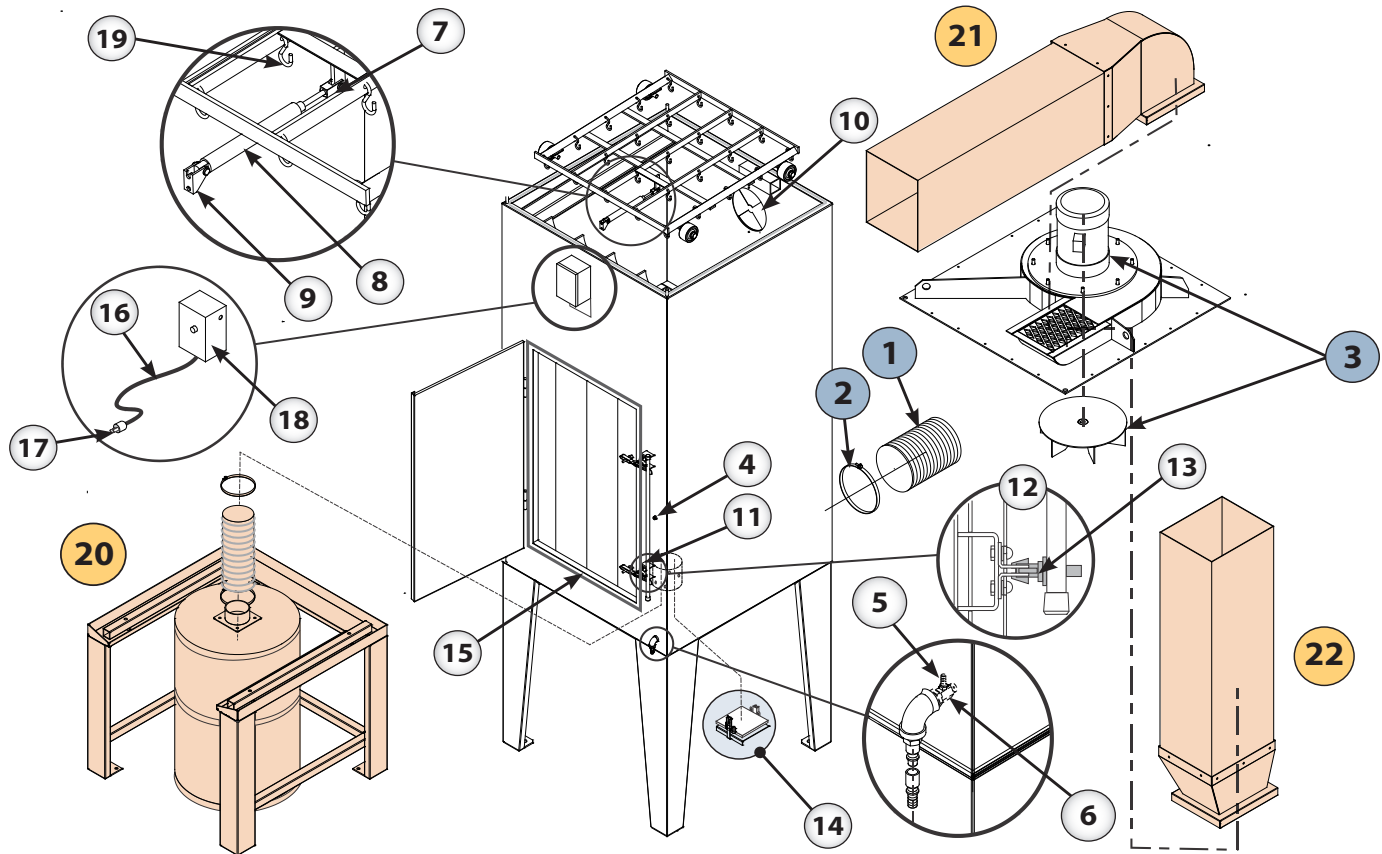


#	STOCK	DESCRIPTION
1	609286	Hopper
2	609287	Hopper Adaptor

#	STOCK	DESCRIPTION
3	618318	Auto-adhesive Rubber
4	618334	Rubber Band

	A	8	9	10	11	12	13
RECYCLER BODY ID	COMPLETE RECYCLER	BODY ONLY	OUTLET PLATE	BODY SUPPORT	HOPPER SUPPORT	"ABRASIVE CARRY HOSE"	"EXTERIOR WEAR PAD"
254 mm (10")	609240	609225	609216	N/A	N/A	606161	609282
330 mm (13")	609242	609230	609212	609180	609178	606120	609283
406 mm (16")	609244	609231	609213	609181	609178	606123	609284
610 mm (24")	609246	609232	609214	N/A	N/A	606124	609285
762 mm (30")	609248	609234	609215	N/A	N/A	606124	609288

BAGHOUSE DUST COLLECTOR - GENERAL PARTS LIST



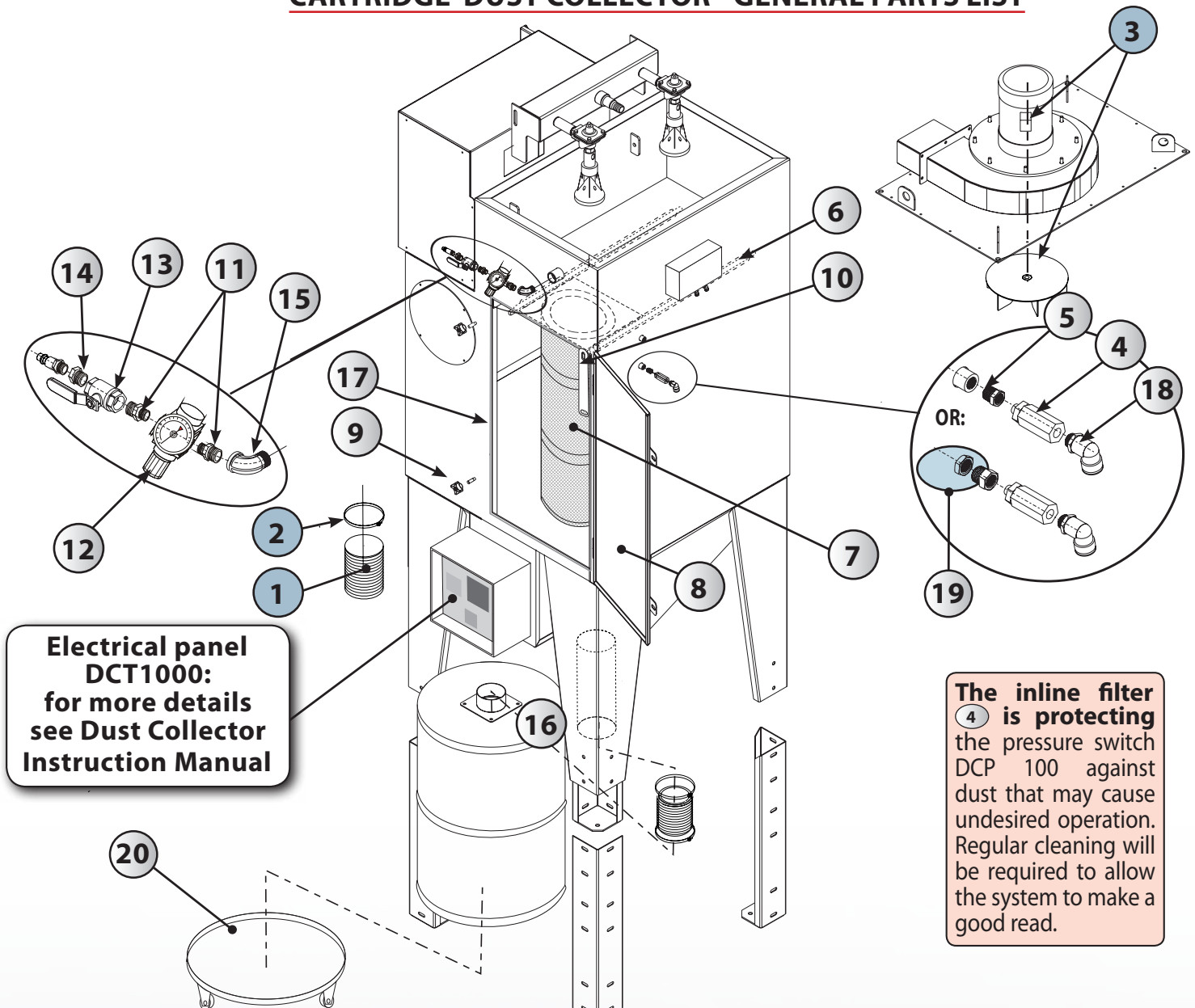
#	STOCK	DESCRIPTION
1		Hoses: see chart page 29
2		Clamps: see chart page 29
3		Fan Motor: See chart page 29
4	608508	Shaking button
5	608408	Flow regulator
6	608409	Adaptor
7	608406	Hinge axle
8	608405	Cylinder
9	608407	Hinge plate
10	610280	Adjustable air trap

#	STOCK	DESCRIPTION
11	610287	Door handle
12	610223	Toggle lock
13	910223	Toggle stem
14	601378	Trap door for dust
15	618321	"D" type rubber (sold per foot)
16	616575	Electric cable (sold per foot)
17	616406	Electrical plug
18	617063	Electrical box
19	601309	"S" Hook

BAGHOUSE DUST COLLECTOR OPTIONS

DCM MODEL	20 DUST BARREL OPTION			HORIZONTAL MUFFLER	VERTICAL MUFFLER
	OPTION NUMBER	BARREL CAPACITY (L)	BARREL TROLLEY	21	22
DCM-100-4	601486	57	501182	601434	601423
DCM-100	601486			601434	601423
DCM-160	601487	113.6	919633	601435	601424
DCM-230	601490			601436	601425
DCM-330	601490			601437	601426

CARTRIDGE DUST COLLECTOR - GENERAL PARTS LIST



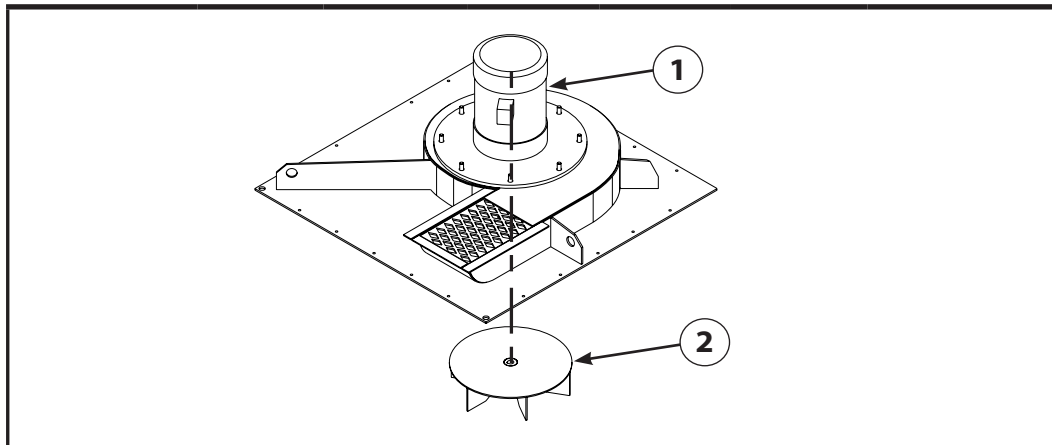
**Electrical panel
DCT1000:
for more details
see Dust Collector
Instruction Manual**

**The inline filter
4 is protecting
the pressure switch
DCP 100 against
dust that may cause
undesired operation.
Regular cleaning will
be required to allow
the system to make a
good read.**

#	STOCK	DESCRIPTION
1	Hoses: see chart page 29	
2	Clamps: see chart page 29	
3	Fan Motor: See chart page 29	
4	611058	INLINE FILTER
5	632248	¼" REDUCER
6	NPN	CARTRIDGE GUIDE
7	901321	CARTRIDGE
8	NPN	ACCESS DOOR
9	940109	KNOB
10	NPN	HANDLE FOR FIXING THE CARTRIDGES

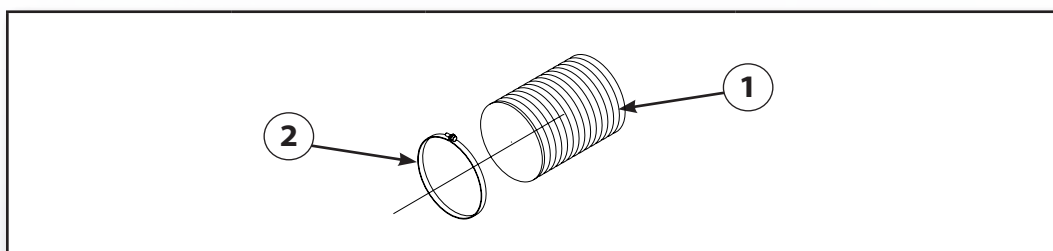
#	STOCK	DESCRIPTION
11	630651	1" TO ½" REDUCER
12	608022	COMPLETE REGULATOR
13	608102	½" BALL VALVE
14	632706	½" NIPPLE
15	630641	90° MF 1" ELBOW
16	601448	15 gal RECOVERY BARREL (DCM 100 to 330 ONLY)
	901448	30 gal RECOVERY BARREL
17	618321	"D" TYPE RUBBER (SOLD PER FOOT)
18	314048	¼" @ 90° PUSH-IN FITTING
19	932004	FF ¼" BULKHEAD
20	501182	TROLLEY FOR 15 gal BARREL
	919633	TROLLEY FOR 30 gal BARREL

FAN MOTOR & SUCTION HOSE



FAN MOTOR

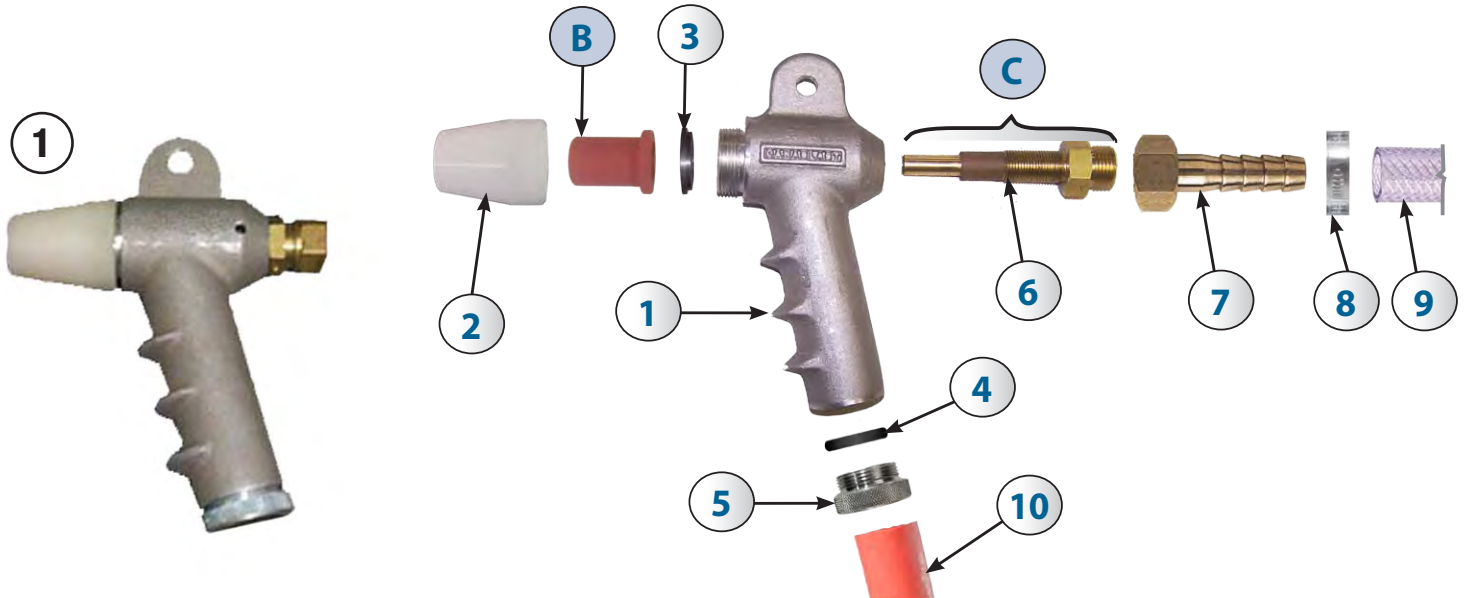
Fan Motor (cv) ①	Motor (voltages)					Impeller ②
	120 V	208 V 230 V	240 V	460 V	575 V	
0.37	616311	N/A	N/A	N/A	N/A	610525
0.75	616313	N/A	N/A	N/A	N/A	610526
1.49	N/A	616326	616323	616325	616324	610527
2.24	N/A	616333	616330	616331	616332	610528
3.73	N/A	616339	616338	616339	616340	610529
5.59	N/A	IST	IST	IST	IST	IST
7.46	N/A	IST	IST	IST	IST	IST



CORRUGATED SUCTION HOSES AND CLAMPS

Fan Motor (kW)	Hose ID	Hose ①	Clamp ②
0.373	5"	606168	624121
0.746	6"	606169	624124
1.492	7"	606171	624127
2.238	8"	606173	624128
3.730	10"	606177	624137

G5 BLAST GUN - EXPLODED VIEW & PARTS LIST



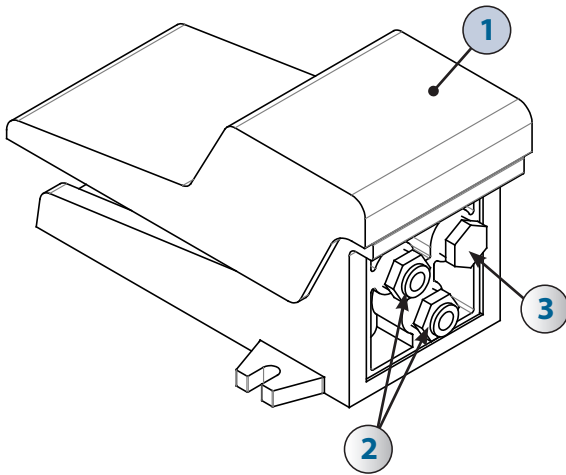
G5 BLAST GUN - AIR JET / NOZZLES COMBINATIONS

1 G5 COMPLETE BLAST GUN (PRE-ASSEMBLED*)		B NOZZLES			C AIR JET (COMPLETE)	ORIFICES ±
G5	NOZZLES	TYPE	ORIFICE	CODE		
610121	CERAMIC	CN2-4	1/4"	605004	610116	1/8"
610120	CERAMIC (STANDARD)	CN2-5	5/16"	605005	610117	5/32"
610166	CERAMIC	CN2-6	3/8"	605015	610109	3/16"
610122	CERAMIC	CN2-7	7/16"	605006	610118	7/32"
610123	TUNGSTEN	TN2-4	1/4"	605007	610116	1/8"
610124	TUNGSTEN	TN2-5	5/16"	605008	610117	5/32"
610167	TUNGSTEN	TN2-6	3/8"	605018	610109	3/16"
610125	TUNGSTEN	TN2-7	7/16"	605009	610118	7/32"
610126	BORON CARBIDE	BN2-4	1/4"	605010	610116	1/8"
610127	BORON CARBIDE	BN2-5	5/16"	605011	610117	5/32"
610168	BORON CARBIDE	BN2-6	3/8"	605021	610109	3/16"
610128	BORON CARBIDE	BN2-7	7/16"	605012	610118	7/32"

SPARE PARTS

Pre-assembled gun	1	610119	Blast Gun Body only	6	618219	Rubber Protector
	2	607037	Nozzle Adaptor	7	632771	1/2" Brass Female Swivel Hose Barb
	3	618017	NW-2 Rubber Washer	8	624015	3/4" O-Clamp
	4	618112	O-Ring	9	606104	1/2" PCV Compressed Air Hose (sold per foot)
	5	607038	Hose Adaptor	10	606148	1/2" Multipurpose Abrasive Conveying Hose (sold per foot)

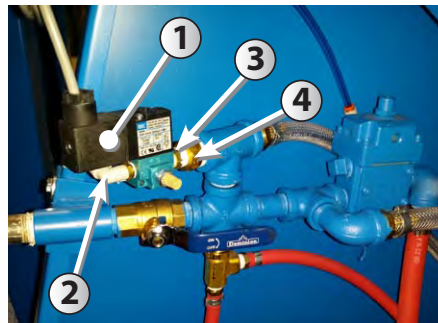
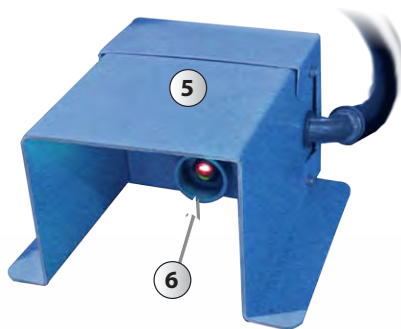
STANDARD FOOT PEDAL - PARTS DETAIL



#	STOCK	DESCRIPTION
1	908065	Pneumatic Foot Pedal (complete)
2	950264	1/4" Push-in Fittings
3	632551	1/4" Brass Plug

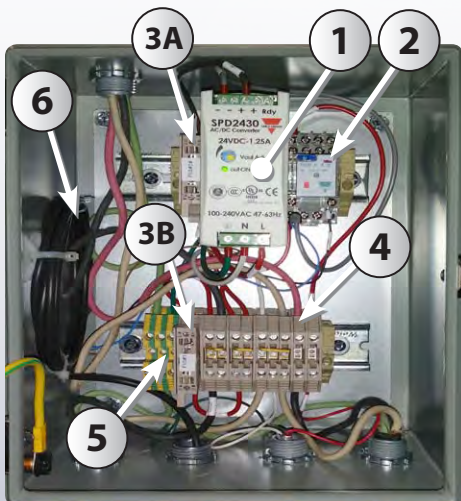
NO-CONTACT FOOT PEDAL (OPTIONAL)

PEDAL & PARTS



#	STOCK	DESCRIPTION
1	608568	SOLENOID VALVE
2	324561	1/8" PUSH-IN FITTING
3	632214	ADAPTER 1/8" TO 1/4"
4	632745	ADAPTER 1/2" TO 1/4"
5	910525	COMPLETE NO-CONTACT FOOT PEDAL
6	917879	INFRARED SENSOR CELL

CONTROL PANEL WITH PARTS



#	STOCK	DESCRIPTION
1	917618	24V DC - POWER SUPPLY
2	917877	24V DC RELAY
3A	917893	MDL.2A FUSE
3B	616933	AGC-1A FUSE
4	-/-	TERMINAL BLOCKS
5	616865	GROUND BLOCKS
6	917880	SENSOR CABLE

RECOMMENDED SPARE PARTS

Description	Configuration	Part No	Qty
Cabinet			
Nylon Gloves	All models	603212	1
Nozzle 5/16" ID*		605011	1
Air Jet 5/32" ID*		610117	1
"Blast Hose (sold by foot)"	2636-2844-3636-3648-4248-4848	606148	7
	3660-3672-4860-4872-6060-6072	606148	10
Safety Glass	2636-2844-3636-3648-4248-4848	610212	1
	3660-3672-4860-4872-6060-6072	610211	5
Window Shield	2636-2844-3636-3648-4248-4848	613038	1
	3660-3672-4860-4872-6060-6072	613035	5
Reclaiming Hose	DCM100-DCM600	606120	8
	DCM100-DCM600	606123	8
	DCM160-DCM900	606124	8
Dust Collector			
Filtering Bag	DCM100	601316	16
	DCM160		25
	DCM230		36
Filtering Cartridge	DCM600	901321	2
	DCM900		2
	DCM1200		4
Dust Carrying Hose	DCM100-DCM600	606169	12
	DCM160-DCM900	606171	12
	DCM230-DCM1200	606173	12

*Corresponds to the standard items and may not reflect your actual cabinet configuration.

ELECTRICAL SCHEMATIC WITH DCM 50 TO 330 BAG-TYPE - 1 PH - PARTS LIST

Fonction	Localisation	Tag	Material (Cat. No.)	Series	Cat. No. Description	Supplier
	+CAB1	-FU203	AGC15		GLASS FUSE 15 AMP	FERRAZ
	+CAB1	-FU203	HKP-HRR		FUSE HOLDER E-3/RB-14-G-FL	BUSSMAN
	+CAB2	-FU208	ATDR1		FUSE 1A 600V TYPE CC TIME DELAY	FERRAZ
	+CAB2	-FU208	HKP-HRR		FUSE HOLDER E-3/RB-14-G-FL	BUSSMAN
	+CAB1	-FU209	HKP-HRR		FUSE HOLDER E-3/RB-14-G-FL	BUSSMAN
	+CAB1	-FU209	AGC1		GLASS FUSE 1 AMP	FERRAZ
	+CAB1	-FU212	10140		FUSE BLOCK VUSM-4	WIDMULLER
	+FIELD	-J203	CUSTOMER		CUSTOMER FUSE DISCONNECT	CUSTOMER
	+CAB1	-J205	27W75		PLUG 4P FEMELLE 15A	LEVITON
	+FIELD	-L7206	2SLSTF2040DD20V/4SLSP4040DD20		STRIP LED 24" / STRIP LED 48"	METALUX
	+FIELD	-M209	0449 (3R4BF-Z4)		REDUCTOR MOTOR 115HP 15V 180/1RATIO	BODINE
	+FIELD	-MTR203	113912		MOTOR 1/2HP 120/220V 1PH 50HZ 3000RPM	LEESON
	+FIELD	-MTR203	113914		MOTOR 1HP 120/220V 1PH 50HZ 3000RPM	LEESON
	+FIELD	-MTR203	120990		MOTOR 2HP 220V 1PH 3000RPM 50HZ	LEESON
	+CAB1	-P204	BRY5466NP		Straight Blade Devices 20A 250V, 2-Pole 3-Wire MALE	HUBBELL
	+CAB2	-P205	26W75		PLUG 4P MALLE 15A	LEVITON
	+FIELD	-PC218	GX3-AP-IE		PHOTOELECTRIC SENSOR PNP UP TO 100MM	AUTOMATION DIRECT
	+CAB1	-PS214	SPD24301		POWER SUPPLY 24VDC 300W	CARLO GAVAZZI
	+CAB1	-R218	RM44624DC		RELAY 4PDT 24VDC	CARLO GAVAZZI
	+CAB1	-R218	SY4595C		RELAY HOLDER 4 POLE	CARLO GAVAZZI
	+CAB1	-SA203	R3-4371			
	+FIELD	-SOV210	120W2-E1BN781		VALVE DIAPH 1/2	GOYEN
	+FIELD	-SOV212	35A-AAA-DAAJ-4JB		SOL VALVE 35A-AAA-DAAJ-4JB 120V 1NC	MAC
	+FIELD	-SOV216	35A-AAA-DAAJ-4JB		SOL VALVE 35A-AAA-DAAJ-4JB 120V 1NC	MAC
	+CAB1	-T209	FF15MC		15 MINUTE TIMER	INTERMATIC
	+CAB2	-T210	TMM1		TIMER RELAY 1NO 1NC	LOVATO
	+CAB1	-T212	TMM1		TIMER RELAY 1NO 1NC	LOVATO
	+CAB2	-T214	TMM1		TIMER RELAY 1NO 1NC	LOVATO

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CE M SERIE DCM 30 - 330 1PH 240V 2HP POWER & CONTROL

Customer: IST SURFACE
 Drawing number: IST-282L
 Drawing by: LAURENT GOLDSCHMITT
 Date: 2021-12-16
 Rev.:
 Page Rev. Date: 2021-12-16 8:59:45 AM
 Page: 3 / 3

ELECTRICAL SCHEMATIC WITH DCM 50 TO 330 BAG-TYPE - 3 PH - PARTS LIST

Fonction	Localisation	Tag	Material (Cat. No.)	Series	Cat. No. Description	Supplier
	+CAB1	-FU203	HKP-HHR		FUSE HOLDER E-3/RB-14-6-FL	BUSSMAN
	+CAB1	-FU209	HKP-HHR		FUSE HOLDER E-3/RB-14-6-FL	BUSSMAN
	+CAB1	-FU212	10140		FUSE BLOCK VUS14-4	WEDMULLER
	+FIELD	-FU212	CUSTOMER		FUSE HOLDER E-3/RB-14-6-FL	BUSSMAN
	+CAB1	-J203.1	BRY5668NC		Customer Fuse Disconnect	CUSTOMER
	+FIELD	-LT206	2SLSTP2040DDUNV/4SLSTP4040DDUNV		Straight Blade Devices 20A 250V, 2-Pole 3-Wire FEMALE STRIP LED 24" / STRIP LED 48" 240V	HUBBELL
	+FIELD	-M209	M88P7NZZ26		MOTOR 230V 1/15 HP	METALUX
	+FIELD	-MTR207			REFER TO REFERENCE LIST	LEASON
	+CAB2	-OL207			REFER TO REFERENCE LIST	SCHNEIDER ELECTRIC
	+CAB1	-P203	BRY5466NP		Straight Blade Devices 20A 250V, 2-Pole 3-Wire	SCHNEIDER ELECTRIC
	+CAB2	-P203.2	BRY5466NP		Straight Blade Devices 20A 250V, 2-Pole 3-Wire	HUBBELL
	+FIELD	-PC218	GX3-AP-E		PHOTOELECTRIC SENSOR PNP UP TO 100MMI	HUBBELL
	+CAB1	-PS214	SPD24301		POWER SUPPLY 24VDC 300W	Automation Direct
	+FIELD	-Q207	CUSTOMER		CUSTOMER FUSE DISCONNECT	CARLO GAVAZZI
	+CAB2	-R203			REFER TO REFERENCE LIST	CUSTOMER
	+CAB1	-R218	RMA4524DC		RELAY 4PDT 24VDC	SCHNEIDER ELECTRIC
	+CAB1	-R218	SY4505C		RELAY HOLDER 4-POLE	CARLO GAVAZZI
	+CAB1	-SA203	R13-437A		SEALED TOGGLE SWITCH	CARLO GAVAZZI
	+FIELD	-SOV210	120M2-EUBN7251		VALVE DAMPH1/2 240VAC	SHINCHINDUSTRIAL
	+FIELD	-SOV212	35A-ABA-DAJA-1JB		SOL VALVE 35A-AAA-DAAL-1JB 240V NC	GOYEN
	+FIELD	-SOV219	35A-ABA-DAJA-1JB		SOL VALVE 35A-AAA-DAAL-1JB 240V NC	MAC
	+CAB1	-T209	FF5MCC		15 MINUTE TIMER	MAC
	+CAB2	-T210	MTC000-31		CONTROL TRANSFORMER 380/240VAC 100VA	INTERMATIC
	+CAB2	-T214	TM11		TIMER RELAY 1NO 1NC	MARCUS
	+CAB2	-T216	TM11		TIMER RELAY 1NO 1NC	LOVATO
	+CAB2	-T218	TM11		TIMER RELAY 1NO 1NC	LOVATO

Customer: **IST SURFACE**
 Drawing by: **LAURENT GOLDSCHMITT**

Drawing number: **IST-282K**
 Date: **2021-12-07**

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 Rev.: **4 / 4**

Customer: **IST SURFACE**
 Drawing by: **LAURENT GOLDSCHMITT**

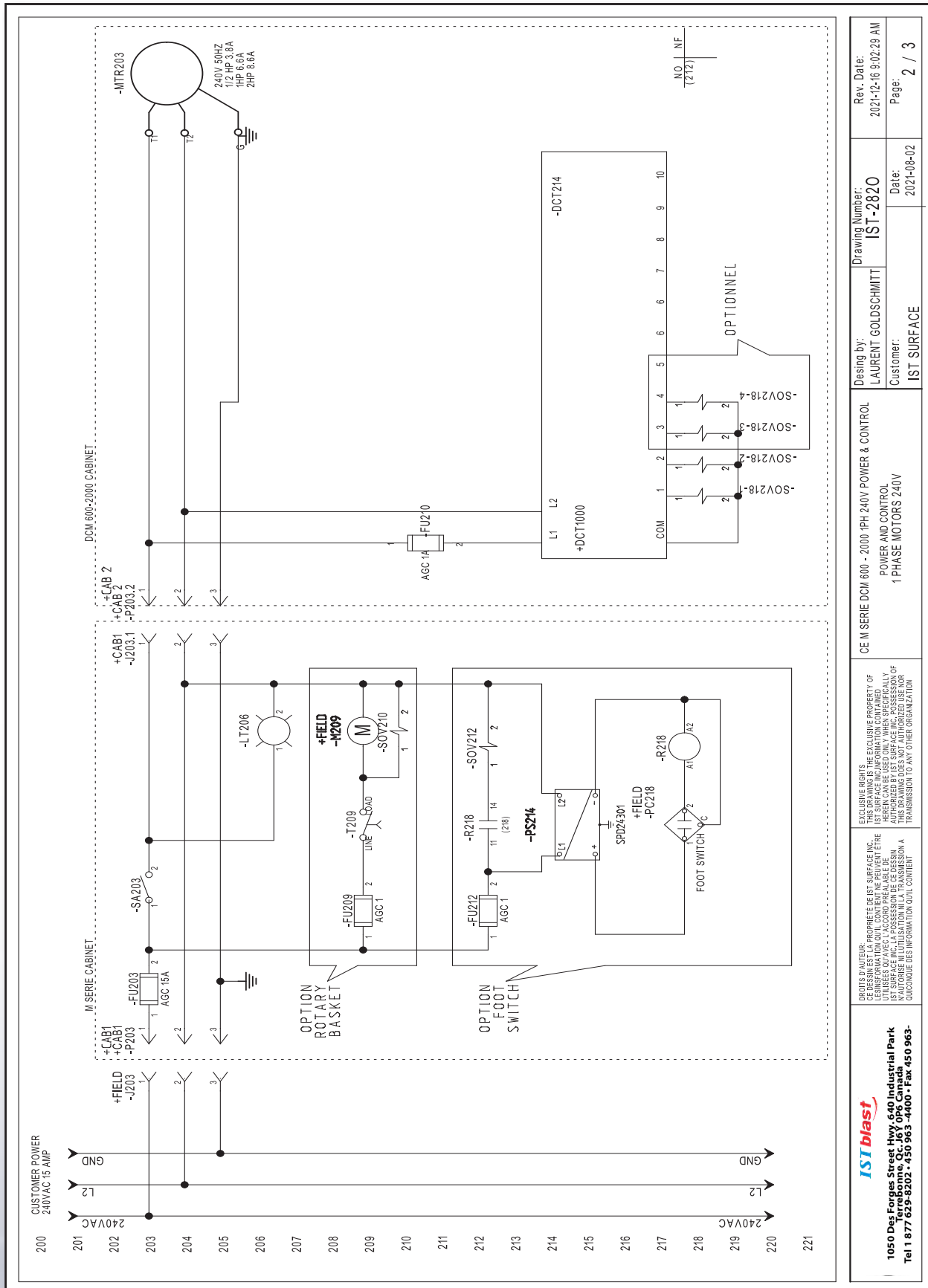
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ELECTRICAL SCHEMATIC WITH DCM 600 TO 1800 CARTRIDGE TYPE - 1 PH



<p>ISTblast 1050 Des Forges Street Hwy 660 Industrial Park Tel 1 877 629-8202 • 430 963-4400 • Fax 450 963-</p>	<p>DRÔTES D'AUTEUR. CE Dessin est la propriété de IST SURFACE INC. Tous droits réservés. Toute réimpression ou utilisation non autorisée sans le consentement écrit de IST SURFACE INC. est formellement interdite. Tous droits réservés. Toute réimpression ou utilisation non autorisée sans le consentement écrit de IST SURFACE INC. est formellement interdite.</p>	<p>EXCLUSIVE RIGHTS THIS DRAWING IS THE EXCLUSIVE PROPERTY OF IST SURFACE INC. NO PART OF THIS DRAWING HEREIN CAN BE USED OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF IST SURFACE INC. ALL RIGHTS RESERVED. NO TRANSMISSION TO ANY OTHER ORGANIZATION</p>	<p>CE M SERIE DCM 600 - 2000 1PH 240V POWER & CONTROL POWER AND CONTROL 1 PHASE MOTORS 240V</p>	<p>Desing by: LAURENT GOLDSCHMITT Customer: IST SURFACE</p>	<p>Rev. Date: 2021-12-16 9:02:29 AM Date: 2021-08-02</p>	<p>Drawing Number: IST-2820 Page: 2 / 3</p>
	<p>Customer: IST SURFACE</p>			<p>NO NF (212)</p>		

ELECTRICAL SCHEMATIC WITH DCM 600 TO 1800 CARTRIDGE TYPE - 1 PH - PARTS LIST

Fonction	Localisation	Tag	Material (Cat. No.)	Series	Cat. No. Description	Supplier
+DC1000		-DC1214	DTIC1000		DUST COLLECTOR TIMER CONTROLLER	DWYER
+CAB1		-FU203	HKP-HRR		FUSE HOLDER E-3/RB-14-6-FL	BUSSMAN
+CAB1		-FU203	AGC15		GLASS FUSE 15 AMP	FERRAZ
		-FU209	HKP-HRR		FUSE HOLDER E-3/RB-14-6-FL	BUSSMAN
		-FU210	HKP-HRR		FUSE HOLDER E-3/RB-14-6-FL	BUSSMAN
		-FU212	1040		FUSE BLOCK VUSH-4	WEDMULLER
+FIELD		-J203	CUSTOMER		CUSTOMER FUSE DISCONNECT	CUSTOMER
+CAB1		-J203.1	BRY5669NC		Straight Blade Devices 20A 250V, 2-Pole 3-Wire FEMALE	HUBBELL
+FIELD		-LT206	ZSLSTP204000JUV/4SLSTP104000JUV		STRIP LED 24" / STRIP LED 48" 240V	METALUX
+FIELD		-M209	M38P7NZ26		MOTOR 230V 1/16 HP	LEASON
+CAB2		-MTR203	13914		MOTOR 1/4HP 120/220V 1PH 50HZ 3000RPM	LEASON
+CAB2		-MTR203	13912		MOTOR 1/2HP 120/220V 1PH 50HZ 3000RPM	LEASON
+CAB2		-MTR203	120990		MOTOR 2HP 220V 1PH 3000RPM 50HZ	LEASON
+CAB1		-P203	BRY5466NP		Straight Blade Devices 20A 250V, 2-Pole 3-Wire	HUBBELL
+CAB2		-P203.2	BRY5466NP		Straight Blade Devices 20A 250V, 2-Pole 3-Wire	HUBBELL
+FIELD		-PC218	GK3-AP-E		PHOTOELECTRIC SENSOR PNP UP TO 100MM	AUTOMATION DIRECT
		-PS214	SPD24301		POWER SUPPLY 24VDC 300W	CARLO GAVAZZI
		-R218	S14S95C		RELAY HOLDER 4 POLE	CARLO GAVAZZI
		-R218	RMA4524DC		RELAY 4PDT 24VDC	CARLO GAVAZZI
		-SA203	RG-487A		SEALED TOGGLE SWITCH	SHINCHIN INDUSTRIAL
+FIELD		-SOV210	12QWZ-EUBN/251		VALVE DMAPH 1/2 240VAC	GOYEN
+FIELD		-SOV212	35A-ABA-DAA-L-1B		SOL VALVE 35A-AAA-DAA-L-1B 240V NC	MAC
+FIELD		-SOV218-1	RCAC2514200		1" NPT Diaphragm Valve - 1/8 NPT	GOYEN
+FIELD		-SOV218-2	RCAC2514200		1" NPT Diaphragm Valve - 1/8 NPT	GOYEN
+FIELD		-SOV218-3	RCAC2514200		1" NPT Diaphragm Valve - 1/8 NPT	GOYEN
+FIELD		-SOV218-4	RCAC2514200		1" NPT Diaphragm Valve - 1/8 NPT	GOYEN
		-T209	FF15MC		15 MINUTE TIMER	INTERMATIC

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 Drawing by:
LAURENT GOLDSCHMITT

Drawing number:
IST-2820
 Date:
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ELECTRICAL SCHEMATIC WITH DCM 600 TO 1800 CARTRIDGE TYPE - 3 PH - PARTS LIST

Fonction	Localisation	Tag	Material (Cat. No.)	Series	Cat. No. Description	Spplier
	+DCT1000	-DCT1215	DTC1000		DUST COLLECTOR TIMER CONTROLLER	DWYER
	+CAB1	-FU203	HKP-HRR		FUSE HOLDER E-3/RB-14-6-FL	BUSSMAN
	+CAB1	-FU209	HKP-HRR		FUSE HOLDER E-3/RB-14-6-FL	BUSSMAN
	+CAB1	-FU212	10/40		FUSE BLOCK VUS14-4	WEIDMULLER
	+CAB2	-FU212	HKP-HRR		FUSE HOLDER E-3/RB-14-6-FL	BUSSMAN
	+FIELD	-J203	CUSTOMER		CUSTOMER FUSE DISCONNECT	CUSTOMER
	+CAB1	-J203.1	BRY5669NC		Straight Blade Devices 20A, 250V, 2-Pole 3-Wire FEMALE	HUBBELL
	+FIELD	-LT206	2SLSTP204000JUNV/SLSTP404000JUNV		STRIP LED 24" / STRIP LED 48" 240V	METALUX
	+FIELD	-M209	M38PTN26		MOTOR 230V 1/15 HP	LEASON
	+FIELD	-MTR207	REFERT TO		REFERT TO REFERENCE LIST	SCHNEIDER ELECTRIC
	+CAB2	-OL207	REFERT TO		REFERT TO REFERENCE LIST	SCHNEIDER ELECTRIC
	+CAB1	-P203	BRY5468NP		Straight Blade Devices 20A, 250V, 2-Pole 3-Wire	HUBBELL
	+CAB2	-P203.2	BRY5468NP		Straight Blade Devices 20A, 250V, 2-Pole 3-Wire	HUBBELL
	+FIELD	-PC218	GX3-AP-E		PHOTOELECTRIC SENSOR PNP LP TO 100MM	AUTOMATION DIRECT
	+CAB1	-PS214	SPD24301		POWER SUPPLY 24VDC 300W	CARLO GAVAZZI
	+FIELD	-Q207	CUSTOMER		CUSTOMER FUSE DISCONNECT	CUSTOMER
	+CAB2	-R203	REFERT TO		REFERT TO REFERENCE LIST	SCHNEIDER ELECTRIC
	+CAB1	-R218	RMA4524DC		RELAY 4PDT 24VDC	CARLO GAVAZZI
	+CAB1	-R218	SV4S05C		RELAY HOLDER 4 POLE	CARLO GAVAZZI
	+CAB1	-SA203	RG-487A		SEALED TOGGLE SWITCH	SHINCHINDUSTRIAL
	+FIELD	-SOV210	120V2-EUBN/251		VALVE DIAPHR 1/2 240VAC	GOYEN
	+FIELD	-SOV212	35A-ABA-DAA-L-1B		SOL VALVE 35A-AAA-DAA-L-1B 240V NC	MAC
	+FIELD	-SOV219-1	RCAC2514200		1" NPT Diaphragm Valve - 1/8 NPT	GOYEN
	+FIELD	-SOV219-2	RCAC2514200		1" NPT Diaphragm Valve - 1/8 NPT	GOYEN
	+FIELD	-SOV219-3	RCAC2514200		1" NPT Diaphragm Valve - 1/8 NPT	GOYEN
	+FIELD	-SOV219-4	RCAC2514200		1" NPT Diaphragm Valve - 1/8 NPT	GOYEN
	+CAB1	-T209	FF5MC		15 MINUTE TIMER	INTERMATIC
	+CAB2	-T210	MTC100-31		CONTROL TRANSFORMER 380/240VAC 100VA	MARCUS


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Customer: IST SURFACE
Drawing by: LAURENT GOLDSCHMITT

Drawing number: IST-282N
Date: 2021-12-07

Page Rev. Date: 2021-12-07 15:10:04
Page: 4 / 4

IST LIMITED WARRANTY

IST warrants all equipment led in this manual which is manufactured by IST and bearing its name, to be free from defects in material and workmanship on the date of sale by an authorized IST distributor to the original purchaser for use. Notwithstanding any special, extended or limited warranty published by IST will, for a period of TWENTY FOUR (24) months from the date of sale, repair or replace any part of the equipment determined by IST to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with IST's written recommendations.

This warranty does not cover, and IST shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-IST component parts. Nor shall IST be liable for malfunction, damage or wear caused by the incompatibility with IST equipment with structures, accessories, equipment or materials not supplied by IST, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by IST.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized IST distributor for verification of the claimed defect. If the claimed defect is verified, IST will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser, transportation prepaid. If the inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

IST's sole obligation and the buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought forward within one (2) years of the date of sale.

IST MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY IST. These items sold, but not manufactured by IST (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. IST will provide the purchaser with reasonable assistance in making any claim for breach of these warranties.

LIMITATION OF LIABILITY

In no event will IST be liable for indirect, incidental, special or consequential damages resulting from IST supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of IST, or otherwise.

Report all accidents or "near misses" which involve IST products to:

- **Technical Assistance**

The following items are not covered under the IST warranty policy:

- **Parts or chassis replacement due to normal wears.**

Defective material or workmanship is not considered normal wear

