



SUCTION CABINET ECONOBLAST® SERIE 26-28-48 WITH DB 13 DUST BAG OR DC 50 DUST COLLECTOR



- **Warranty**
- **Safety**
- **Operation**

- **Service Parts**
- **Accessory Information**
- **Registration Form**



INSTRUCTION MANUAL



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CABINET SPECIFICATIONS

TYPE of CABINET	ECONO 26	ECONO 28	ECONO 48
Item Nb	628104	628157	628257
Dim. ext. (P x L x H)	26" x 36" x 67"	28" x 44" x 67"	36" x 48" x 67"
Dim. int. (P x L x H)	26" x 36" x 30"	28" x 44" x 30"	36" x 48" x 31"
Door Dim. (L x H)	20" x 29"	22" x 29"	30" x 48"
Door	Single		
Weight (lb)	250	300	350
Cabinet construction	14 gauge		
Floor Capacity	300 lb		
Gloves	Rubber 8" diam.		
Blasting system	Suction trigger		
Piping	3/8 " diam.		
Nozzle material	Ceramic		
Abrasive Regulator	AR 3/4		
Blast Gun	G15-CN1-5		
Pressure regulator/gauge	Optional		
Glass	14" x 22"		
Lighting	LED fixture 24"		
Dust collector	DB 13	DC 50	
Filter area (square feet)	13	50	
Dimensions (L x H)	15" x 66"		20" x 20" x 78"
Motor (hp)	1/3		
Fan (cfm)	400		
Fan silencer (dB A)	Under 80		
Electrical system (V)	120		



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.

NOTICE TO BUYERS AND USERS OF OUR PRODUCTS AND THIS INFORMATION DOCUMENT

The products described in this document and the information on these products is aimed at professionals and advanced users of shot peening equipment.

No representation is made or intended as to the suitability of the products described for a particular purpose of the request. No statement is intended or made as to the efficiency, production rate, or the useful life of the products described below. Estimate rates of production or production in regard to the finishes are the responsibility of the user and must be derived solely from the user's experience and expertise, and should not be based on information in this document.

The products described herein may be combined by the user in a variety of means for uniquely determined by the user. No statement is intended or made as to the balance of engineering skill or combination of products by the user's choice, or concerning compliance with the regulations or the practice of these combinations components or products. It is the responsibility of users to learn about the products mentioned in this document to become familiar with the laws, regulations and safety practices that apply to these products, equipment connected to these products and materials that can be used with these products.

It is the responsibility of the user to ensure that appropriate training of operators was carried out and a safe working environment is provided.

Our company is proud to offer a variety of products for industrial blasting, and we trust that our professionals use their industry knowledge and expertise for safe and effective use of these products.

MATERIAL RECEIPT

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 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 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 list and compare it with the parts you have received. If any parts are missing, contact the supplier you purchased the equipment from.



GENERAL SAFETY RULES

- **KEEP WORKING 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

- **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 THE EQUIPMENT.** Keep proper footing and balance at all times.

UNIT USE AND CARE

- **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.
- **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.



INSTALLATION AND STARTING

Before operating the ISTblast SANDBLASTING CABINET, 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.

1. 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.

All ISTblast ECONOBLAST series cabinets are equipped with a tubular type dust bag for dust collection or an optional high-performance dust collector model DC-50.

a) DB -13 Dust Bag :

The dust bag, pail and clamps are packed inside the cabinet. Place dust bag behind the cabinet and install the opening of the dust bag to the outlet of the reclaimer using the supplied clamp. (Page 11, No. 21).

b) DC-50 Dust Collector :

The dust collector should be located on a leveled area near the back of the cabinet, at the right side. 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 manual for more details.

2. Connect the electrical power cable to a power source of 120 volts, 15 amps

All electrical connections to the ISTblast cabinet 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.



It is important to connect the ISTblast system to the ground to discharge static electricity, which can be generated when sanding. The ground can also reduce the discomfort to which an operator may face when static electricity is dissipated.

3. The compressed air supply inlet is located at the front of the cabinet (Page 9). Compressed air connection must be made with a pipe or hose of at least ½" in diameter. Do not use quick connect male-female type, but connections with the fewest restrictions possible. The compressed air must be clean, dry and free of oil for optimum operation of the unit.

Note: Always install a air pressure regulator with gauge ½" air to maintain power between 80 and 90 pounds / inch. maximum.



ABRASIVE MEDIA LOADING

Note : Your suction cabinet is designed to operate efficiently with most of light and reclaimable abrasive media on the market. However, certain types such as **sand, crushed glass or silica are not recommended and should not be used** in your 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 or aluminum oxide.

To fill, open the cabinet door and pour a maximum amount of 25 lbs of abrasive (about ½ bag) at the bottom of the cabinet.

Warning : To operate properly, your ISTblast system requires clean, dry air. Moisture or oil in the compressed air supply can contaminate the abrasive, which can prevent it from flowing freely inside the system.

OPERATION

1. Turn on compressed air and turn on the motor with the power switch. When you are working, blasting pressure should not exceed 80 to 90 lbs. Place the part to be cleaned inside the cabinet. It must be dry and free of oil or grease.
2. After closing the door, put on protective gloves. Hold the gun in one hand while holding the part with the other.
3. Use the gun trigger to activate the arrival of compressed air. The passage of air into the gun sucks abrasive. The abrasive is then propelled through the nozzle of the gun. If you have opted for the G5 Gun Kit, Regulator and pedal ÉCONOBLAST (600115) it is the pedal that activates the air.

As soon as it hit the part to clean, abrasive falls in the bottom of the cabinet and is directed to the abrasive regulator AR $\frac{3}{4}$ (Page 9, No. 11). Dust is itself is directed to the bag or dust collector.

SHUT DOWN

1. Once cleaning is finished, await 10 to 15 seconds before turning off the motor and opening the door of the cabinet in order to allow the evacuation of dust in suspension.
2. Stop the electrical motor.
3. Shut off the air from the compressor.

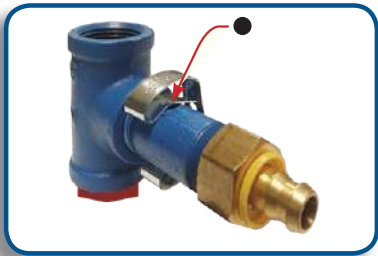


MAINTENANCE AND ADJUSTMENT OF YOUR SUCTION CABINET

1. Check both the quantity and quality of abrasive frequently. If required, clean out the system and reload with new media. During normal blasting operation, the media should be replaced completely after 8 hours. Make sure to use dry, clean abrasive such as glass beads no. BT-6 (50-70).
2. Before starting the machine, shake the dust bag vigorously by hand . See the dust collector manual for more details.
3. Empty dust pail or dust collector's bottom hopper regularly

Warning:

Never shake bags while cabinet reclaimer is running. Never wash dust bags : 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).



4. the AR 3/4 abrasive regulator is located at the bottom of the reclaimer, (Page 9, no. 25). 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 1/3 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.

5. Make sure you have a proper air jet/nozzle combination. Standard ECONOBLAST series suction cabinets are usually equipped with 5/32" air jets and 5/16" nozzles.

Proper jet/nozzle combination :

JET	NOZZLE	AIR CONSUMPTION
1/8"	1/4"	21 CFM * @ 80 PSI *
5/32"	5/16" standard	34 CFM* @ 80 PSI *
3/16"	3/8"	48 CFM * @ 80 PSI *
7/32"	7/16"	65 CFM * @ 80 PSI *

* CFM : Cubic Feet / Minute

* PSI : Pounds / Square Inch

6. 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 be changed if necessary. The nozzle, washer nozzle and protective rubber of G5 gun (Page 15) should be checked periodically to prevent premature wear of the gun G15 (Page 13)

WARNING :

Make sure to use appropriate safety equipment. (Ear plugs, dust mask etc.).



SCHEMATIC OF UNIT- VIEW RIGHT SIDE

Face view





SCHEMATIC OF UNIT VIEW RIGHT SIDE

Inside view





SCHEMATIC OF UNIT- VIEW RIGHT SIDE

Rear view





SANDBLASTING CABINET - PARTS LIST

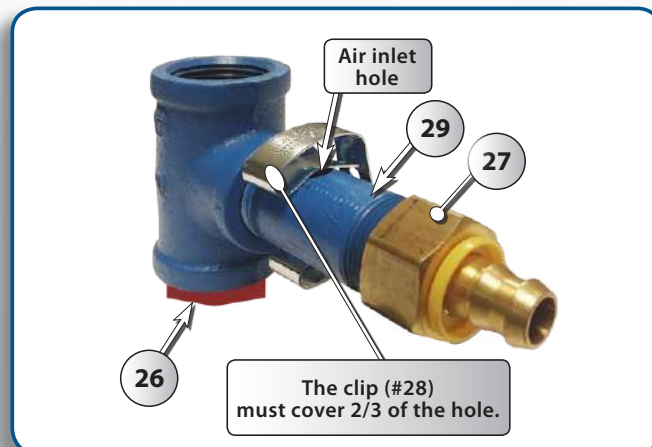
#	STOCK	DESCRIPTION
1	616306	1/3 hp Electric Motor 120V AC, 60 Hz, 3450 rpm
2	610522	High-Efficiency ECONOBLAST Turbine
3	601315	DB-13 Dust Bag
4	601310	23 L White Plastic Dust Pail
5	624137	T Clamp T-188 (11¼"Ø) Clamp for Dust Pail
6	624117	T Clamp T-64 (4" Ø)
7	618126	Air Hose Grommet ½" (¾)
8	610205	14" x 22" Laminated Safety Window
9	613026	RPW 26 Self-Adhesive Plastic Shield, 20 ¾" x 12 7/8"
10	610207	Window's Rubber Gasket
11*	617127	250 W Halogen Light Bulb (for Flood Light 250W) (before 2017)
	617131	LED Flood Light Upgrade Kit 150 W - 1200 lumen (after 2017)
12*	610213	Pyroceram Glass 5½" x 4" (before 2007)
	610206	Pyroceram Glass (since 2007)
13	617014	ON/OFF Switch
	617019	Switch Protection
14	616935	AGC 10 A - 250 V Fuse
	616907	Fuse Holder
15*	617161	Light Fixture for DEL (since 2017)
	610322	Protective Glass for DEL (since 2017)



SANDBLASTING CABINET - PARTS LIST (CONT'D)

#	STOCK	DESCRIPTION
16	610455	ECONO 26" x 36" Expanded Steel Floor
	610453	ECONO 28" x 44" Expanded Steel Floor
	610451	ECONO 36" x 36" Expanded Steel Floor
	610456	ECONO 36" x 48" Expanded Steel Floor
17	610288	Standard ISTblast® Complete Door Lock
18	910223	Door Latch Rubber Bumper Screw
19	618321	Rubber Door Gasket Type D (sold per foot)
20	610229	8" Ø Glove Flange (sold by unit)
	624128	T Clamp T-128 (8" Ø) Clamp for Gloves (sold per unit)
21	603212	Nylon Sleeve Gloves, 8" ID x 30" long (sold in pairs only)
22	*****	G15 Trigger Operated Sandblast Gun (see next page)
23	606104	½" ± PVC Abrasive Hose (sold per foot)
24	606103	¾" Ø Air Hose (sold per foot)
25	608010	AR-¾ Abrasive Regulator
26	939143	Threaded Polyethylene Plug for AR-¾ Abrasive Regulator
27	632960	PL Adaptor ¾" FPT x ½" B
28	608011	AR-¾ Clip
29	630505	¾" x 3" Nipple
30	600115	OPTION: Factory Mounted Pedal* Kit & G5 Blast Gun
	600215	OPTION: Pedal* Kit & G5 Blast Gun (parts only)
31	610275	OPTION: Blowgun dust

AR-3/4 ABRASIVE REGULATOR (# 25) ADJUSTMENT





G15 BLAST GUN FOR SUCTION CABINET

G15 BLAST GUN, PARTS LISTING

A	#	Part No.	Description
Complete pre-assembled gun	1	610110	G15 Gun Body
	2	610111	G15 Suction Head
	3	607039	G15 Nozzle Adaptor
	4	632761	3/8" MPT x 1/2" Stem Brass
	5	618218	G15 Rubber Protector
	6	618100	G15 O-Ring
	7	NPN	Hexagonal Screw 1/4" - 20 x 1/4"
	8	910104	G15 Repair Kit

NOZZLE AND AIR JET COMBINATIONS

A		Nozzle				Complete Air Jet	
G15	Nozzles	Model	Orifice	Length	Code	Code	Orifices
A		B				C	
610100	Ceramic	CN1-4	1/4"	1-1/4"	605000	610113	1/8"
610101	Ceramic (Standard)	CN1-5	5/16"		605001	610114	5/32"
610102	Tungsten	TN1-4	1/4"	1-1/4"	605002	610113	1/8"
610103	Tungsten	TN1-5	5/16"		605003	610114	5/32"

* Pre-assembled sandblast guns includes parts 1 to 6, plus a combination of B-C

CERAMIC NOZZLE

CN1		Cost-efficient nozzle for occasional use with soft abrasive media, such as glass beads, walnut shell, and steel shot / grit.
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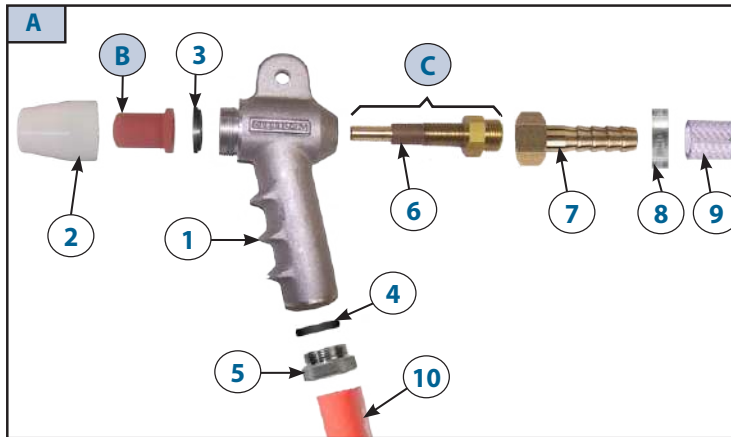
TUNGSTEN CARBIDE NOZZLE

TN1		Higher durability nozzle for regular use with highly abrasive media, such as aluminum oxide and GMA Garnet.
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OPTIONS : G5 GUN, PRESSURE REGULATOR, FOOT PEDAL

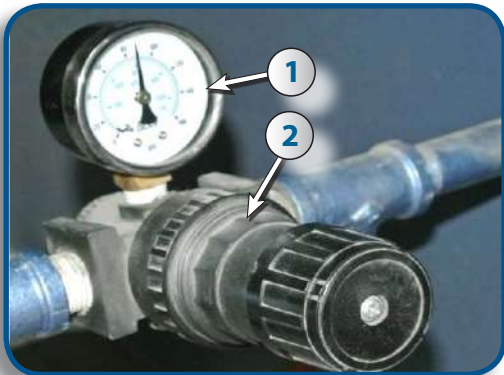
G5 GUN : PARTS LIST



Pre-assembled gun		
1	610119	Blast Gun Body only
2	607037	Nozzle Adaptor
3	618017	NW-2 Rubber Washer
4	618112	O-Ring
5	607038	Hose Adaptor
6	618219	Rubber Protector
7	632771	½" Brass Female Swivel Hose Barb
8	624015	¾" O-Clamp
9	606104	½" PCV Compressed Air Hose (sold per foot)
10	606148	½" Multipurpose Abrasive Conveying Hose (sold per foot)

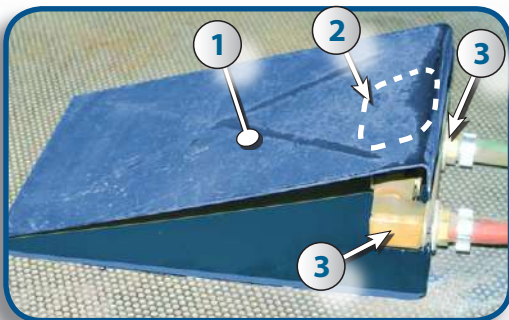
* A- B-C : see table next page

PRESSURE REGULATOR : PARTS LIST



#	STOCK	DESCRIPTION
1	611022	Pressure gauge ¼"
2	608022	Pressure regulator

FOOT PEDAL : PARTS LIST


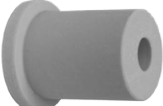



#	STOCK	DESCRIPTION
1	610270	2 way Pneumatic Pedal (complete)
2	608604	Valve only
3	632551	PL 90° elbow MF ¾"





NOZZLES LIST FOR THE G5 GUN

PROPER AIR JET/NOZZLE COMBINATIONS								
Complete blast guns (pre-		Nozzles				Air jet	Orifices ±	
G5	Nozzles	Type	Orifice	Length	Code			
A		B				C		
	610121	Ceramic	CN2-4	1/4"	1-1/4"	605004	610116	1/8"
	610120	Ceramic	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"



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 TWENTY FOUR(24) 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** 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 **Canablas** be liable for malfunction, damage or wear caused by the incompatibility with **Canablas** equipment with structures, accessories, equipment or materials not supplied by **Canablas** , 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 **Canablas** distributor for verification of the claimed defect. If the claimed defect is verified, **Canablas** 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 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 two (2) years 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.



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 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 (Labeling) & Lithography
- Wood finishing
- Power & Energy
- Pharmaceutical

