

■ 40,000 PSI AQUA MISER UNITS ■



**AQUA MISER ULTRA BOSS**

- **Patented B.O.S.S.® Abrasive Injection System**

The system pressure feeds any abrasive media to achieve a multitude of blasting specifications. Achieve a white metal finish, profile new steel, prepare concrete, or simply degrease and clean.

The ULTRA BOSS can use traditional abrasives for high strip rates or water soluble abrasives for low environmental impact and delicate blasting requirements.

- **Pneumatic Remote Control System**

The pump and motor are only fully engaged when the trigger is pulled. This uses less electricity, causes less wear and tear, and eliminates expensive tumble boxes, dump valves and unloaders.

- **Triplex Plunger Water Pump**

The pump provides ultra high pressure (up to 40,000 psi) while using a low volume of water (3 gpm). This means less operator fatigue, less water to contain and dispose, and less inlet water required (just a garden hose for feed water).



**Model E-75**  
Electric Motor  
Driven

**Low Maintenance Ultra High Pressure Pump  
Abrasive Injection to Enhance Strip Rates (optional)  
Remote Start/Stop Pump Control**

**Small Compact Modular Design** - The E-75 requires minimal floor space and allows the abrasive section to be placed away from the pump.



**Model D-115**  
Diesel Engine  
Driven

**Abrasive Injection To Enhance Strip Rates  
Remote Start/Stop Pump Control  
Low Maintenance, Ultra High Pressure Pump**



[www.aquamiser.com](http://www.aquamiser.com)

# 15,000 PSI AQUA MISER UNITS & ACCESSORIES

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## AQUA MISER ULTRA BOSS



### Model E-25

Electric small stationary unit on caster wheels able to fit through 36" door openings or elevators.

### Model D-44

The Aqua-Miser B.O.S.S. D44 is a diesel portable high-pressure water blasting machine, capable of delivering water pressures of up to 20,000 psi. and flow rates of up to 10.8 gpm. The D44 is factory set for 3 gpm. @ 15,000 psi. The D44 is equipped with a patented pressure injected abrasive system capable of injecting a variety of abrasives (Bicarbonate of Soda, Garnet, and, Glass, Steel, etc.) into the high-pressure water stream creating a highly effective tool. The D44 is engineered to wash or degrease with water only or an abrasive can be added to remove paints and coatings at highly productive strip rates while only using a very small quantities of abrasives. The effectiveness of the Aqua-Miser D44 is due to the injection of these small quantities of abrasives 0.5 - 3.0 lb./min. into the 15,000 psi water stream and accelerating the abrasive particles to speeds well above the speed of sound. Accelerating these particles to such velocities provide for a maximum strip rate while using a minimum quantity of abrasives.



[www.aquamiser.com](http://www.aquamiser.com)

## ACCESSORIES

### FAN WATER BLAST GUN

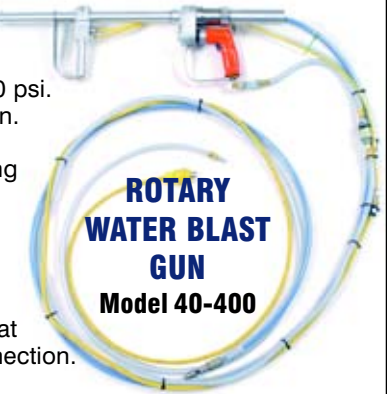
Rated Operating Pressure: 40,000 psi.  
 Rated Flow: 4 gpm.  
 Required Air: 20 cfm@60 psi.  
 30-Degree Flat Fan Blast Pattern, Wear Resistant Media Injection Inserts.  
 Large variety of abrasive media types and grades available.  
 Pump Control: Electrical Contacts. Safety Shroud of Hose End. Length: 39", Adjustable Handle.



**ABRASIVE FAN GUN**  
**Model F40-103**

### ROTARY WATER BLAST GUN

Rated Operating Pressure: 40,000 psi.  
 Rated Flow: 4 gpm  
 Required Air: 20 cfm @ 90 psi.  
 Inline Air Motor Lubrication.  
 Rotation: 2700 rpm.  
 Four Port Titanium Rotating Spray Head with 3/8-24 jeweled nozzles. (Other head configurations are available in stainless steel on request).  
 Aluminum Safety Shroud at High Pressure Hose Connection.  
 Dual triggers for Safety.  
 Pump Control: Air or Electrical Contacts.  
 Length: 40", Hose Length: 16', Adjustable Handle.



**ROTARY WATER BLAST GUN**  
**Model 40-400**

### FLOOR CLEANER

Adjustable Handle Bar.  
 Front Swivel Caster for Maneuverability.  
 Rated Operating Pressure: 15,000 psi.  
 Working Pressure Safety Factor: 2.5:1.  
 Rated Flow: 3.2 gpm.  
 10" Stainless Steel Rotating Spray Bar with ten ports sized for 3/8-24 jeweled nozzles.  
 Rotation Air Motor: 0.4 Horsepower @ 5400 rpm  
 Air Requirements: 20 cfm @ 100 psi  
 Start/Stop Grip Lever provided on Handle Bar.  
 Pump Control: Air or Electrical Contacts  
 Vacuum Recovery Compatible.



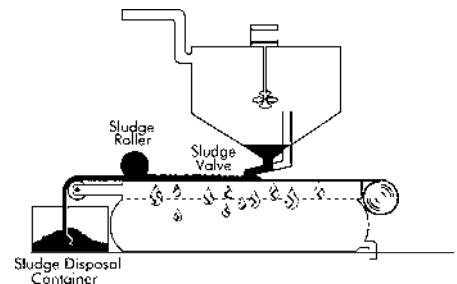
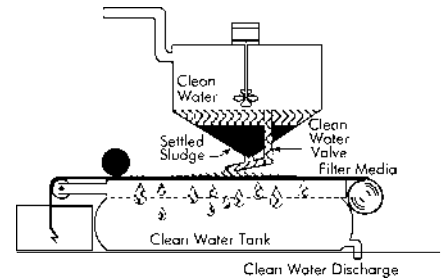
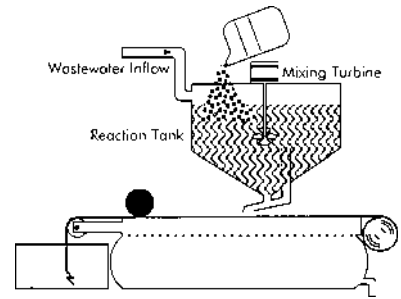
**FLOOR CLEANER**  
**Model FC-100**

**■ WATER PURIFICATION ■**

**AQUA MISER Waste Water Filtration Unit  
Model BBC-10-15-3**



The CESCO waste water filtration system is designed to remove heavy metals from the waste stream.



**CESCO** introduces a new line of products for removal of metals from a variety of water streams including: water-blasting, waste water, contaminated ground water, process water and potentially, drinking water.

**AQUA-FLOK**



**Aqua-Flok** powder is a blend of enhancement polymers and clay that have an enormous and eager appetite for most contaminants found in waste water such as emulsified oils, heavy metals, TSS, paint, etc.

The **Aqua-Flok** allows the heavy metals to coagulate into a sludge form, which then can be filtered out and disposed of. TCLP test results typically confirm that the process has permanently isolated the contaminants in a "non-leachable" form.

**Call us toll free for a free analysis kit.**

**■ WATER PURIFICATION ■**

**AQUA-PURE**

**Aqua-Pure** liquid involves the bonding of metals with sulfides to form insoluble metal sulfides. **Aqua-Pure** reduces the metals to a non-leachable metal sulfide, thereby substantially reducing sludge generation and waste bulking.

TCLP test results typically confirm that the process has permanently isolated the contaminants in a “non-leachable” form.

Available in  
5 Gallon  
Pails and  
55 Gallon  
Drums



Dilution rates vary

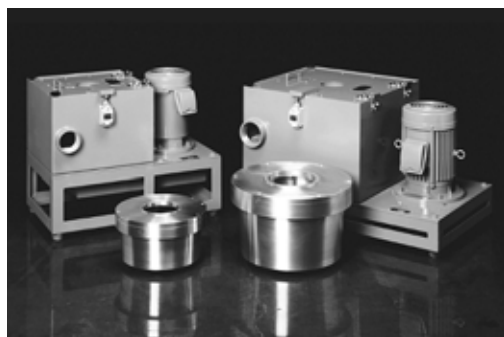
**■ AQUAKLEAN-CENTRIFUGE ■**

**AquaKlean will reduce volume of waste disposal by as much as 85%.**

**Model C50M**



**Model C100A**



- Simple installation
- Cost effective
- Automatically cleans itself
- Solids are discharged for easy disposal
- Minimizes waste by separating liquid and solid waste
- Eliminates the use of filters or other consumable materials

## ■ CONTAINMENT SYSTEM ■

"The system captures the water, filters the paint particle for disposal, and reuses the water for further paint removal. The only by-product of the operation is the paint and rust. After careful analysis of existing technology, the 46th maintenance squadron decided the water pressure paint stripping operation was not only the most efficient, cost-saving system, but was the most environmental sound."

"In the stripping process the plastic media and garnet-blasting refuse becomes coated with the metal print. This

refuse is hazardous waste, and base organizations have to pay to dispose of this material. This can get expensive. According to Sculthrope. It costs \$1 per pound to dispose of hazardous waste. Plastic blast media and sand blasting media can fill up to a 55-gallon drum in a day and half, weighing in a hefty 850 to 900 lbs."

"Since November, we have been stripping three to five pieces of equipment a week and have filled three-fourths of 55-gallon drum with paint particles."

"Savings are not only generated from

the reduction of hazardous waste but also in a reduction of man-hours. Dzioknonski said this system works 25-50 percent faster."

"The cost saving from reduction in hazardous waste disposal alone is \$140,760.00 the first year. The equipment including installation and start-up will have paid for itself in a little over two years. This does not take into consideration the additional saving in man-hour reduction."

*Excerpts from Environmental Management News Dated April 18, 2003*

### BOSS BLAST CONTAINMENT SYSTEM With Air and Water Filtration

**Non Toxic Air Release • Non Toxic Water Runoff • Solid Particulate Capture • Various Sizes Available**

**Hydro-Cyclonic Separator:**  
Removes solids from the contaminated water stream.

**Aqua-Klean:**  
Utilizes centrifugal force to separate solids as small as 10 micron.

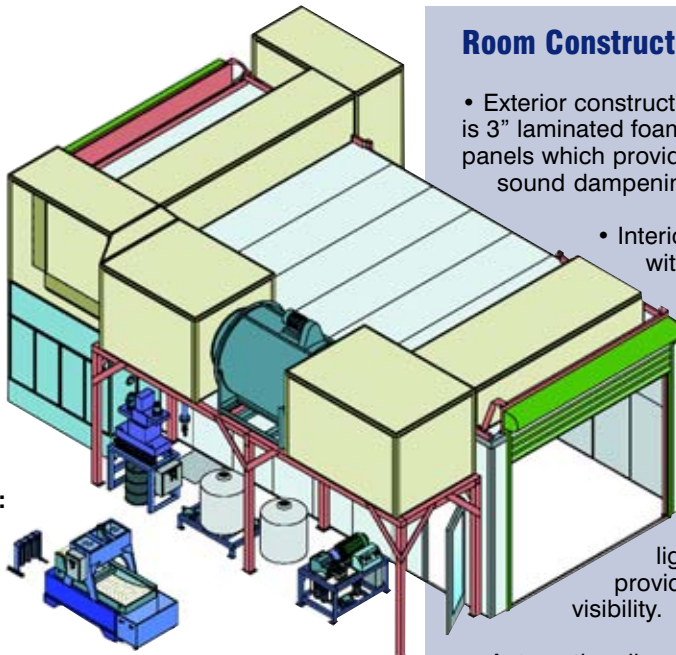
**Aqua-Filter:**  
Utilizes water curtain and baffles to remove airborne particles from the recirculating air.

**Water Storage Tanks:**  
Storage location for the clean and dirty water in the system.

**Aqua-Treat:**  
Waste water treatment system chemically removes and filters heavy metals and impurities from the water system. Water can then be re-circulated back to the HP water pump.

**Stand Alone Filter System:**  
Filters the water to 2 micron.

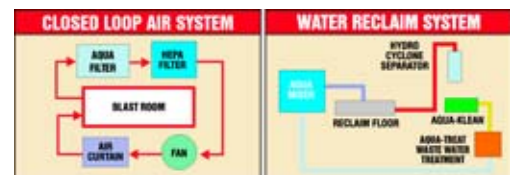
**E-75 Aqua-Miser:**  
High-pressure water pump rated at 3.0 GPM at 40,000 PSI.



#### Room Construction Features:

- Exterior construction and ducting is 3" laminated foam and aluminum panels which provide stability and sound dampening.
- Interior walls are lined with stainless steel panels for durability.
- Galvanized steel water section (Aqua-Filter).
- Water-tight lighting is provided for high visibility.
- Automatic roll-up steel doors.
- Concrete floor has trench and sump pit for full water recovery.
- Air Filtration System

The Aqua Miser BOSS Containment System utilizes known engineering principles to remove paint particles and water vapor from the room air in the blasting system. Air is drawn through the Water Fall Filtration System, a continuous curtain of moving water, and thrown against adjacent walls where suspended particles are removed and flushed into the collection pan. Air reaching the filters is virtually free of airborne particles and water vapor.



**The Aqua Miser BOSS Containment System tremendously reduces all cost associated with waste disposal.**

## WATER JET TECHNOLOGY

### AQUA-MISER

The **Aqua Miser** is used to speed up the development of weapons at the high-speed test track located on an U.S. Air Force Base. The test track utilizes a coated train like rail system to guide a rocket-powered sled toward a target at speeds up to (2) miles per second. The rail coating is to be removed and replaced between each rocket sled run. The **Aqua Miser** system replaced a conventional sand blasting method and reduced the turn time on the track providing for a greater number of test runs to be performed.



The **Aqua Track** system utilizes a digitally controlled, self-propelled railcar, equipped with a fully instrumented operator cab, a 60kW generator set for power, (2) Aqua Miser D115 pump systems, and a water supply tank. Fixture mounted guns directed the waterjets at the coated rails while the railcar moved at digitally set speeds. All functions could be controlled either from the operator cab, or from a radio powered remote control pendant.

The **Aqua Track** railcar due to its versatility and robust design is used to perform a number of operational and maintenance functions at the high-speed test track including the reapplication the rail coating.

### AQUA-VAC

**If you are concerned about environmental issues related to your water blasting operation, consider a portable closed loop system:**

The CESCO **AQUA-VAC** used in conjunction with vacuum compatible water blast equipment, such as CESCO'S Deck Blasters and Hand Held Rotary Scrubbers, provides continuous collection and filtration of blast water and debris in a closed loop system.

*Eliminates environmental impact of contaminated runoff.*

*Minimizes cleanup*

*Eliminates the accumulation of water and debris in the work area.*

### AQUA-TRACK

Prior to 2003, the Transit Association experienced many costly delays, flat spots on wheels, and incidents of rail crossing gates not activating. These problems are attributed to a resin from falling leaves building up on the rails in the Fall season. The resin causes slippery rails, resulting in the trains sliding and over shooting the stations. The resin can also electrically isolate the wheel from the rail, which results in failed gate crossing activation. Recorded was over 300 delays in 2002 attributed to slippery rails.

In 2003, two CESCO 250 HP, 10,000-PSI pumps were mounted on a rail car with water blast nozzles located just above the rails. The water blast removes the embedded resin at a rate of up to 30 MPH. CESCO also provided a heated control cab for an operator to monitor and control the water blast operation. In 2003, the Transit Association recorded only 45 delays, an 85 % improvement over the previous year.

The high-pressure water blast system may reduce maintenance cost alone more than enough to pay for the system the first full season of operation.

