



## BAGHOUSE DUST COLLECTORS DCM100 TO 330 120 V



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



# INSTRUCTION MANUAL



## TABLE OF CONTENTS

	<b>Page</b>
BAGHOUSE DUST COLLECTORS DCM100 TO 330.....	1
INTRODUCTION.....	3
NOTICE TO PURCHASERS.....	4
GENERAL SAFETY RULES - UNIT USE AND CARE.....	5
INSTALLATION.....	6, 7
BAGHOUSE DUST COLLECTOR - PARTS LIST & CHARTS .....	8, 9
ELECTRICAL SHACKER (OPTIONAL) - INSTALLATION .....	10
MAINTENANCE.....	11
ELECTRICAL SCHEMATICS.....	12 TO 16
ISTBLAST LIMITED WARRANTY .....	17
INFORMATION / TECHNICAL ASSISTANCE.....	18
OUR MAP LOCATION.....	19
ABOUT THE COMPANY .....	20



## INTRODUCTION

**Welcome to the ISTblast® 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.**

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 ISTblast dust collector 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. ISTblast is not responsible for damage to equipment after it leaves our warehouse.
4. Check the equipment received 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 ISTblast dust collector, read this Instruction Manual completely. All ISTblast products are engineered and manufactured to the highest performance standards and have been subjected to detail testing before shipment from the factory.





## **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.



## 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 or alcohol.
- **DO NOT OVERREACH.** Keep proper footing and balance at all times.
- **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 ISTblast repair service facility. Use only IST ISTblast replacement parts; any other parts may create a hazard.

## ENVIRONMENTAL CONDITIONS FOR WHICH THE EQUIPMENT IS DESIGNED

- Indoor location
- Altitude 6,562 feet max.
- Ambient temperature: 104 °F max.
- Relative humidity: 80 %
- Main supply voltage fluctuation +/-10 %
- To use with non-combustible dust only



## INSTALLATION

### **WARNING**

**ALL ELECTRICAL CONNECTIONS TO THE ISTBLAST EQUIPMENT SHOULD BE MADE BY A QUALIFIED ELECTRICIAN AND MUST ADHERE TO THE CODES, STANDARDS, AND PROCEDURES SPECIFIED BY THE AUTHORITY HAVING JURISDICTION. THE CUSTOMER IS RESPONSIBLE FOR PROVIDING APPROPRIATE DISCONNECTING MEANS ADJACENT TO THE EQUIPMENT FOR EACH INCOMING POWER CIRCUIT.**

### **CAUTION**

**BEFORE PROCEEDING TO INSTALLATION, THE ELECTRIC POWER SUPPLY MUST BE LOCKED AND TAGGED. FAILURE TO COMPLY WITH THIS COULD RESULT IN SERIOUS INJURIES DUE TO ELECTRIC SHOCK.**

1. The dust collector should be located on a leveled area near the back of the cabinet, while respecting the laws and regulations in your area. Allow access to components such as the pressure gauge, fan, door and hatch, the barrel, the cartridges and cleaning system.
2. Make sure the equipment is leveled, installed on a solid surface, 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. This dust collector requires an electrical connection. The electrical connections depend on the size and number of motor phases. Refer to the Electrical drawings on pages 12 to 16.
4. After the installation is complete, verify the direction of rotation of the turbine. To check the direction of rotation, turn on and turn off the engine quickly to provoke a slow rotation of the blades. Look inside the slots above the engine where the turbine can be readily observed. The right direction of rotation is indicated by an arrow. The impeller should rotate toward the blower.

If the rotation is not the same, please notify an electrician so that it performs the necessary change

### **CAUTION**

**NEVER LOOK INSIDE THE EXIT OF THE FAN WHEN THE FAN IS RUNNING. FAN EJECTED DEBRIS COULD CAUSE INJURY.**



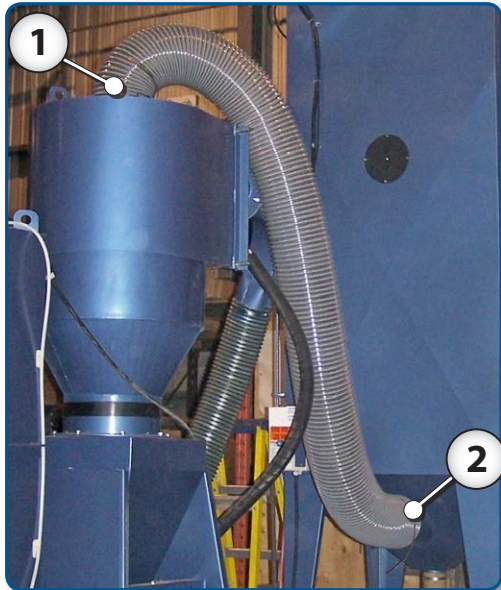
**GROUNDING:** To prevent static electricity from accumulation, connect the ground wire of the dust collector to a connection anchored to the factory ground.

5. Check the amperage on initial startup. If the engine uses too much amperage, gradually close the wall until the data meets the specified amperage of the motor plate. The partition is located at the fan outlet.





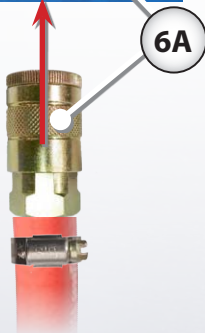
## INSTALLATION (CONT'D)



6. Connect one end of the tubular transport of abrasive at the exit of recycling ① and the other end at the entrance at the bottom of the scrubber ②. Secure each end of the hose with clamps included with the hose.
7. The wire is removed on the first 2 or 3 inches. Be careful not to damage the hose. The wire helps dissipate static electricity inside the hose. For the static is dissipated, each segment must be in contact with the metal of which must have a firm grounding installed.
8. For dust collector with the dust collecting drum option, make sure that the drum is properly located under the dust collector and that it has been correctly secured to it.
10. For dust collectors equipped with a muffler option you must install it directly to the air outlet of the fan. Simply bolt it on the adapter. To ensure right air circulation, it is essential to keep 18 inches of clearance in front of the air outlet of the muffler. See details in section MUFFLER INSTALLATION on pages 8 & 9.
11. Connect your shop's air supply line to the dust collector air inlet. Your air supply is coupled to the air inlet with a ¼ inch male quick connect coupling ⑥A (see details page 8).



Air dryer  
(optional)



To properly operate, your IST system must use clean, dry air. Use proper filters, air dryers, and air purifying systems to ensure clean and dry air is supplied.

An isolating valve should be installed at the source of air (Air Inlet of cabinet) to depressurize the system for maintenance.

If you use a rigid conduit for your air duct, a flexible section must be installed to allow the opening of the door.

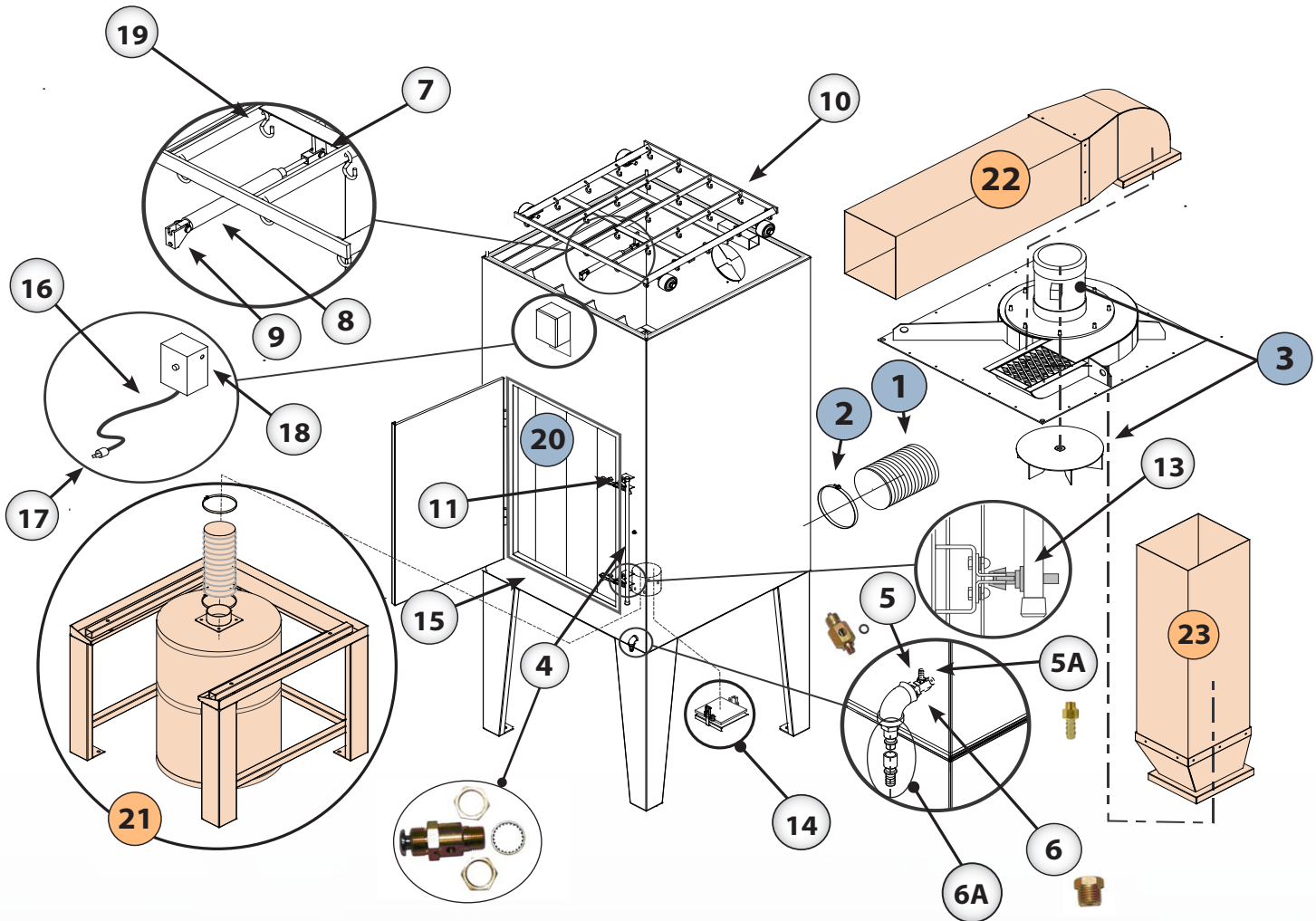
12. You need a maximum of 80 psi air supply for the standard, push button, pneumatic dust bag shaker of your equipment. Just press (more or less 10 times) the button on the side of the service door before starting operation.



**CAUTION** IF YOU USE INTERLOCKING CONNECTIONS, SECURE THEM WITH PINS. A CONNECTION THAT DISCONNECTS UNDER PRESSURE COULD CAUSE SERIOUS INJURY.



## DCM SERIE BAGHOUSE DUST COLLECTOR - GENERAL PARTS LIST



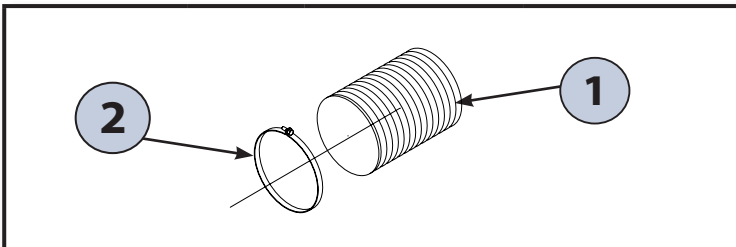
#	STOCK	DESCRIPTION
1	Hoses: see chart page 9	
2	Clamps: see chart page 9	
3	Fan Motor: see chart page 9	
4	608508	Shaking button
5	608408	Flow regulator 10-32
5A	632064	1/8" hose barb fitting 10-32 MPT
6	608409	1/4" Adaptor for flow regulator
6A	-/---->	Air inlet (1/4" M quick connect. # 607222, & 1/4" F # 607219)
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
20	Dust Bags: see chart page 9	
21	Dust Barrel & Legs Option: see chart page 9	
22	Horiz. Muffer Option: see chart page 9	
23	Vert. Muffer Option: see chart page 9	





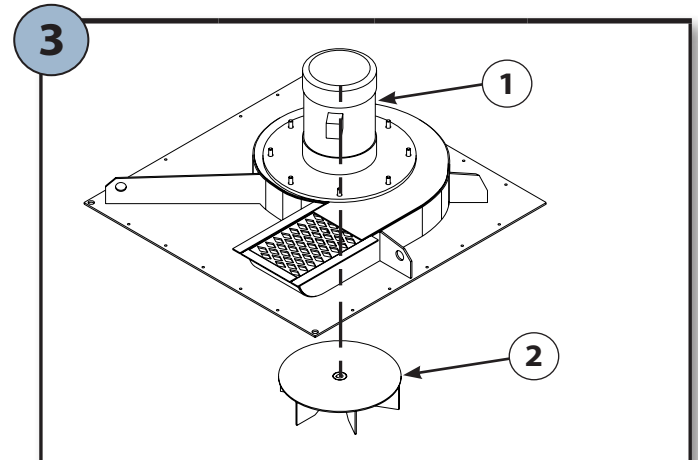
## FAN MOTOR & SUCTION HOSE



### CORRUGATED SUCTION HOSES AND CLAMPS

Fan Motor (hp)	Hose ID	① Hose	② Clamp
1/2	5"	606168	624121
1	6"	606169	624124
2	7"	606171	624127
3	8"	606173	624128
5	10"	606177	624137

#	STOCK	DUST BAGS
②①	601316	DCM100 : DB6HP dust bags (Qty : 16)
		DCM160 : DB6HP dust bags (Qty : 25)
		DCM230 : DB6HP dust bags (Qty : 36)
	601308	DCM330 : DB9HP dust bags (Qty : 36)



### FAN MOTOR

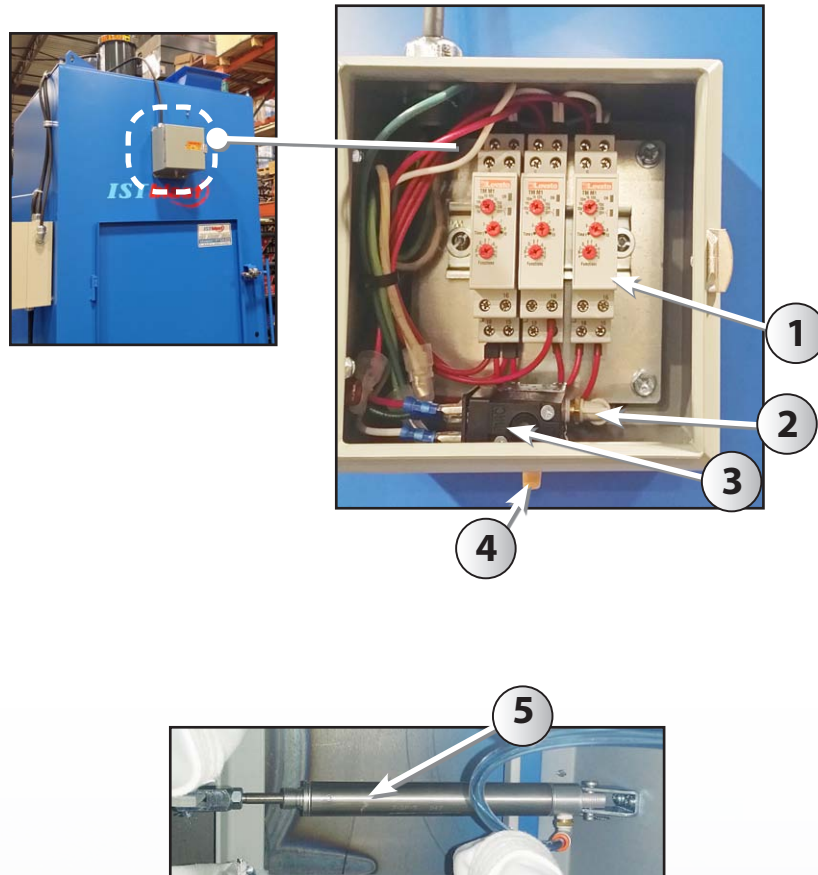
Fan Motor (hp) ①	Motor (voltages)		Impeller ②
	240 V	380 V	
1/2	IST	N/A	610525
1	IST	N/A	610526
2	IST	N/A	610527
3	N/A	IST	610528
5	N/A	IST	610529
7.5	N/A	IST	IST
10	N/A	IST	IST

### BAGHOUSE DUST COLLECTOR OPTIONS

DCM MODEL	②① DUST BARREL OPTION		HORIZONTAL MUFFLER ②②	VERTICAL MUFFLER ②③
	OPTION NUMBER	BARREL CAPACITY (GAL)		
DCM-100-4	601486	15	601434	601423
DCM-100	601486	15	601434	601423
DCM-160	601487	30	601435	601424
DCM-230	601490	30	601436	601425
DCM-330	601490	30	601437	601426



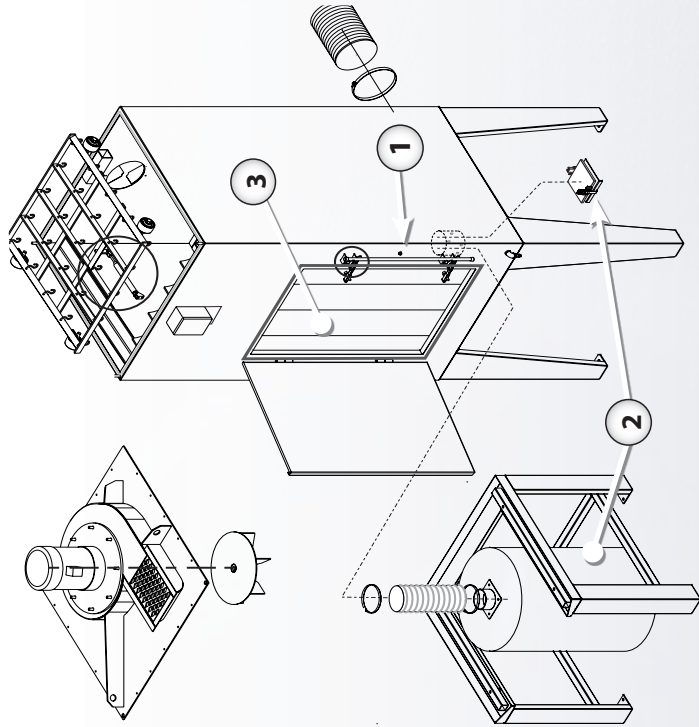
## ELECTRICAL SHACKER (OPTIONAL)



#	STOCK	DESCRIPTION
1	917850	TIMERS
2	324560	¼" PUSHIN FITTINGS
3	608568	SOLENOID VALVE
4	608284	MUFFLER
5	608405	PNEUMATIC CYLINDER

For electrical schematic, see pages 12 to 15.

# MAINTENANCE



## DAILY MAINTENANCE & OPERATION

For the first two weeks of use, you should not shake the dust collector's bags. This will allow the dust to create a thin layer on the inside of the bag, increasing the filtering efficiency. It also explains why new bags may leak for the first hours of use.

1. If your dust collector is equipped with the automatic shacker option, the action will occur automatically at motor's shut down
2. Remove dust from the dust collector on a regular basis. Before opening the door, make sure to have a container under the trap to collect the dust. **(picture 1)**  
If you are equipped with the dust drum option simply open the lid with the ring's lever **(picture 2)** and empty dust.
3. After each use, turn off the impeller and shake bags inside the dust collector. Never shake bags while the cabinet is running.
4. Empty optional dust barrel or dust collector's bottom hopper regularly.

## WARNING

**Never shake bags while the cabinet is running. Never wash bags, instead 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).**

**Bag shacking should never occur while the electric motor is running. Always wait for complete stop of electric motor to avoid tearing off bags.**



Picture 1



Picture 2

#	STOCK	DESCRIPTION
3	601316	DB-6 BAGHOUSE



## EVERY 2,000 HOURS OF OPERATION

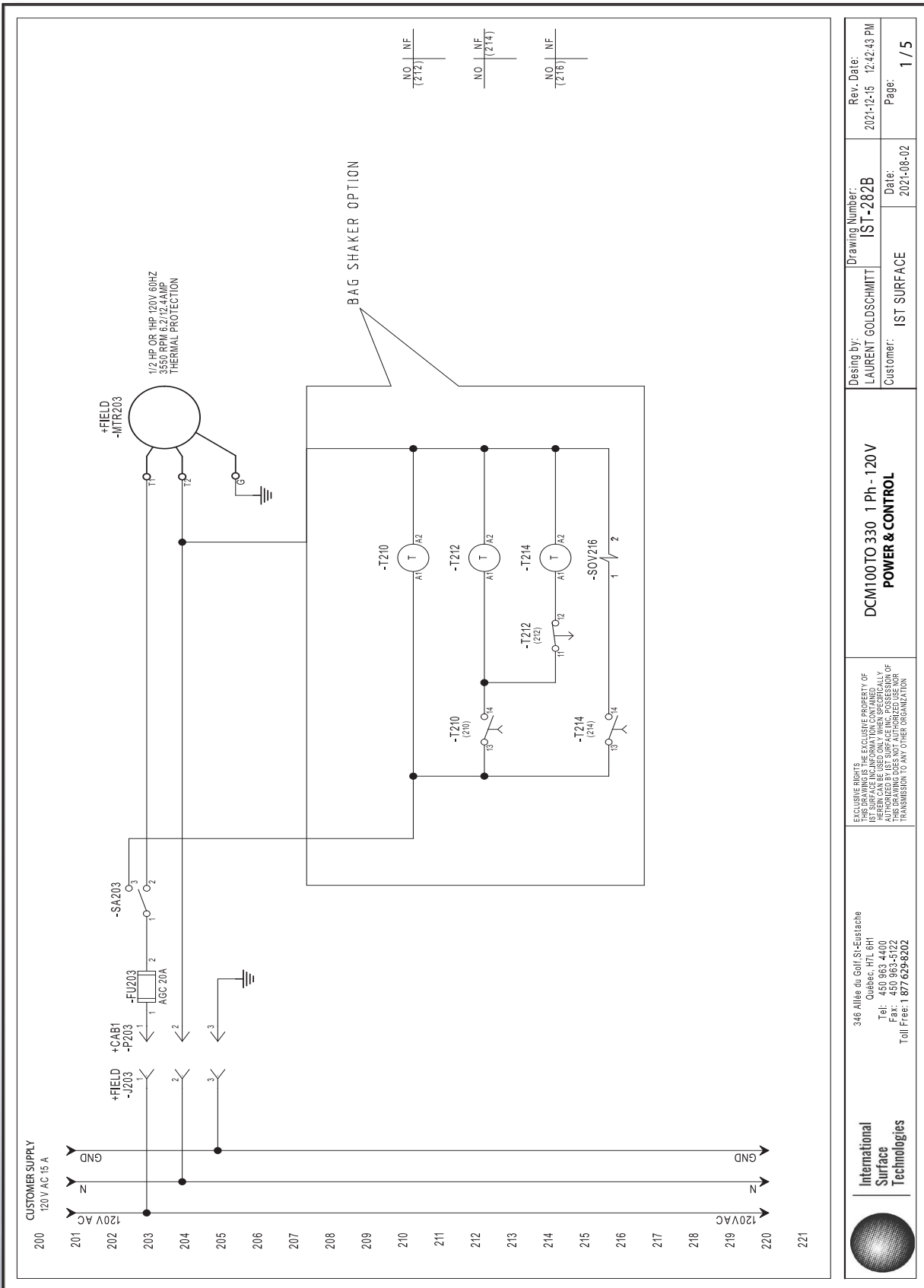
Replace bags **3** when the dust collector is unable to evacuate the dust cloud from the cabinet or after every 2,000 hours of operation.







**ELECTRICAL SCHEMATIC FOR DCM 50 TO 330 BAG-TYPE - 120 V / 1 PH - DIAGRAM**

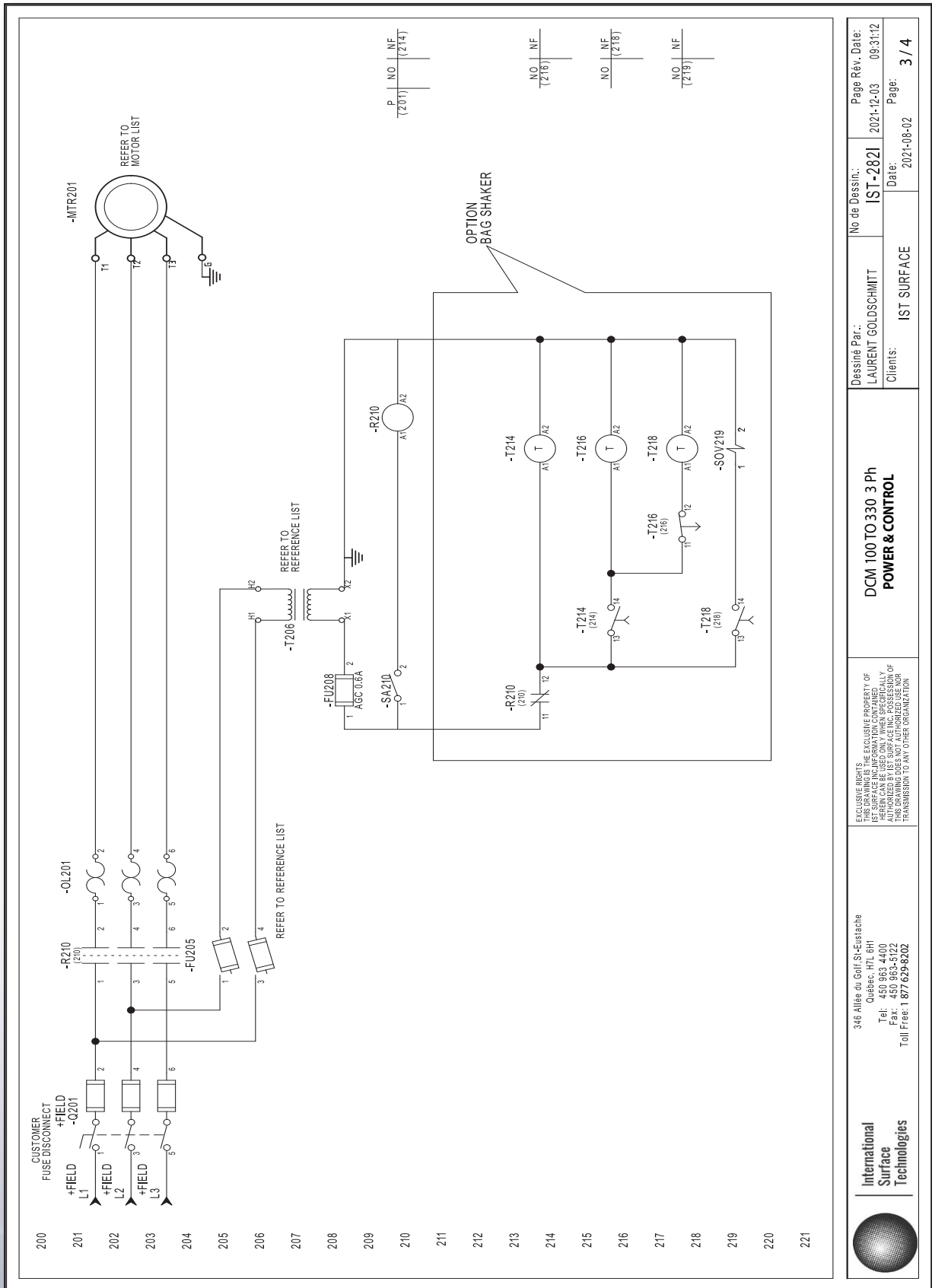


<p>Desing by: LAURENT GOLDSCHMITT</p> <p>Customer: IST SURFACE</p>	<p>Drawing Number: IST-282B</p> <p>Date: 2021-08-02</p>	<p>Rev. Date: 2021-12-15 12:42:43 PM</p> <p>Page: 1 / 5</p>
<p><b>DCM100TO 330 1 Ph - 120 V</b></p> <p><b>POWER &amp; CONTROL</b></p>		
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<p><b>International Surface Technologies</b></p>		





**ELECTRICAL SCHEMATIC FOR DCM 100 TO 330 BAG-TYPE - 3 PH - DIAGRAM**









**REFERENCE LIST FOR FOR DCM 50 TO 330 BAG-TYPE - 3 PH**

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MOTOR RATINGS VOLTS INPUT, STARTER AND OVERLOAD SELECTION									
POWER	V	A	PHASES	HERTZ	RPM	STARTER	OVERLOAD	CUSTOMER FUSE TYPE AND CAPACITY	
2HP	208-230/460V	6-5.4/2.7A	3	60	3450	LEID093A620G70	LRD12/LLRD08	AJT8 - AJT17/AJT4	
2HP	575V	2.16A	3	60	3450	LEID093A620G70	LRD10/LLRD07	AJT3	
3HP	208-230/460V	8.1-7.3/3.6A	3	60	3450	LEID093A620G70	LRD14/LLRD08	AJT12 - AJT10/AJT5	
3HP	575V	2.9A	3	60	3450	LEID093A620G70	LRD14/LLRD08	AJT4	
5HP	208-230/460V	13.3-12/6.1A	3	60	3450	LCID1867/LCID1267	LRD21/LLRD12	AJT20 - AJT15/AJT8	
5HP	575V	4.8A	3	60	3450	LCID1867/LCID1267	LRD21/LLRD10	AJT6	
7.5HP	575V	7.1A	3	60	3450	LEID093A620G70	LRD12	AJT9	
7.5HP	460V	8.8A	3	60	3450	LEID093A620G70	LRD14	AJT12	
10HP	460V	12A	3	60	3450	LCID1267	LRD16L	AJT15	
10HP	575V	8.3A	3	60	3450	LCID1267	LRD14	AJT12	

CONTROL TRANSFORMER SELECTION						
PRIMARY VOLTAGE	V/A	PHASES	HERTZ	SECONDARY VOLTAGE	PART NO	PRIMARY FUSE
600VAC	50	1	60	120VAC	SCLA9TBD32X	0.2 amp
480VAC	50	1	60	120VAC	SCLA9TBD32T	0.2 amp
240VAC	50	1	60	120VAC	SCLA9TBD32M	0.6 amp

MOTOR RATINGS VOLTS INPUT AND SELECTION						
POWER	V	A	PHASES	HERTZ	RPM	MAKER
2HP	208-230/460V	6-5.4/2.7A	3	60	3450	YNS16642A-2X4
2HP	575V	2.16A	3	60	3450	YNS16642C-575
3HP	208-230/460V	8.1-7.3/3.6A	3	60	3450	NEP182TC2-2X4
3HP	575V	2.9A	3	60	3450	NEP182TC2-575
5HP	208-230/460V	13.3-12/6.1A	3	60	3450	NEP184TC2-2X4
5HP	575V	4.8A	3	60	3450	NEP184TC2-575
7.5HP	575V	7.1A	3	60	3450	NEP213TC2-575
7.5HP	460V	8.8A	3	60	3450	NEP213TC2-2X4
10HP	460V	12A	3	60	3450	NEP215TC2-2X4
10HP	575V	8.3A	3	60	3450	NEP215TC2-575

Dessiné Par.:  
LAURENT GOLDSCHMITT  
Clients: IST SURFACE

DCM100 A 330 3 Ph  
REFERENCE LIST

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## **ISTBLAST LIMITED WARRANTY**

**ISTblast** warrants all equipment led in this manual which is manufactured by **ISTblast** and bearing its name, to be free from defects in material and workmanship on the date of sale by an authorized **ISTblast** distributor to the original purchaser for use. Notwithstanding any special, extended or limited warranty published by **ISTblast** will, for a period of TWELVE (12) months from the date of sale, repair or replace any part of the equipment determined by **ISTblast** to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with **ISTblast**'s written recommendations.

This warranty does not cover, and **ISTblast** 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- **ISTblast** component parts. Nor shall **ISTblast** be liable for malfunction, damage or wear caused by the incompatibility with **ISTblast** equipment with structures, accessories, equipment or materials not supplied by **ISTblast**, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by **ISTblast**.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized **ISTblast** distributor for verification of the claimed defect. If the claimed defect is verified, **ISTblast** 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.**

**ISTblast**'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 (1) year of the date of sale.

**ISTblast 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 ISTblast.** These items sold, but not manufactured by **ISTblast** (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. **ISTblast** will provide the purchaser with reasonable assistance in making any claim for breach of these warranties.

### **LIMITATION OF LIABILITY**

In no event will **ISTblast** be liable for indirect, incidental, special or consequential damages resulting from **ISTblast** 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 **ISTblast**, or otherwise.

**Report all accidents or "near misses" which involve ISTblast products to:**  
- Technical Assistance

**The following items are not covered under the ISTblast warranty policy:**  
- Parts or chassis replacement due to normal wears.

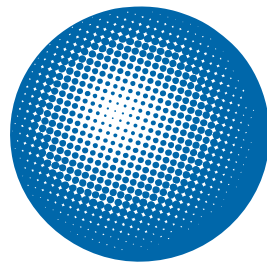
**Defective material or workmanship is not considered normal wear**





## INFORMATION / TECHNICAL ASSISTANCE

ISTpure is a registered trademark of:



**International  
Surface  
Technologies**  

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[istsurface.com](http://istsurface.com)

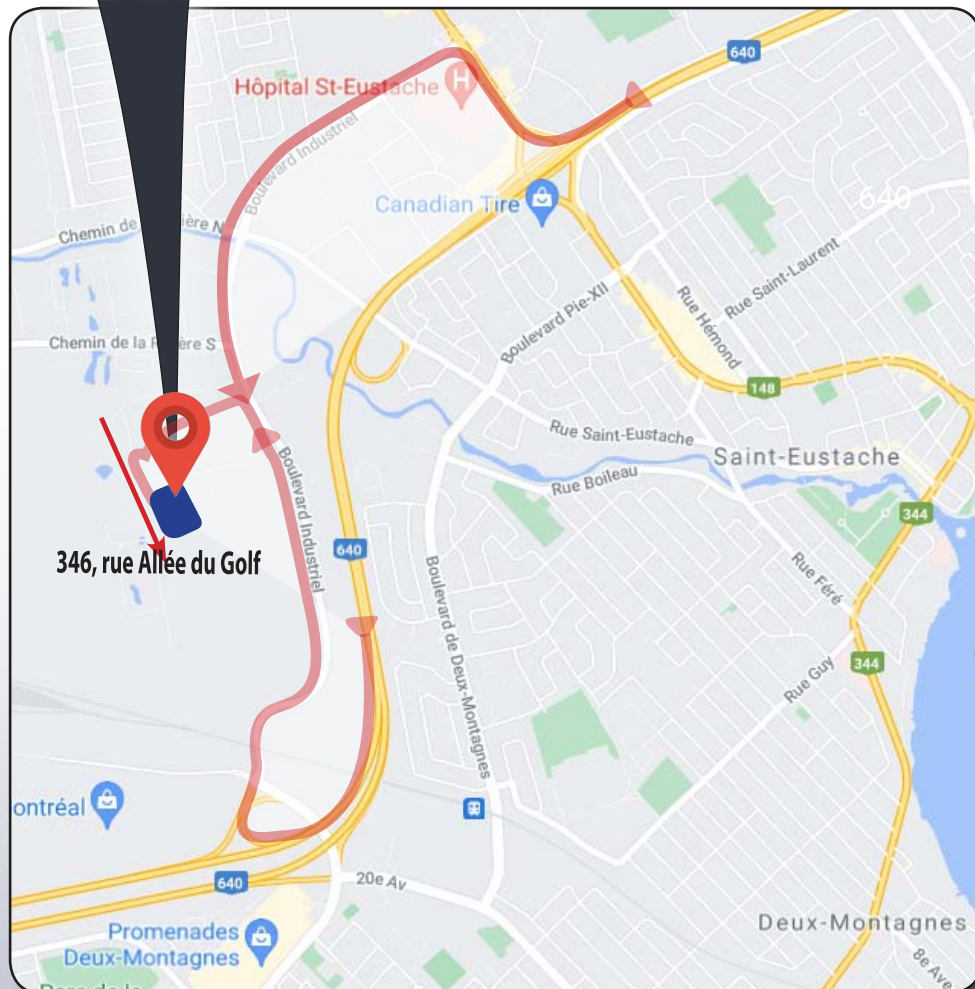
For more information, pricing or technical support, contact your local IST distributor or call / fax to our Consumer Information numbers:

**TEL.: 1 877 629-8202 & 450 963-4400 FAX : 450 963-5122**

Or visit us at:  
**[www.istsurface.com](http://www.istsurface.com)**



## OUR MAP LOCATION







## ABOUT THE COMPANY

### WHO WE ARE

IST is a leading industrial manufacturer of standard and custom engineered equipment for the surface treatment industry and the solvent recycling industry.

### MISSION

IST is dedicated to being an innovative and trusted supplier in the conception, fabrication and distribution of surface treatment equipment and recycling equipment.

The success of our mission relies on the following core values :

### **Innovation - Integrity - Quality**

The products, technologies and industry expertise of IST are used in a wide range of manufacturing and industrial applications, including but not limited to :

- General Manufacturing
- Industrial Equipment
- Metal forming
- Aerospace and Aviation
- Rail and Transit
- Marine
- Automotive
- Petroleum
- Flexography (labelling) & Lithography
- Wood finishing
- Power & Energy
- Pharmaceutical

