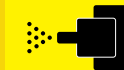


# PRODUCT GUIDE

What's inside the machine?

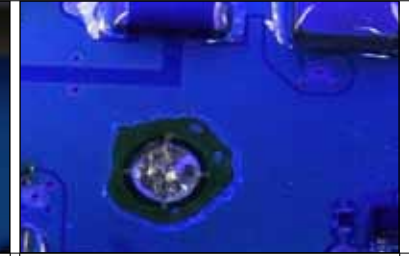
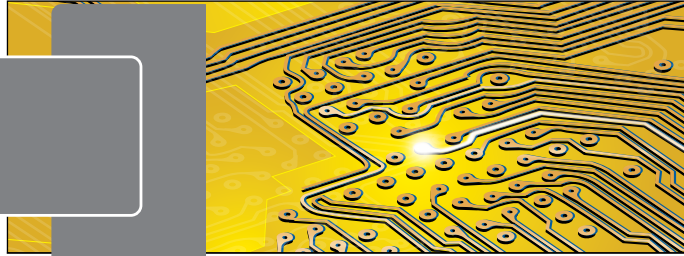
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G U E V K J H W A A D G O S M O L X Y  
P H U M I S E A L I B K G Y G M V L O  
C X X Q K M L C S H K V J N  
P E T H R N I E T L E K J C  
C O A T I N G O E E B Z Z L  
O U Q W M G U H P X  
S P O C W R F K L V  
L I O I C Y G Y F N



## Powder Abrasion System

# HumiSeal®

# Powder Abrasion System



*The Tabletop powder abrasion conformal coating removal system is a complete, effective package to aid reworking of electronic assemblies that have been coated.*

## HumiSeal® is the only supplier specialised in conformal coating manufacture.

**With a rich history of innovation for more than 50 years, our product offerings and technical support is second to none.**

The Tabletop Conformal Coating Removal System is a complete package. The work cabinet has a built-in dust collector with a backward inclined fan that generates approximately 258 scfm of vacuum to evacuate the spent abrasive from the work area into a collection drawer on the side. This drawer can be easily removed for powder disposal.

This compact design is a space saver being just 24" wide, 33" deep and 17" high with accommodations for placing the SWAM-Blaster® Model MV-2L Micro Abrasive Blaster on top. Sets up in minutes and a single switch turns on the power for the entire system, cabinet lighting, and power for the Model MV-2L SWAM-Blaster, cabinet ionizers and the Point Ionizer™.

A powder abrasion system will safely and selectively remove HumiSeal UV cure conformal coatings from various components on printed circuit boards without causing any mechanical or ESD damage.

The HumiSeal powder abrasion systems is fully equipped with adjustable powder flow control and air pressure regulation to enable removal of the coating from pinpoint areas to larger areas. This method requires some relative dexterity as it uses high velocity particles delivered through a nozzle.

### ESD

A point ionizer effectively reduces the ESD from reaching levels that could potentially damage components during the removal process. A point ionizer introduces a flow of positive and negative ions into the abrasive path at the exit point of the nozzle tip. The rework chamber

also contains several point ionisers and system meets NASA ESD requirements. Report available on request.

### POWDER MEDIA

There are several types of abrasive powders available for conformal coating removal including Carbo Blast, Plastic Blast and Soda Bicarbonate. Carbo Blast has been proven to be the least aggressive and successfully removes HumiSeal UV cure conformal coatings without affecting the solder resist or components.

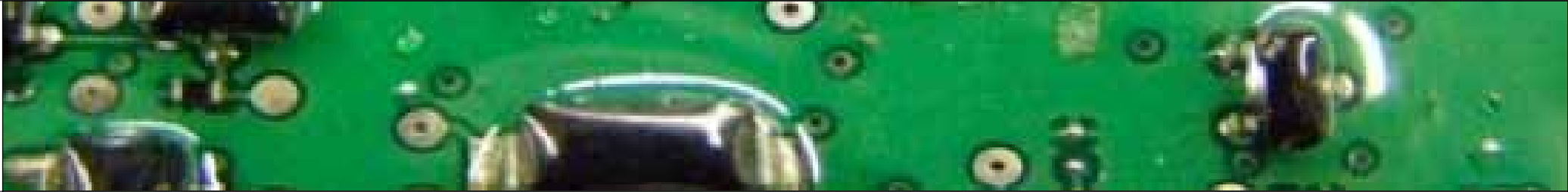
Made from wheat starch crystals it is the mildest of the available powders and does not cause any mechanical damage to the PCB.



“Carbo Blast is non toxic and 100% water soluble.”



## Conformal Coating Removal System



*For best results when removing HumiSeal UV cure conformal coating, blast the coating for short periods with a high air assist. A longer exposure with a lower air assist may lead to damage of the solder resist and components. It is important to set up correctly. A max 10 seconds is required for a localised area.*

### CLEANING

Although the powder abrasion system is fully equipped with an internal dust filtration system, it is important to guarantee that no residues are left on the board before recoating the reworked area.

### PROCEDURE

1. Remove excess powder with a compressed air jet.
2. Immerse the PCB into a solution of DI water / Isopropyl Alcohol (IPA) at 1/1 dilution to rinse off any residues.
3. Rinse in a clean solution of IPA to remove any potential residues.
4. Check under a black light that no coating residues are left on the reworked area.
5. Oven dry for 15min at 60°C.

**Note** The Carbo Blast powder is fully water soluble and the addition of IPA s to aid drying.



### CONFORMAL COATING REMOVAL SYSTEM INCLUDES

- ✓ SWAM-Blaster® Model MV-2L Micro Abrasive Blaster
- ✓ Built in dust collection and filter
- ✓ Built in Point Ionizer™ at the Nozzle
- ✓ Ergonomic Ionized Work Chamber
- ✓ Switch for white fluorescent or black light fluorescent lights
- ✓ Tempered glass viewing window
- ✓ Oval angled arm holes for operator comfort
- ✓ Grounding wrist strap
- ✓ ESD safe work mat
- ✓ White powder coat finish
- ✓ 1 kg container of Carbo Blast #25A Abrasive Media

Power Requirement: 230V/50hz/3amps

Air Requirement: 5 SCFM at 100 psi minimum.

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

# What's inside the machine?

HUMISEAL®, THE WORLD'S LEADING FORMULATOR OF  
PROTECTIVE COATINGS FOR ELECTRONIC CIRCUITS



Military & Aerospace  
Electronics



Industrial Controls  
Electronics



Renewable Energy  
Electronics



Automotive  
Electronics



Consumer  
Electronics



White Goods  
Electronics



*We make a material difference*