



BODY SHOP TECHNOLOGY

CUSTOMISED SOLUTIONS FOR THE BODY SHOP



COMPANY

POLIN-AC

THE NEW COMPANY WITH A LONG HISTORY

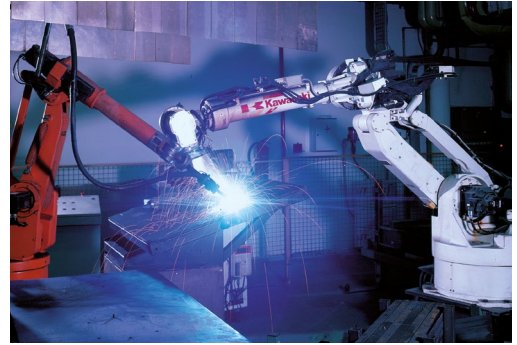
POLIN-AC is the result of the synergy between POLIN, a company that has been producing spray booths since 1940, and ARIA-C, an energy-conscious company which has been designing and producing ventilation and heating systems for the automotive refinishing sector since 2005.



A GREAT
REALITY WITH
THE MOST
RECENT
FACILITY SITES



PRODUCTION TECHNOLOGY:
INVESTMENTS IN SOPHISTICATED PRODUCTION TECHNOLOGY,
AUTOMATIC LINES AND ROBOTIZED STATIONS, HAVE ALWAYS BEEN
CONSIDERED A KEY PRIORITY NOT ONLY TO ACCELERATE THE ENTIRE
PRODUCTION PROCESS, BUT ALSO TO GUARANTEE CONSTANT
OVERALL PRODUCT QUALITY CONTROL.



Polin has long been a key reference on the domestic and international markets, appreciated for the high level of quality, innovation and technology that can be found in its spray booths. A blend of experience, professionalism and know-how are at the core of the new company POLIN-AC, which aims at offering innovative solutions while meeting the specific needs of every customer and market.

Continuous investment in technological innovation allowed POLIN to present AIRFORCE, the company's leading model for technology and aesthetics, to the worldwide market in 2014.

With its flexibility and dynamism, recognised and appreciated by the market, ARIA-C has entered this context with its extensive range of high-performance systems aimed at low energy consumption.

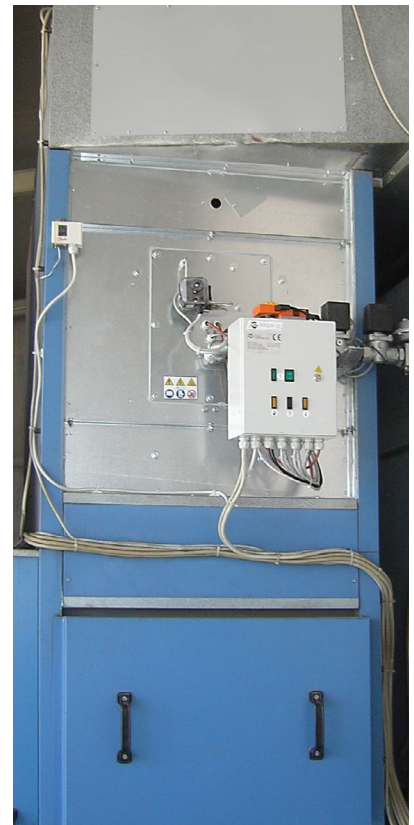
The goal of the new company POLIN-AC is to offer energy saving quality products, technologically advanced, designed and created entirely in Italy.

DRYTECH

THE QUICK HEATING RETROFIT SYSTEM FOR EVERY SPRAYBOOTH

REDUCES WORKING TIME AND ENERGY CONSUMPTION

The DRYTECH system with direct fired burner is specially designed to be easily fitted within any type of hot air generator in replacement of the combustion chamber and traditional burner. DRYTECH allows for faster heat build up, more stable temperatures, and reduced working cycle time. Lower operating costs and optimised curing cycle times guarantee excellent energy and fuel savings.



TECHNICAL SPECIFICATIONS

- Natural gas or LPG supply
- Heating capacities from 35 kW to 600 kW
- Modulating or Two Stage thermoregulation



ADVANTAGES

- 1 • Gas saving up to 45% compared to same power heating systems with combustion chamber.
- 2 • Complete combustion of gases, environment-friendly and maximum efficiency (close to 100%).
- 3 • Maximal thermal delta of 30°C painting phase.
- 4 • Relative humidity control.
- 5 • 75°C reachable in 5 minutes (*) during baking phase.
- 6 • Flawless and immediate ignition thanks to dedicated high tension transformer and ignition electrode
- 7 • Particularly suitable for water based paints.
- 8 • Excellent temperature stability and distribution within the designated work area.
- 9 • Minimal gas consumption in each work phase.
- 10 • Reduction of production cycle time up to 30%.
- 11 • Minimal environmental impact.

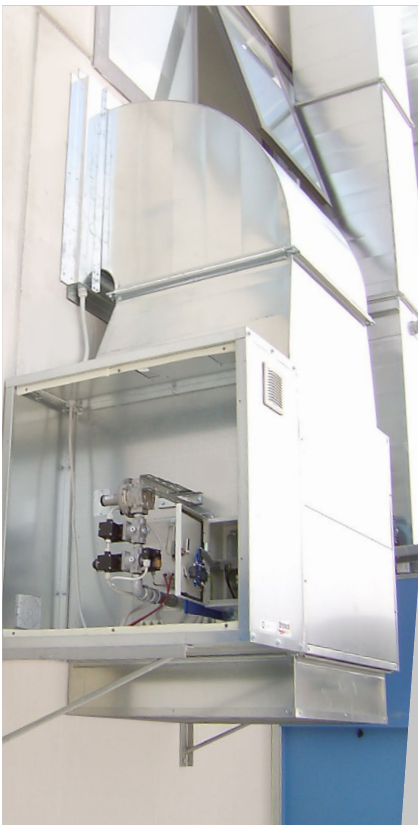
(*) data referred to spray booths with internal dimensions 7 m x 4 m x H= 2.8 with air recirculation during baking phase.

CUBIK

THE OUTDOOR DUCTED BURNER SOLUTION

PRE-ASSEMBLED HEATING UNIT

CUBIK is a direct heating solution designed to be easily installed outdoors on the air inlet duct for heating of prep stations, spray booths and working areas. The burner valves and control box are protected by IP54 housing. The direct fired burner guarantees reduced humidity level and ideal temperature stability within any spray booth or prep area, making it possible to obtain excellent results in terms of flash-off and baking of all painted parts, including those that are hung from the spray booth ceiling or placed on trestles. Outdoor positioning of the CUBIK unit allows for safe installation when using LPG.



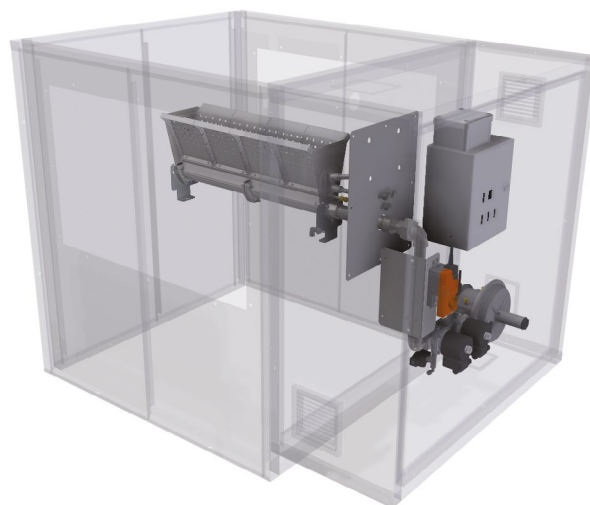
TECHNICAL SPECIFICATIONS

Natural gas or LPG supply

Protection rating IP54

Heating capacities from 115 kW to 450 kW

Two stage/Modulating thermoregulation



ADVANTAGES

- 1 • Gas saving up to 45% compared to same power heating systems with combustion chamber.
- 2 • Complete combustion of gases, environment-friendly and maximum efficiency (close to 100%).
- 3 • Maximal thermal delta of 30°C painting phase.
- 4 • Relative humidity control.
- 5 • Curing temperature reached within 5 minutes (*).
- 6 • Flawless and immediate ignition thanks to dedicated high tension transformer and ignition electrode.
- 7 • Particularly suitable for the water based paints.
- 8 • Excellent temperature stability and distribution within the designated work area.
- 9 • Minimal gas consumption in each work phase.
- 10 • Reduction of production cycle time up to 30%.
- 11 • Maximum operational safety
- 12 • Minimal environmental impact.

*) data referred to spray booths with internal dimensions 7m.x 4m.x H=2.8m. and air recirculation during baking phase.

PRODUCTS

AU AND CUBE HOT AIR HANDLING UNIT FOR EVERY DEMAND

HIGH PERFORMANCE AND REDUCED OPERATING COSTS

Wide range of hot air handling units, available with or without combined air extraction unit, suited for every industrial application.

All POLIN-AC units are designed for unparalleled reliability, efficiency and operating costs.



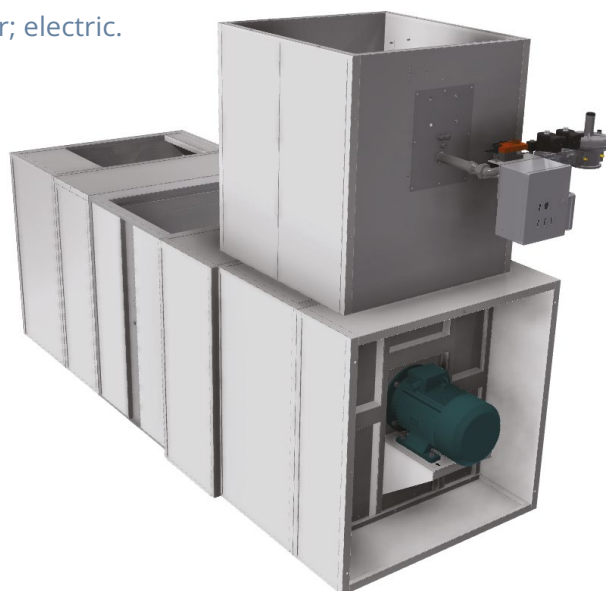
TECHNICAL SPECIFICATIONS

Three-phase electric supply

Motor power from 2,2 kW to 45 kW

Direct fired heating; combustion chamber; hot water; electric.

Heating capacity from 35 kW to 600 kW.



AU SERIES

High performance air handling units - 9.000 cu.m/h to 90.000 cu.m/h air handling capacity – with backward inclined blade fans. Available with optional cross-flow or rotative heat exchanger and inverters for all power levels. Modular construction allows for vertical or horizontal positioning. Also available in combi solution with air extraction unit.

CUBE SERIES

Completely pre-assembled monoblock unit; its limited dimensions facilitate positioning in tight spaces. Particularly suited to be used as heated air inlet unit for prep areas and semi downdraft spray booths of limited dimensions. Handling capacity 8.000 cu.m /h to 20.000 cu.m/h with forward blade centrifugal fan.

MINIAU SERIES

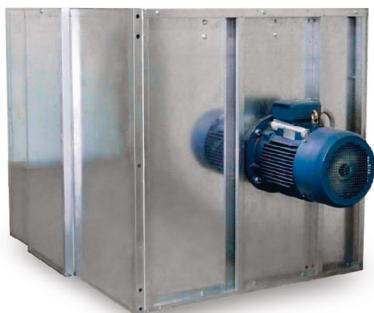
Hot air generator suitable for a wide variety of applications thanks to reduced dimensions, light weight and 35 to 70 kW heating capacity. Completely pre-assembled monoblock unit. Handling capacity 1500 cu.m/h to 8000 cu.m/h with forward blade fans. Also available in combi solution with air extraction unit.

EXTRACTION UNITS

AIR FLOW AND PRESSURE ALWAYS BALANCED IN THE SPRAY BOOTH

IN PERFECT SYNERGY WITH THE GENERATOR

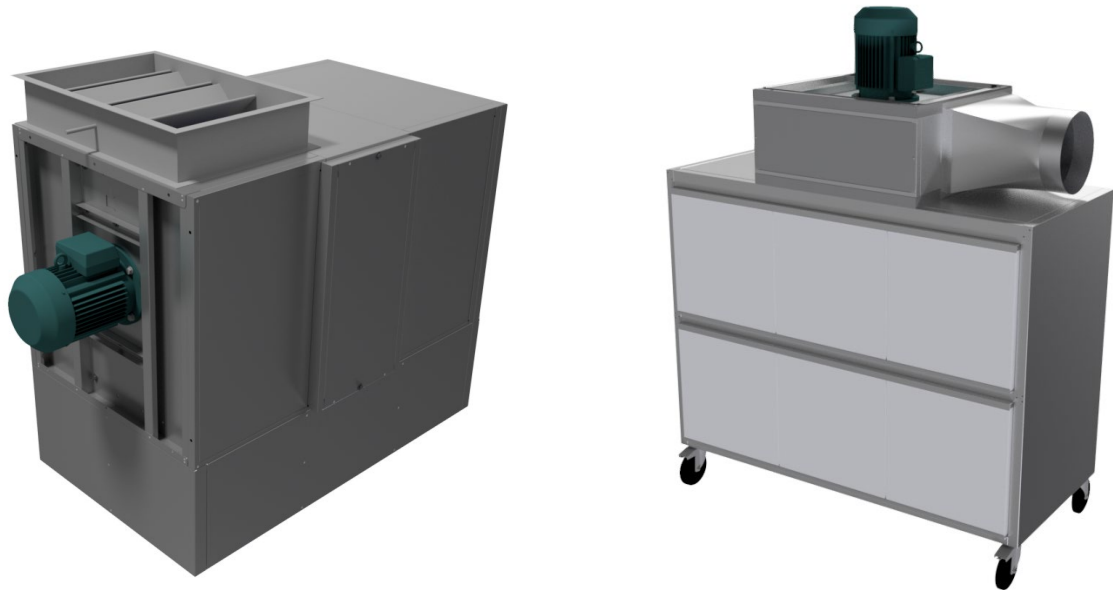
The range of air extractors is composed of models conceived for every production demand. Created to work in perfect synergy with the generator for constant and balanced pressure inside the spray booth.



TECHNICAL SPECIFICATIONS

Three-phase electric supply

Motor power from 2,2 kW to 45 kW



EXT SERIES

Dry filtration and air extraction units for heavy duty applications. Galvanised steel modular construction allow for vertical and horizontal positioning. Direct drive reverse blade impeller. Multi pocket synthetic exhaust filter.

EXTC SERIES – (ACTIVE CARBON)

Dry filtration and air extraction units inclusive of activated carbon. Galvanised steel modular construction plates allow for vertical and horizontal positioning. Direct drive reverse blade impeller.

ES SERIES

Completely pre-assembled monoblock unit. Galvanised steel construction allows for vertical and horizontal positioning. Belt driven centrifugal fan. Optional multi pocket synthetic exhaust filter sector.

CAM

Completely pre-assembled monoblock unit. Cross draft air extraction unit, optionally with AN-DREAE filter or PAINT STOP. Direct drive forward blade impeller. Fitted with pivoting wheels for ease of movement.



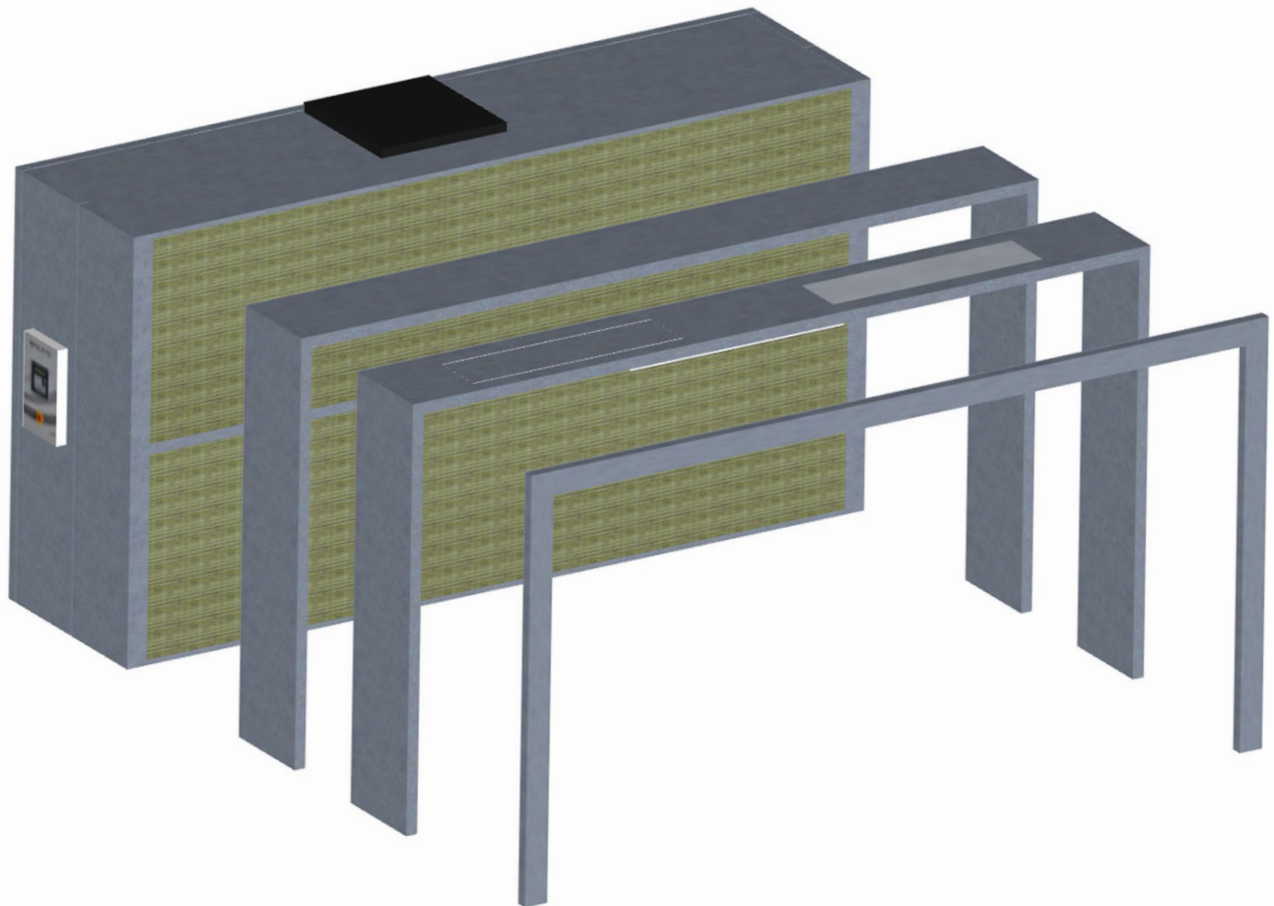
PRODUCTS

BGA AND PA SUCTION WALLS

EFFICIENT HORIZONTAL AIR EXTRACTION

Suction walls for horizontal air extraction, galvanised steel construction with reverse blade turbine directly mounted to motor shaft and fitted with anti-spark ring and inlet cone.

PA SUCTION WALL

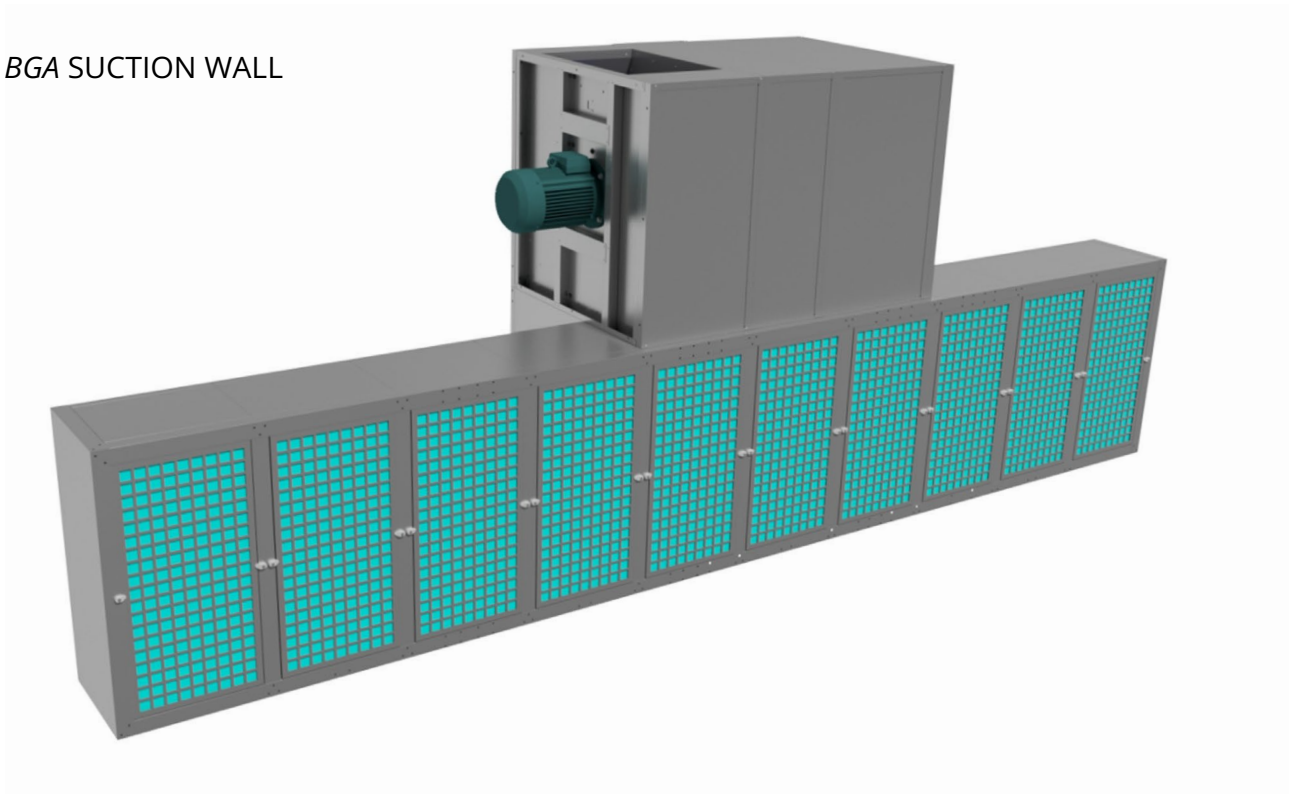


TECHNICAL SPECIFICATIONS

Three-phase electric supply

Motor power from 2,2 kW

BGA SUCTION WALL



CHARACTERISTICS

- 1 • Galvanised steel panel structure.
- 2 • Pre-assembled high output reverse blade turbofan directly mounted to motor shaft.
- 3 • 4-pole asynchronous 3-phase electric motor, tropicalised with Class F isolation, IP54 protection grade.
- 4 • Exhaust air filtration by means of PAINT STOP filter panel. Self-extinguishing Class PF2 according to DIN 53438. Filtering grade EUROVENT EU3.
- 5 • Protection of auxiliary circuit.
- 6 • Emergency stop push-button.
- 7 • On-board control panel with direct motor starting.

INVERTER FOR INTELLIGENT USE OF AIR FLOW

LOW CONSUMPTION AND PERFECT AIR FLOW FOR EVERY WORK PHASE

Possibility to choose 3 different motor speeds for spray and bake phases: LOW, MEDIUM and HIGH rpm. resulting in optimised energy consumption.

TECHNICAL SPECIFICATIONS

Electric supply 400V 3ph+N

Motor power from 5,5kW to 70kW

Control: 3 speeds, with potentiometer, flow switch and pressure transducer.

ADVANTAGES

- 1 • Air flow tuned according to the individual requirements of each work phase.
- 2 • Consumption of electricity reduced by reducing the rpm of the motors.
- 3 • Electric power consumption reduced up to 45%
- 4 • Elimination of the absorption peak compared to star/delta start up.
- 5 • Forced fresh air replacement during all recycling phases by keeping the extraction motor on, running at reduced rpm.
- 6 • Semi-automatic spray booth pressure adjustment by means of push-buttons which have direct influence on the rotating speed of the extraction unit motor.
- 7 • Overall noise reduction.



CONTROL PANELS

SAFE, EASY AND COMPLETE CONTROL

TO HANDLE EVERY FUNCTION OF THE SPRAY BOOTH

Designed for the operation of spray booths and aggregate units, CE marked and compliant with the rules in force. It allows the control of the motors, lights, dampers, safety devices and parameters of each working phase:

SPRAY: possibility to set individual temperature.

AUTOMATIC CURING CYCLE (*flash-off, bake 1, bake 2, cool down*):

possibility to set individual work times and temperatures. Once cool down is completed, the system shuts down automatically.

HOT FLASH OFF (HFO): in this timed phase, the spray booth operates in recycling mode but temperature setting corresponds to the bake phase in order to allow for a brief but rapid temperature rise, reducing the time required for flash-off of water based paints. Once the set time is over, the unit returns to *paint* mode operation.

ADVANTAGES

- 1 • Improvement of the operator safety.
- 2 • Compliance with current legislation regarding safety at work.
- 3 • Intuitive control of the spray booth or preparation area.
- 4 • Optimised consumption by controlled motors switch off in bake phases*.

(*) data referred to spray booth with air recirculation in bake phase.



Leader in the manufacturing of spray booths

Since 1935 we have been projecting and manufacturing spray booths with heating systems and air generators for the body shop and the industry. Our history is made of passion, continuous technological innovation and growth, which has led us to become worldwide leader. Our commitment is always to offer to our customer a quality product conceived to respond to the most specific requests.



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