## Vortemail VEC

/ Automatic applicator for enamels or charged waterborne materials.



#### INDUSTRIAL APPLICATION

A solution to spray automatically non-solvent based materials, like porcelain enamels, ceramics, or charged waterborne materials.

The Vortemail VEC is designed for spraying liquid porcelain enamel and non-solvent based materials. A component of an automatic system, its needle and nozzle combination provide a clean triggering of the material and a possibility for remote adjustment of the pattern. Its standard mount is stationary or on a reciprocating machine, but may also accommodate a robot.

Spraying with the Vortemail VEC provides the benefits of electrostatics to the customer, and a perfect finish from the finest atomization. Transfert efficiency is much higher than that of a conventional atomizer, providing substantial materials savings. Coating times are reduced, as are booth maintenance and cleaning operations.

#### **CUSTOMERS BENEFITS**

The diaphragm technology of the Vortemail VEC provides longevity, resistance to abrasion, flow control during spraying.

- Reliability: the technology provides a lifespan 4 or 5 times longer than a regular atomizer
- triggering at the gun: even with high numbers of triggers, we maintain perfect sealing
- Complete and thorough flushing of the gun: low chamber volume, no wetted spring .
- East maintenance: the needle tip is a clip-on type
- Excellent resistance to abrasion of the needle tip and nozzle
- Possibility to circulate the material directly at the gun, to avoid material sedimentation in the tubes when at rest.
- Excellent finish: the atomization of the product is finer when used with the Vortex nozzles
- Adaptability: the size of the pattern may be adjusted to spraying requirements, saving even more material.





# Vortemail **VEC**



#### **USE**

Materials are supplied from SAMES peristaltic pumps **[F]** and isolated tank **[G]**. Their principle of operation consists in flattening a piece of tube with three wheels rotated by a motor, which provides an accurate and constant flow control for the system. By changing this tube:

• one changes at will the caliber of the pump and changes the flow ranges:

2.1 cc/rev = 500 cc/min, max

3.1 cc/rev = 750 cc/min, max

4.6 cc/rev = 1000 cc/min, max

• one as certains easy and fast maintenance operation, without special tooling.

SAMES recommends to install 2 pumps in parallel to a gun, to reduce pulsating at the nozzle, and increase flows when needed.

A connection for recirculation is also possible [D].

### TECHNICAL CHARACTERISTICS

#### **Supplies**

• Atomizing air: 6 bar (90 psi) max [C]

• Pilot air: 5.5 bar (80 psi) mini [B]

• Fluid pressure: 3 bar (45 psi) max [E]

• Fluid flow: 1000 cc/min max

• Air consumption: 60 m<sup>3</sup>/hr, at 5bar (75psi)

• Voltage (U): 100 kV max [A]

• Operating temperature: 50C (122F) max

• Weight (w/o holder): 1.2 kg (2.65 lbs)

#### **Connections**

	Gun	Recommended tube
Fluid	F 3/8 NPS	Int. Ø 5 mm
Atomizing air	F 1/4 NPS	Ø 6 x 8 mm
Pilot air	F 1/8 NPS	Ø 4 x 6 mm

