

ELECTROSTATIC

EXPERTS IN FINISHING SOLUTIONS
FOR ALL MARKETS WORLDWIDE

NANO ⚡ **BELL2**



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ROTARY ATOMIZER BELL FOR ROBOTIC APPLICATION

Thanks to our 65 years of knowledge, our customers deliver the best finishing quality in industry while saving material, increasing their productivity and protecting the environment.

Product performance, reliability and ergonomics are constantly being improved in the spirit of innovation which has made the name of SAMES famous.



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MCD000RELA - C. BROUILLET - SAMES Technologies reserves the right to modify their units, together with characteristics, equipment and accessories, without prior notice.

- **Easy integration and maintenance**
- **High transfer efficiency**
- **High finishing quality**

The Finishing Experts



ROTARY BELL ATOMIZER FOR ROBOTIC APPLICATION

NANO BELL 2

SEVERAL VERSIONS DEPENDING ON YOUR NEEDS:



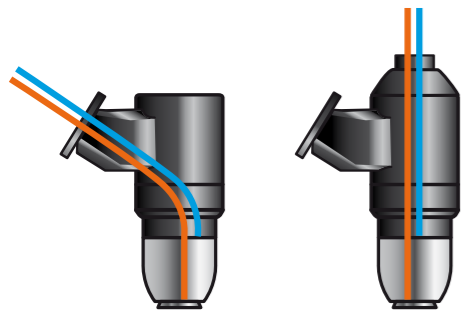
VERSION	Compatible with	Product Resistivity
NANO BELL 2 SB High voltage unit (UHT 158 EEx e) integrated into the atomizer	solvent based product	$\geq 6 \text{ M}\Omega \cdot \text{cm}$ $< 6 \text{ M}\Omega \cdot \text{cm}$ contact SAMES
NANO BELL 2 WB Remote high voltage unit (UHT 287 EEx e) from atomizer	water-based paint *nonflammable or hardly flammable	$\approx 0 \text{ M}\Omega \cdot \text{cm}$

* the product distribution system must be isolated from the ground potential.

BOTH VERSIONS AVAILABLE FOR

hollow wrist robot:

non-hollow wrist robot:



Hi-TE TECHNOLOGY:

PATENTED

The external shroud is composed of couples of combined air holes. This external shroud allows several aimed applications; the pattern can fastly vary from a narrow and penetrating spray to a wide and wrapping spray for an optimal transfer efficiency.

Main benefits :

- More paint savings
- Better finishing quality and color match
- Easy operation thanks to single air adjustment



TECHNICAL DATA

Weight

All versions NANO BELL 2, without hoses (kg)	5
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Fluid supply

Fluid pressure maxi. (bar)	10 (150 psi)
Paint flow (cc/min) according type of paint	30 to 750
Viscosity range - FORD n°4 (seconds)	20 to 50

ATEX marking:

NANO BELL 2 solvent-based product with $R > 6 \text{ M}\Omega \cdot \text{cm}$ CE 0080 II 2 G EEx > 350 mJ IISseP05ATEX032X	UHT 158 EEx e: 70kV/100µA II 2 G EEx e II IISseP01ATEX002U	NANO BELL 2 water-based paint with $\approx 0 \text{ M}\Omega \cdot \text{cm}$ Homologation in progress	UHT 287 EEx e: 70kV/500µA II 2 GD EEx e II IISseP01ATEX002U	GNM200[®]: CE II (2) G (EEx > 350 mJ) IISseP05ATEX032X IISseP06ATEX032X IISseP07ATEX001X
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(1): This control module allows piloting the UHT. It is a combined material that is part of the configuration of the certified equipment and that contributes to its good working. It has to be installed into a non explosive area.

Pneumatic supply

Microvalve pilot (bar)	6 (90 psi) to 10 (150 psi)
Magnetic bearing air pressure (bar)	6 (90 psi) to 10 (150 psi) 85 NI/min.
Air shroud pressure (bar)	6 (90 psi) constant
Micro air pressure (bar)	1.9 to 3 bar constant
Pilot consumption (NI/min.)	10
Bearing air consumption (NI/min.)	125
Air shroud consumption (NI/min.)	0 to 600 (depending on shroud)
Turbine air consumption (NI/min.)	190 to 700
Rotation speed (rpm - loaded)	15 000 to 45 000 (during application)

MATERIAL HANDLED

Stains, varnishes and lacquers, polyurethane and epoxy materials, 2K materials, U.V. paints, solvent based and waterborne materials.

RECOMMENDED MARKETS

AEROSPACE

METALLIC FURNITURE

CYCLES & MOTORCYCLES

DRUMS & GAS CONTAINERS

WOOD INDUSTRY

ALUMINIUM PROFILES

AGRICULTURAL & CONSTRUCTION EQUIPMENT

CUSTOMER BENEFITS

EASY INTEGRATION & MAINTENANCE

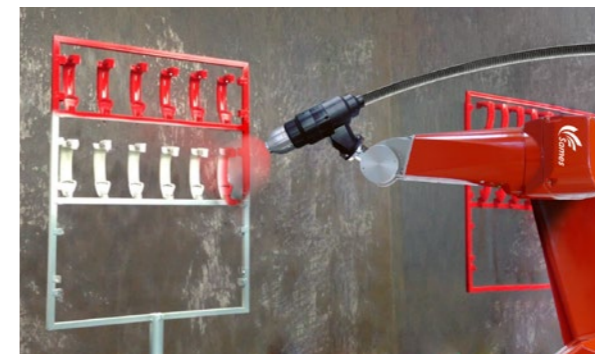
- Light weight sprayer for small size robots
- Allows mounting on both hollow and non-hollow wrist
- Easy to dismantle
- Easy access to valve, fittings
- Long life magnetic turbine



→ Magnetic bellcup fastening system

HIGH FINISHING QUALITY

- Fine atomization of paint droplets
- Sharp control of applied thickness



Application with non-hollow wrist robot

HIGH TRANSFER EFFICIENCY

- Significant paint savings (from 20 to 50% more savings than conventional gun)
- Variation of pattern thanks to Hi-TE Technology for more spray control



- (1) Microvalve
- (2) Magnetic turbine
- (3) Bell cup EC50 Hi-TE
- (4) Internal shaping air shroud
- (5) External shaping air shroud

- (6) High Voltage Unit (UHT 158 EEx e)
- (7) Arm support with output of hoses and cable in hollow wrist robot version
- (8) Output of hoses and cable in non-hollow wrist robot version