International Surface Technologies

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INDUSTRIAL SANDBLASTING CABINETS

ISTblast offers a complete line of superior quality industrial sandblasting cabinets designed to accomplish any light to heavy-duty sandblasting jobs.

All our cabinets come with a dust collector as a standard feature, which results in higher visibility inside the cabinet, increased sandblasting performance, less wear on parts, and extended equipment lifespan. Several options are available to personalize the cabinet and perform complex tasks.

ISTblast sandblasting cabinets are compatible with most abrasive media available on the market and the abrasive flow can be adjusted according to desired results. Common applications include cleaning, etching, deburring, striping, profiling, deburring, finishing, trimming, and surface preparation.

MARKET

- o General Manufacturing
- Aerospace & Aviation
- o Mechanical Workshop & Bodyshop
- Machine & Repair Shop
- o Transport & Automotive
- o Metal Forming & Finishing

KEY FEATURES

- o Industrial grade steel construction
- Low energy consumption LED (Light Emitting Diode) lighting system
- Dust collecting system for better visibility and performance (several models available)
- Adjustable abrasive reclaimer to delivering higher blasting performance and considerably reducing abrasive consumption (only available on ECAB and M Series)
- o Simple pneumatic controls to deliver greater reliability
- Rigid dual-panel doors to stand up to abrasives and seal more tightly than single-panel doors
- Custom design available (M Series only)
- Several options available to address complex processes and applications or for better ergonomic
- CSA approved



GENERAL BROCHURE

2018-02-20





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ECONOBLAST® SERIES

The Econoblast[®] line offers a range of suction sandblasting cabinets designed for light duty industrial applications without compromising the liability and performance of an industrial unit.

Econoblast[®] cabinets have a robust steel construction gauge 14 are delivered with a manual sandblasting gun with trigger, and are available in different sizes and configurations.

Can be operated with standard DB13 or optional DC50 high efficiency dust collectors

KEY FEATURES



HAND TRIGGER CONTROL SANDBLASTING GUN Start blasting operations by pressing the trigger

Description	ECONO 26		ECOI	NO 28	ECONO 48		
Dust collector	DB13 DC50		DB13	DB13 DC50		DC50	
Filter area (sq. ft.)	13	50	13	50	13	50	
Fan cfm motor	250	485	300	535	350	585	
Interior dim's (DxWxH)	26" x 36" x 30"		28″ x 4	4″ x 30″	36" x 48" x 31"		
Overall dim's (DxWxH)	42″ x 36″ x 67″	60" x 60" x 78"	44″ x 44″ x 67″	60″ x 60″ x 78″	52" x 36"x 67"	68″ x 68″ x 78″	
Door opening (L x H)	20″ x	29″	22"	x 29″	30″ x 48″		

OPTIONS AVAILABLE



Turntable



Foot operated pedal and G5 gun upgrade kit



OSHA Door security switch

SPECIFICATIONS





ECAB SERIES

The ECAB Series offers a range of semi-industrial sandblasting cabinets equipped with a dust collector, a tunable media reclaimer and a foot-operated control pedal.

ECAB cabinets have a robust steel construction gauge 14 and are available in different sizes and configurations. Can be operated with standard DB13 dust bag or optional DC50 or DC100 high efficiency dust collectors.

KEY FEATURES



ABRASIVE MEDIA RECLAIMER Tunable cyclonic reclaimer that can be adjusted to control media size.



FOOT OPERATED CONTROL PEDAL Start blasting operations by stepping on the treadle

Description	ECAB 3			ECAB 5			ECAB 7		
Dust collector	DB13	DC50	DC100	DB13	DC50	DC100	DB13	DC50	DC100
Filter area (sq. ft.)	13	50	100	13	50	100	13	50	100
Weight (lb.)	405	525	540	445	565	580	467	587	602
Overall dim's (DxWxH)	42″x 40″x 67″	50″x 57¼″x 76″	56"x70"x 91"	50½"x 46"x 67"	52''x 66''x 76''	64''x 60''x 91''	60"x 50"x 67"	70"x 56"x 76"	72½″x 63″x 91″
Interior dim's (DxWxH)	26" x 36" x 31"			28" x 44" x 31"			36" x 48" x 31"		
Door opening (L x H)		20" x 29"		22″ x 29″			30″ x 29″		

OPTIONS AVAILABLE

SPECIFICATIONS



Turntable (fixed or on loading rail)





Additional side door



OSHA Door security

Rubber lining



KEY FEATURES

CUSTOM DESIGN

Design can be drawn the customer specifications. Many ergonomic options available (see details on page 6)



RUBBER, CLOTH-LINED







ABRASIVE MEDIA RECLAIMER

Tunable cyclonic separator can be adjusted to control media size

M SERIES CABINETS

category.

Looking for even more power and performance? Industrial M Series Sandblasting Cabinets are the most powerful and sophisticated impeller cabinets available on the market. Equipped with a powerful dust collector and a media reclaimer, this cabinet is designed to maximize productivity and achieve highest quality standards. Made of 12 gauge heavy-duty construction, it is one of the strongest and most durable of its

M Series Cabinets are available in different standard designs, or could be tailor-made to your specific needs. Can be operated with either DCM100 to 330 bag-type, or DCM600 to 1800 cartridge-type motorized dust collectors.

LARGE SAFETY-GLASS



PNEUMATIC FOOT TREADLE CONTROL Start blasting operations by stepping on the treadle



3/16" PERFORATED FLOOR 500 LB CAPACITY



SPECIFICATIONS

Standard dimensions 36" or less with standard DCM100

Description	M2636	M2844	M3636	M3648	M3660
Interior dim's (P x L x H)	26"x 36" x 36"	28"x 44"x 30"	36"x 36"x 33"	36"x 48"x 33"	36"x 60"x 33"
Overall dim's (P x L x H)	62"x 65"x 103"	64"x 71"x 103"	72"x 67"x 103"	74"x 77"x 103"	74"x 89"x 103"
Door opening (L x H)	20" x 33"	22" x 28"		30" x 30"	

Standard dimensions 42" or more with standard DCM160

Description	M4248	M4260	M4848	M4860	M6060
Interior dim's (P x L x H)	42"x 48" x 44" 42"x 60"x 44"		48"x 48"x 44" 48"x 60"x 44"		60"x 60"x 44"
Overall dim's (P x L x H)	84"x 80"x 105" 84"x 92"x 105"		92"x 82"x 105"" 92"x 94"x 105"		102"x 82"x 105"
Door opening (L x H)	36" x 41"		42" :	54" x 41"	

Larger dimensions are available.

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HOW IT WORKS

M SUCTION SERIES

Blasting uses the Venturi principle sucking media from a hopper. The air jet is approximately half of the interior diameter of the nozzle and as the air stream is passed through both, it creates a suction which sucks the media from the hopper into the air stream. The media acceleration distance is very short from the nozzle to the workpiece (approximately 4 to 14"). The suction system can continuously blast as long as there is blasting media in the hopper.

Suction systems have limits on their suction capacity and on propelling heavier media. Very heavy blasting media (steel shot or grit) cannot be conveyed into the air stream with suction blasting. However, most industrial blast cabinets use suction systems due to their lower cost and because they work well for most applications.



M PRESSURE SERIES

The pressure blasting systems are much more productive than suction systems.

These systems use a pressure vessel that pressurize as it is energized with the compressed air. When the air/media mix is released from the pot, it accelerates from the pot through at least 5-10 feet of hose and then even faster as it travels through the Venturi of the nozzle. The acceleration rates of air/media mix are much higher in pressure blasting than suction blasting.

When the pressure pot empties of the media, it has to be depressurized to refill with media. Pressure systems can blast all medias regardless of their weight or size, but they require a minimum of 25 psi to operate.



AIR CONSUMPTION TABLES

		Pression (psi ¹)						
Orifice	Nozzle	40	50	60	70	80	100°	
1/8″	1/4′	12	15	17	19	21	26	
5/32″	5/16″	19	23	27	30	34	42	
3/16″	3/8″	27	33	38	43	48	58	
7/32″	7/16″	38	46	52	60	65	80	
1/4″	1/2″	49	58	67	76	85	94	

$\begin{array}{c c c c c c c c c c c c c c c c c c c $	PRESSURE										
1/8" lb/h ³ 55 69 84 97 110 127 140 154 3/16" cfm ² 53 65 77 89 101 113 126 133	Opening	psi ¹	30	40	50	60	70	80	90	100º	
lb/h ³ 55 69 84 97 110 127 140 15- 3/16" cfm ² 53 65 77 89 101 113 126 131	1/0″	cfm ²	8	10	11	13	15	17	19	20	
	1/0	lb/h ³	55	69	84	97	110	127	140	154	
5/10 lb/h ³ 410 495 526 601 680 756 832 910	2/16//	cfm ²	53	65	77	89	101	113	126	137	
	5/10	lb/h ³	410	495	526	601	680	756	832	910	
1/4" cfm ² 34 41 47 54 61 68 74 81	1///	cfm ²	34	41	47	54	61	68	74	81	
1/4 lb/h ³ 219 276 302 351 398 460 504 550	1/4	lb/h ³	219	276	302	351	398	460	504	556	

^oOptimal pressure

¹ psi: Pressure at the nozzle in pounds per square inch

² cfm: Compressed air required in cubic feet per minute ³ lb/h: Abrasive consumption in pounds per hour



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M SERIES CABINETS OPTIONS

GENERAL OPTIONS







On rail

LOADING / UNLOADING RAILS



Removable

Foldable

Turntables facilitate handling of heavy parts. Manual turntable with dolly and outside platform are available in various diameters with a loading capacity ranging from 500 to 2,000 lb. For heavier parts, a loading/unloading rail can be added for easier handling.

LINING

CABINET INTERIOR





Extended-wear options extend equipment life while minimizing maintenance and downtime: black or red rubber curtains in; replaceable window protectors; heavy-duty, media-conveying duct and reclaimers can be upgraded with replaceable wear plate.

BLAST FEATURES

AUTOMATED SYSTEMS



Additional nozzles or guns can automate the blasting process when synchronized with powered oscillators and turntables.

ROTATING BASKET



Rotating basket with timer increases quality and processing speeds of batches of smaller parts.

FIXED GUN HOLDER



Fixed-gun holder with adjustable arm frees operator's hands for parts blasting.

ERGONOMIC FEATURES



No-contact pedal

DOORS

Motorized cart system



Wide opening oval shape gloves



Tiltable Turntable

Elevating work platform



Adjustable armrests

PRESSURE VESSEL



Auto-depress valve





Vertical pneumatic door OSHA door security system



Additionnal side doors



Chain block slot







DUST COLLECTORS OPTIONS



Dust Bag DB13 is a basic dust collecting system that comes by default with most of our cabinets. With a filter area of 13 square feet, it is powerful enough to free your cabinet of fine particles while blasting.

However, if you are considering using your cabinet on a regular basis, we recommend to upgrade for a more powerful dust collector to keep a great visibility inside the cabinet and to avoid frequent production shutdowns to empty the dust container or change the bag.





These dust collectors are modular, equipped with a manual shaker and a barrel dust outlet with a trap door for easy access to the filter bags. These dust collectors are advised for regular users of Econoblast and ECAB Series.

SPECIFICATIONS	DC50	DC100
Filter area (sq. ft.)	50	100
Fan cfm motor	400	600
Weight (lb.)	225	350
Overall dim's (DxWxH)	20" x 20" x 78"	26" x 26" x 88"



With a built-in head motor exhausting system on the clean side and without any contact with abrasive, the dust collectors DCM100 to 330 are designed for heavy-duty use and are the most efficient for preventing dust from escaping into the work environment and contaminating surround machines and work surfaces.

These dust collectors operate with a push-button shaker, or optional automatic bag shaker, to free operator for other tasks with bag-house dust collectors, and require minimal supervision and maintenance. Optional vertical or horizontal mufflers can be added to lower the noise they produce. They are advised for heavy users of M Pressure or Suction Series.

SPECIFICATIONS	DCM100	DCM160	DCM230	DCM330
Filter area (sq. ft.)	100 160		230	330
Fan cfm motor	1/600 2/900		3/1.200	5/1.800
Weight (lb.)	400 450		525	700
Overall dim's (DxWxH)	28"x28"x103" 32"x32"x105"		38"x38"x 13"	38"x38" x 137"
Height with vertical muffler (H)	13	7″	146″	173″



The cartridges type dust collectors DCM600 to 1800 models are the most efficient and effective motorized dust collection systems in the work environment today. The fans can draw in air from the reclaimers from 600 to 1,800 cfm and comes with a built-in muffler. Dust and fine particles that pass through the collector are filtered, and only clean air is exhausted by the system.

The cartridges are cleaned by an automatic pulsing, without operator assistance. The system starts automatically when differential pressure sensors detect that the cartridges are filled or clogged to clean clogged pores. The pulsation system instantly blows compressed air through the cartridges forcing them to inflate in order to remove dust on the outer surface, letting it fall to the bottom of the storage barrel.

SPECIFICATIONS	DCM 600	DCM 900	DCM 1200	DCM 1800	
Filter area (sq. ft.)	6	30	1.260		
Fan cfm motor	1/600	2/900	3/1.200	5/1.800	
Weight (lb.)	900 915		1.100	1.150	
Overall dim's (DxWxH)	36" x 30	6" x 124"	55" x 37" x 137"	55" x 37" x 137‴	

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.

MARKETS SERVED

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 0
- Industrial Equipment 0
- Metal forming 0
- Aerospace and Aviation 0
- **Rail and Transit** 0
- Marine 0
- Automotive 0

- Petroleum 0
- Flexography (Labeling) & Lithography 0
- Wood finishing 0
- Power & Energy 0
- Pharmaceutical 0





Canablast is a registered trademark of International Surface Technologies 4160 Industriel Blvd. Laval, Quebec H7L 6H1 Canada

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