Blast Cabinets-Siphon





Abrasive Blasting

The abrasive blasting process itself is simple: It works by rushing compressed air through a specifically designed delivery system that combines compressed air with abrasive media. This combination of air and abrasive slams into the targeted piece, cutting, etching, abrading, cleaning or otherwise changing the appearance or condition of that surface.

Abrasive blasting is valuable as an efficient, high-quality method of surface preparation. No other method of metal cleaning allows better control of the surface preparation or cleans the surface as thoroughly. By beginning with a screened abrasive, you control and obtain a consistent profile on the targeted surface. This clean, etched surface aids in adhesion and allows the coating to lock onto the surface. This combination of clean and etch greatly enhances the ability to obtain a superior quality finish. Blasting also allows access to irregularly shaped parts that can't be reached by traditional sanding or solvent cleaning methods.

Blasting is also used for other purposes beyond surface preparation, such as removing microscopic machining burrs from engine parts, etching glass, carving of names and designs in wood and stone or surface hardening of manufactured parts.

60 x 48 CB

Overall Dimensions			Openings	Window
Height	Width	Depth	Top 48" x 60"	Height 12"
92"	65"	86"	Side 20" x 30"	Width 24"
Working			Approx. Weight	Mfg. Number
40"	60"	48"	1100 lbs	101701CB-A

With 60" of working width and 48" of working depth, the 60 x 48 CB is a 25 CFM foot-operated blast cabinet that is as large as it is powerful. Comes with a 400 CFM dust collector (not shown) and tungsten carbide nozzle and air jet that provides you with a spacious solution that



fits in most shop environments. Optional equipment includes carbon screen, turntable, 45 CFM gun, tumble basket, 150 or 600 CFM dust collector and reclaim system.

60 x 30 FT Double Station

Overall Dimensions		Openings	Window	
Height	Width	Depth	Top 30" x 60"	Height 12"
82"	62"	74"	Side 24" x 21"	Width 24"
Working			Approx. Weight	Mfg. Number
40"	60"	30"	570 lbs	102765R-A

Clam shell and sideaccess features make loading and unloading this roomy machine a snap. Lower hopper door allows for simple media changes and cloth lined gloves allows the operator to work in comfort and safety. Standard fluorescent lighting, 25 CFM foot pedal blast gun with



tungsten carbide nozzle and air jet, and 150 CFM dust collector (not shown) provide excellent visibility. Optional features include airline filter, carbon screen, double gun system, 45 CFM gun, boron carbide nozzle, tumble basket, turntable, 400 or 600 CFM dust collector, reclaim system and dust blow off gun.

48 x 48 FT

Overall Dimensions			Openings	Window
Height	Width	Depth	Top 48" x 48"	x 48" Height 12"
94"	52"	90"	Side 20" x 30"	Width 24"
Working			Approx. Weight	Mfg. Number
40"	48"	48"	675 lbs	101699R-A

With a clam shell design for ease in loading, this blast cabinet features a backrest welded to the unit for strength and stability. The window is also easily changed, and a hopper door makes media changes simple. 25 CFM foot pedal blast gun and 100 CFM dust collector (not shown)



are standard. Optional features include: dust blow off gun, tumble basket, turntable, 150, 400, or 600 CFM dust collector.

48 x 48 CB

Overall Dimensions				Openings	Window
	Height	Width	Depth	Top 48" x 48"	Height 12"
	94"	52"	90"	Side 20" x 30"	Width 24"
	Working			Approx. Weight	Mfg. Number
	40"	48"	48"	750 lbs	101699CB-A

This blasting cabinet opens wide to 48" x 48" and provides 40" of operating height for your most bulky projects. A 25 CFM foot-operated blast gun, 100 CFM dust collector (not shown), and tungsten carbide nozzle and air jet are standard. Optional features include airline filter, carbon



screen, rubber cotton-lined gloves, dust blow off gun, 45 CFM blast gun, boron carbide nozzle, tumble basket, turntable, 400 or 600 CFM dust collector and reclaim system.

Flip Top and Counterbalance Cabinets



Counterbalance
(right) cabinets have
an enclosed spring
mechanism, offering
smooth movement
and ease of use when
opening or closing the
cabinet lid.

48-2 Super

Overall			Openings	Window
Height	Width	Depth	Top 48" x 13"	Height 12"
63"	51"	25"	Side 17" x 11"	Width 24"
Working			Approx. Weight	Mfg. Number
22"	48"	23"	370 lbs	101695S-A

Two side doors allow endless placement options in this foot-operated blasting unit. Featuring a 100 CFM dust collector, 25 CFM foot pedal gun, fluorescent lighting and cloth lined work gloves; the 48-2 Super is a complete blasting solution with muscle. Options include airline filter, carbon screen,



rubber cotton lined gloves, dust blow off gun, 12 CFM blast gun, boron carbide nozzle, tumble basket, and turntable.

2 Blast Cabinets - Siphon Econoline Abrasive Products 3

Blast Cabinets-Siphon





All of Econoline's cabinets have an easily replaceable

window. See the feature on page 6 for more

information.

48 x 36 RH Vert DR

Overall			Opening	Window
Height	Width	Depth	Side 27" x 34"	Height 12"
81"	51"	36"		Width 24"
Working			Approx. Weight	Mfg. Number
40"	48"	36"	1100 lbs	101771S-RV

This versatile blasting cabinet features a large side opening that allows for options such as the turntable, track and vertical door shown. Standard features include a 100 CFM dust collector, fluorescent lighting. cloth lined work gloves and a 25 CFM foot-operated blast gun. Other optional features include an airline filter, carbon screen, dust blow off gun, 45 CFM gun, boron carbide nozzle, tumble basket, 400 or 600 CFM dust collector, and a reclaim system. Also available as Mfg. Number 101771S-RH in a horizontal door configuration. Turntable and track are also optional in the horizontal door model.



The 48x36 RH Vert DR shown with optional

Window Replacement

48 x 24 FT

Overall Dimensions			Openings	Window
Height	Width	Depth	Top 48" x 24"	Height 12"
65"	52"	54"	Side 17" x 11"	Width 24"
Working			Approx. Weight	Mfg. Number
23"	48"	24"	380 lbs	101697R-A

With four feet of working width, this clam shell design has a backrest assembly standard, as well as a 100 CFM dust collector, fluorescent lighting, 25 CFM foot-operated blast gun, hopper door for easy media changes and more. Optional features include airline filter, carbon screen,



dust blow off gun, boron carbide nozzle, tumble basket and turntable.

42 x 24 Super FT

Overall Dimensions			Openings	Window
Height	Width	Depth	Top 42" x 24"	Height 12"
65"	46"	54"	Side 17" x 11"	Width 24"
Working			Approx. Weight	Mfg. Number
23"	42"	24"	360 lbs	101696R-A

A clam shell design allows for easy loading and unloading. An excellent choice for a mid-sized flip top machine. The 42 x 24 Super FT blast cabinet also includes a backrest assembly, 100 CFM dust collector, fluorescent lighting, 25 CFM foot pedal operated blast gun, and a hopper door



that makes media changes simple. Optional features include airline filter, carbon screen, dust blow off gun, 12 CFM blast gun, boron carbide nozzle, tumble basket and turntable.



Clam Shell Design

Econoline offers a variety of methods of access to the blast chamber area of the cabinet.

Larger cabinets are constructed with both a side door and split-top access, also known as a clam shell. We use the term clam shell to describe the openings of these cabinets in that the entire upper section of the cabinet opens. It is hinged along the back and the top section pivots up and back allowing full access to the interior.

This large access area allows a user to load heavy items with a fork truck or crane and affords the user more blasting area because they are not limited in size by what they can get through a side door. This feature combined with our heavy duty materials make Econoline units popular with customers who have large, heavy items to blast. All split-top cabinets have a spring assist mechanism and can easily be opened by a single operator.

Econoline Abrasive Products 5 4 Blast Cabinets - Siphon

Blast Cabinets-Siphon





Window and Light Replacement

The window in the cabinet is a clear Plexiglas. Econoline chooses to use Plexiglas as over time, the window will become etched by the abrasive blast process and the Plexiglas is less expensive to replace.

We also provide a thin film we call window

underlayment
that protects the
window from blast
damage. This film is
inexpensive and easy
to replace. The user
simply removes the
wing nuts that secure
the window frame to
the cabinet, and then
removes the frame
and the window. The



used underlayment is discarded and replaced with a new piece. The user then replaces the window and frame. The entire process takes approximately two minutes.

For more information about Econoline replacement windows and lamp shields, please see page 29.

40 x 40 FT

Overall Dimensions			Openings	Window
Height	Width	Depth	Top 40" x 40"	Height 12"
82"	44"	74"	Side 20" x 30"	Width 24"
Working			Approx. Weight	Mfg. Number
32"	40"	40"	560 lbs	101698R-A

This blasting cabinet offers a flip top, clam shell design with a full 40" of work area at a height of 30". Features a steel screen work surface, 25 CFM foot pedal blast gun and 100 CFM dust collector. The operator can access projects using large side door if desired.



40 x 40 CB

Overall			Openings	Window
Height	Width	Depth	Top 40" x 40"	Height 12"
82"	43"	72"	Side 20" x 30"	Width 24"
Working			Approx. Weight	Mfg. Number
30"	40"	40"	580 lbs	101698CB-A

This blasting cabinet offers a counterbalanced clam shell cabinet style similar to the 40 x 40 FT, with a full 40" of work area at a height of 30". This unit comes complete with a 100 CFM dust collector, fluorescent lighting, steel screen work surface and cloth lined work gloves.



A hopper door allows for easy media changes and a footoperated blast gun allows an operator optimal control of the 25 CFM blast gun. Options include upgrades to a 400 or 600 CFM dust collector, or the addition of a tumble basket or turntable.

BB 36-0 Budget

Overall			Openings	Window
Height	Width	Depth	Top 36" x 13"	Height 12"
63"	39"	25"		Width 24"
Working			Approx. Weight	Mfg. Number
23"	36"	24"	260 lbs	101717R-A

The BB 36-O Budget blasting cabinet features a trigger operated 12 CFM blast gun and ceramic nozzle. Includes a 100 CFM dust collector, steel air jet, top flipper access door, and lower hopper door for quick media changes. Other optional features include an airline filter, carbon



screen, tumble basket, turntable, blow off gun, foot pedal, 25 CFM blast gun upgrade, and regulator and gauge.

30-0 Super

Overall			Opening	Window
Height	Width	Depth	Top 30" x 13"	Height 11½"
63"	32"	25"		Width 12"
Working			Approx. Weight	Mfg. Number
22"	30"	23"	250 lbs	101693S-A

With a tungsten carbide nozzle and air jet standard, the 30-0 Super is a powerful midsize model blast cabinet with a footoperated 12 CFM blast gun and 100 CFM dust collector. Fluorescent lighting improves visibility through the easyto-change window. Optional features



include an airline filter, carbon screen, dust blow off gun, boron carbide nozzle, tumble basket, 150 CFM dust collector and turntable.

36-1 Super

Overall			Openings	Window
Height	Wldth	Depth	Top 36" x 13"	Height 12"
63"	39"	25"	Side 17" x 11"	Width 24"
Working			Approx. Weight	Mfg. Number
23"	36"	24"	280 lbs	101694S-A

The 36-1 Super features a standard 25 CFM blast gun with tungsten carbide nozzle and air jet, 100 CFM dust collector and fluorescent lighting. This is Econoline's most popular model and includes side door access as well as easy to use flipper door on the front. Many optional features add



versatility to this mid-sized cabinet, but a popular choice is a media reclaim system.

24-0 Super

Overall			Opening	Window
Height	Width	Depth	Top 24" x 13"	Height 11 ½"
63"	26"	25"		Width 12"
Working			Approx. Weight	Mfg. Number
23"	24"	24"	230 lbs	101692S-A

With welded and cross-braced legs and a 100 CFM dust collector included, the 24-0 Super is a complete blast cabinet solution. Other standard features include a 12 CFM foot-operated blast gun, tungsten carbide nozzle and air jet, and hopper door for easy media changes.



For more versatility, add a tumble basket, turntable or upgrade to a 25 CFM blast gun.

6 Blast Cabinets - Siphon Econoline Abrasive Products 7

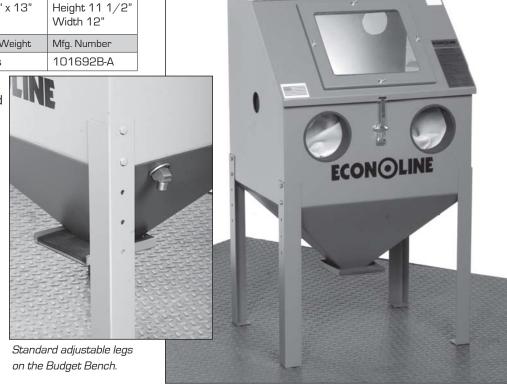
Blast Cabinets - Siphon



24-0 Budget Bench

Overall			Opening	Window
Height	Width	Depth	Top 24" x 13"	Height 11 1/2"
47"	25"	21"		Width 12"
Working			Approx. Weight	Mfg. Number
20"	23"	19"	150 lbs	101692B-A

The 24-0 Budget Bench from Econoline has a trigger operated 12 CFM blast gun, fluorescent lighting and an expanded metal work surface. Adjustable legs are standard. A ceramic nozzle is also standard. A larger version of the Mini Bench, the Budget offers an optional free standing, adjustable leg kit. Other optional features include a media tray kit, 12 or 25 CFM foot pedal gun kit, and shop vacuum.



Mini Bench

Overall			Opening	Window
Height	Width	Depth	Top 18" x 12"	Height 6"
33"	19"	17"		Width 12"
Working			Approx. Weight	Mfg. Number
16"	18"	16"	95 lbs	101691R-A

The Econoline Mini Bench is a compact blast cabinet with all the bells and whistles of a big unit on a smaller scale. This bench model comes with a standard shop vacuum dust collector, work gloves, easy to change window, door safety switch, foot-operated blast gun with 12 CFM and a tungsten carbide nozzle and air jet. Optional features include an airline filter, carbon screen, dust blow off gun,

6 CFM blast gun, boron carbide nozzle and tumble basket.

Mini Bench foot pedal.

ESB 007 Spot Blast

Height	Width	Depth	Approx. Weight	Mfg. Number
44"	20"	18"	80 lbs	101765S-A



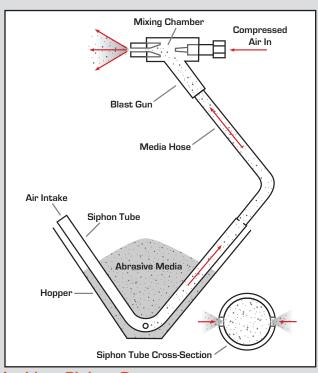
The Econoline ESB 007 Spot Blast unit is a portable, dust free solution to your blasting needs. Low abrasive consumption recycles abrasive media separate from dust and debris. Includes a standard 12 CFM trigger gun, regulator and gauge, water filter, recycling head and a .5 micron



Spot Blast with lid open.

cartridge filter. This unit weighs just 55 lbs when empty, and with a 1" blast pattern, it's perfect for small jobs and touch ups.

Other Portable Units are available on page 13, and Replacement Filter information is available on page 28



Inside a Siphon System

Econoline siphon cabinets are economically priced, have a minimum number of moving parts and require less maintenance than a direct pressure system. Siphon cabinets, also known as suction cabinets, permit continuous blasting without pausing to refill abrasive media. Production rates are not as high as with a direct pressure system, but resulting finishes are comparable in quality. Econoline siphon cabinets meet the challenge where initial costs and maintenance are concerns.

A siphon system works as follows: Abrasive is held in the storage hopper of the blast machine and delivered to the suction gun through a media hose. Compressed air is brought into the suction gun from the regulator through an air hose. As dry and regulated compressed air flows through the air jet, it passes through a mixing chamber before it enters the blast nozzle. Negative pressure, or suction, is created in the mixing chamber of the gun body and media is drawn into the blast nozzle, much as water is sucked through a straw. Incoming compressed air accelerates the media to a velocity of approximately 60 to 100 CFM, depending upon the air pressure selected. The CFM of compressed air required to operate a suction gun is determined by the orifice in the air jet, combined with the orifice in the blast nozzle.

Our siphon machines are available in a variety of sizes and styles with factory options available that contribute to greater productivity and ease of operation. Econoline advises the use of a reclaim system when recoverable media is used. This option will typically pay for itself quickly in terms of media saved. Please see page 14 for more information about Econoline reclaim models.

8 Blast Cabinets - Siphon Econoline Abrasive Products 9