



# Robotic Paint Gun Cleaning



Crystal Cap Cleaners technology is on line with the following valued customers

#### NORTH AMERICA

- GENERAL MOTORS
- FORD MOTOR COMPANY
- DAIMLER CHRYSLER
- SATURN
- HONDA NORTH AMERICA
- NISSAN MOTORS
- TOYOTA MOTOR COMPANY
- MERCEDES BENZ
- STERLING TRUCKS
- MACK TRUCKS
- DELPHI
- PETERBUILT
- AUTO ALLIANCE

#### EUROPE

- AUDI
- BMW
- MERCEDES - BENZ
- PORSCHE
- LAND ROVER
- FORD MOTOR CORPORATION
- SMART CAR
- AUTO 5000
- VOLKSWAGEN
- PLASTIC OMNIUM
- ROLLS ROYCE

#### MEXICO

- GENERAL MOTORS
- DAIMLER CHRYSLER
- VOLKSWAGEN
- PLASTIC OMNIUM

#### ASIA

- GENERAL MOTORS

#### OTHER CUSTOMERS USING CRYSTAL CAP CLEANERS

- |                      |                         |
|----------------------|-------------------------|
| BATESVILLE CASKET    | DDM PLASTICS            |
| COLLINS AND AIKMAN   | GUARDIAN AUTOMOTIVE     |
| MAGNA                | MERIDIAN                |
| POLYGON              | BUDD AUTOMOTIVE         |
| STANLEY ELECTRIC     | NORTH AMERICAN LIGHTING |
| WOODBIDGE FOAM       | SIEGLE ROBERTS          |
| ALGONQUIN AUTOMOTIVE | TIERCON INDUSTRIES      |
| ABC EXTERIOR         |                         |



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# Robotic Paint Gun Cleaning



# CRYSTAL CAP CLEANERS

# Uses Less Fluid • Less Cycle Time • Minimum Maintenance



**Clean paint applicators are a must for complete success in robotic painting and Crystal Cap Cleaners are the choice of a majority auto plants in North America and Europe.**

**A Crystal Cap machine provides a clean, dry paint gun or bell applicator using less fluid in less time with a minimum of maintenance.**

**Additional Benefits:**

- An increased first run yield
- Increase in production output
- Clean with water or solvent
- Can be integrated into a colour change cycle
- Only one moving part
- Cleaning is contained within sealed vessel
- Eliminates booth entries and contamination
- Easy installation and controlled by the robot or P.L.C.
- The draining allows for connection to a fluid recovery system



**Product Description**

The automatic cap-washing system offered by **Crystal Cap Cleaners Inc.** provides effective, effortless cap washing in a compact unit designed with longevity and ease of maintenance in mind. The entire unit is contained in one 316 stainless steel vessel and can be mounted anywhere in the paint booth. The wash system is controlled using 1 solvent and 1 air supply valve. A self-propelled, rotating high-impact wash head is the essence of the cap cleaning procedure.

*Crystal Cap Cleaners provide robotic paint applicator cleaning and through their Research and Development department, also provide total cleaning solutions. Including door and trunk opening tool cleaners and sound deadener gun cleaners.*

**How it Works**

Crystal cap cleaner's patented technology is self contained in a stainless steel vessel housing an impeller (spinner) system activated by fluid and air.

The paint gun enters the vessel sealing on the floater O-ring . The floater is designed to move allowing for any variation in the robot.

Once the applicator has entered and sealed on the floating collar, fluid and air are activated creating a rotating and pulsing action that cleans and dries the business end of the paint gun or bell and at the same time cleans the interior of the vessel.

Clean time is managed within the parameters of the plant.

Once finished and the paint applicator exits the vessel, the impeller is turned off and a unique High Speed Drying System is activated ensuring no residual fluid is left on the air cap, horns, ring, shroud or cup.

Crystal Cap Cleaners provides DEMONSTRATION units to customers who are interested in the vessel and want to see it in action in there own paint line. This program is designed to allow the customer a 45-day free trial of our unit on site for evaluation.

**CRYSTAL CAP...THE CLEANER THAT WORKS**

Crystal Cap Cleaners unique patented technology of cleaning and drying paint atomisers and the ability to respond fast to customer's demands has made it a leader in the Robotic paint gun cleaning industry.

**A few examples....**

- ◆ A side by side demonstration with a European customer resulted in significant solvent savings, reduced down time, but most of all, an increase in their first run yield of 30 additional vehicles each production shift. The Crystal Cap Cleaners eliminated interrupted production every 40 minutes for manual cleaning.
- ◆ When a U.S. plant changed from solvent to water bourn paint, the Robot suppliers gun boxes became completely inefficient. A paint engineer changed them with Crystal Cap Cleaners, the result was clean, dry air caps in a short time cycle, saving on air cap replacement and capturing more VOC's became a side benefit.
- ◆ A General Motors plant converted to the Aquabell system and found the robot suppliers gun box cleaner inadequate. CCC designed a system which included not only the cleaner but the docking station and slide assembly. After side by side trials. The desired result was achieved and the Crystal Cap Aquabell cleaning system installed.
- ◆ A major European Auto maker made the decision to adapt the Crystal Cap Cleaner to 5 new paint lines, at the same time as the installation of the new robots, after side by side trials with the robot supplier's cleaner. The results were dramatic. Further custom requests by the customer were designed, engineered, manufactured, tested and installed all within the ramp up time and to the customer's complete satisfaction.
- ◆ A customer request resulted in a comprehensive method of cleaning LASD (sound deadener) applicators. after on line trials the performance was to the customers complete satisfaction. The CCC system is on line now and is being adopted by other plants.



**Crystal Cap Cleaners are custom configured to each model of paint gun or bell applicators employed in today's Robotic painting industry.**

Single gun systems use the CC-2001 single gun solution, Twin guns are accommodated in the CC-2002 series, Bell atomizer, aquabell systems, use the CC-2003 series and LASD systems the CC-2006.