



SPRAY BOOTH SYSTEMS FOR AUTOMOTIVE PAINTING MADE IN ITALY



A NEW COMPANY WITH A LONG HISTORY









POLIN-AC is the result of a 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.

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, recognized 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.







A GREAT ORGANISATION WITH THE MOST MODERN PRODUCTION FACILITIES









The company organization is focused towards the optimization and coordination of all production departments, with the aim of creating a quality product with the best possible delivery time.

The introduction of the most modern software systems, allows us to check the production flow of the different divisions in a timely and accurate manner.

Investments in sophisticated production

technology, automatic lines and robotized stations has always been considered a key priority, not only to accelerate the entire production process, but also to guarantee constant overall product quality control. Today like yesterday, we deliver to our customers technology capable of offer high-tech performance, great productive efficiency, and maximum optimization of working times, operating costs and energy consumptions.













TECHNOLOGY ENTIRELY MADE IN ITALY

TECHNOLOGICAL EVOLUTION IN EVERY ASPECT

Not all Italian cabins are really Italian. Air-Force is 100% Italian. Designed and made completely in Italy, it guarantees high performance with maximum energy efficiency, applying innovative technological solutions to all functions that are useful to facilitate and optimize the job of the operators.

The AirForce project is being constantly developed and implemented so that every single aspect of the booth may benefit from the latest technical innovation.



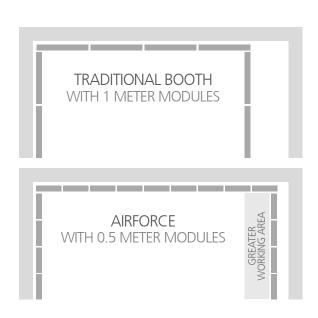
WE HAVE DOUBLED THE MODULARITY

FREE TO CHOOSE ACCORDING TO YOUR NEEDS

AirForce was designed in four different versions, developed to satisfy every specific work need, always offering the best as far as advantages and performance are concerned. The use of 0.5 meter wide panels result in a wider choice of spray booth dimensions, making it easier to integrate the booth into the optimal layout of every body shop. Great freedom of configuration choice:

- different dimensions of the booth i.e. height, width and depth;
- total or partial filtering plenum;
- 4 different illumination systems, combinable among themselves;
- raised metal base or in-ground floor pit;
- heating by direct flame burner heating or stainless steel combustion chamber;
- 3 different control panels and relative choice of functions;
- curing mode with partial air recirculation or full air exhaust.

THE 0.5 METER
PANELS GUARANTEE
A MODULARITY
WHICH OPTIMIZES
THE USE OF SPACE

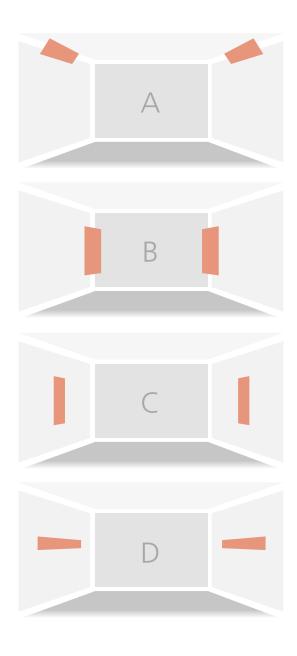


ILLUMINATION ACCORDING TO YOUR PREFERENCE

THE BEST ILLUMINATION OF THE VEHICLE WITH NO SHADOWS OR GLARE

All of the different possible lighting solutions guarantee an abundant amount of diffused light in the cabin. Our range of spray booths offers systems that can be combined according to the client's preference, with ample freedom of choice:

- inclined at an angle in the upper section of the cabin (A);
- vertically positioned in the 4 corners of the cabin (B);
- vertically positioned flush into the side or rear wall panels (C);
- horizontally positioned flush into the side or rear wall panels (D).



IDEAL AIR FLOW FOR EVERY WORK PHASE

THE PERFECT PLACE FOR PAINTING

AirForce creates the best working conditions in an ideal environment for the application and drying of paint. Air flow in the cabin is perfectly calibrated in every single work phase, allowing the operator to work

in a healthy and completely dust free environment. The evenly distributed air flow fully envelops the vehicle, transferring heat to every single point, at a constant pressure and stable temperature.



DESIGNED TO SAVE GAS AND TO INCREASE OUTPUT

DIRECT FLAME BURNER HEATING

The AirForce heating system has been developed to always ensure perfect combustion, thanks to the integration between the latest generation of direct flame technology and the ventilation system of the booth.

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ALL ADVANTAGES

100% combustion yield

Maximum rapidity in reaching the set temperature

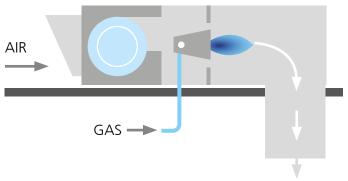
Better temperature stability

Reduction of working time with an increase in the productivity of the system

Reduced maintenance requirements

No need for a fume chimney

Eliminates problems relative to the presence of condense



REDUCED ELECTRIC ENERGY CONSUMPTION THANKS TO INVERTER TECHNOLOGY

The integration of inverter technology guarantees maximum operational efficiency of the motors. The progressive action of the inverter always allows for optimal pressure in the booth based on the type of work that is being done.

In the automatic version, the inverter is connected to a proprietary sensor which detects the use of the spray gun, thereby adjusting the air flow in the booth according to the activity of the operator.

ALL ADVANTAGES

- "Soft" start-up of the motors prevents spikes of energy absorption
- Minor energy consumption thanks to optimal management of the speed of the motors
- Automatic control of cabin pressure
- Self-balancing of air flow in the cabin based on the use of the spray pistol

OVERALL ENERGY SAVINGS OF

OVER 50%

PRODUCTIVITY INCREASE OF

OVER 40%







THE BEST SYSTEM TO MEET YOUR EXPECTATIONS

A WIDE RANGE OF GENERATORS WITH COMMON BENEFITS

We have taken the benefits that a body shop can get from the air generator of a booth to the highest level. This goal has been reached by developing a ventilation system with high

efficiency motors driven by inverters, resulting in a reduction of energy consumption up to 60% in comparison to traditional systems.

THE **ADVANTAGES**

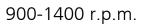
BALANCED AIR FLOW IN THE BOOTH MULTIPLE CHOICE OF HEATING SYSTEMS

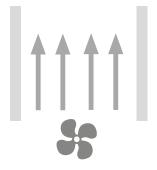
HUGE ENERGY SAVINGS THANKS TO THE USE OF INVERTERS (UP TO 60%) NO BELT DRIVE

=
NO MAINTENANCE

The lack of belt transmission allows for compact dimensions and the elimination of any need for maintenance.

The POLIN-AC generators can also be matched to a variety of indirect heating systems: combustion chamber with fuel oil burner, electric battery, hot water battery, or even a combination of two systems.

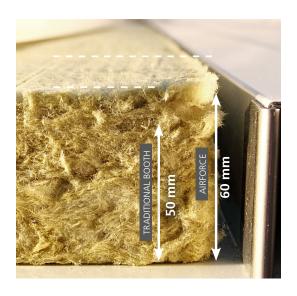








DESIGN CHARACTERISTICS



60 MM THICK WALL PANELS WITH MINERAL WOOL INSULATION

The walls are 60 mm thick, thicker than most booths. Thanks to the use of mineral wool, not only fire resistance, but also thermal insulation is improved, with important positive effects on general energy efficiency.



STRONG HINGES
ON THE ENTRY DOORS

The three fold entry door of the booth is mounted on heavy duty CNC machined aluminum hinges which rotate on ball bearings, for smooth operation and long life.



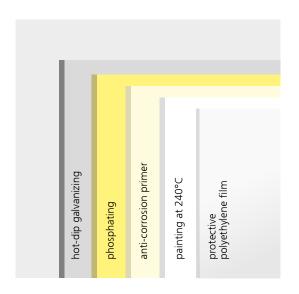
LARGE TEMPERED GLASSES ON THE ENTRY DOORS

A solution that, apart from the evident aesthetic value, allows for a better field of vision between the inside and outside of the booth, so as to have control of the production phases at a glance.



SERVICE DOOR
WITH PUSH EXIT

The service door, positioned in accordance to the norms, is equipped with snap-action closure and push exit.



ANTI-CORROSION GALVANIZED AND PRE-PAINTED PANELS

The panels are subjected to a specific treatment which guarantees long term durability. The surface undergoes 5 different treatments: hot-dip galvanizing, phosphating, anti-corrosion priming, painting at 240°C and final application of a protective polyethylene film.



LIGHTING SYSTEM WITH FLUORESCENT OR LED LIGHT TUBES

The reflectors have a large reflecting surface and are available with a choice of fluorescent or LED light tubes.



EASY REPLACEMENT AND MAINTENANCE OF THE FILTERING PLENUM

Replacement of the filters or cleaning of the plenum can be easily carried out by a single operator. The particular coupling system of the filter frame allows it to swing down in vertical position while remaining supported from above.



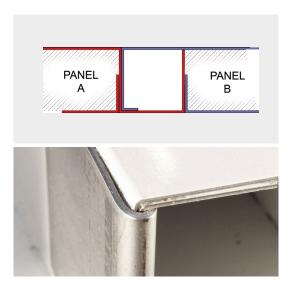
GALVANIZED FLOOR GRATES

The standard grates of the floor are galvanized and extremely sturdy. Higher load capacity grids are available according to the customer's requests.



MULTI POCKET FILTERING SYSTEM OF THE VENTILA-TING UNITS

Incoming and outgoing air quality is addressed by means of multi pocket filtration systems that contribute to a dust-free environment inside the spray booth and a paint free environment outside. Standard dimensions and ease of replacement are features that are appreciated by all service personnel.



HIGH STABILITY JOINT BETWEEN THE PANELS

The panels are constructed in such a way to create a box-like joint when they are coupled together. The entire construction can be rapidly assembled with a system which guarantees solidity, uniformity and high-stability of the booth.



CONSTRUCTIVE STANDARDS

WORKING SAFELY IN A NORM COMPLIANT SPRAY BOOTH

IN COMPLIANCE WITH THE CURRENT EUROPEAN DIRECTIVES

Higher costs are involved in the production of norm compliant technology, but it's the mission that we have chosen, so as to guarantee maximum safety, under all aspects.

European norms are the standard key points to be observed, but which we constantly aim to surpass with our advanced technology. Our desire is to supply our client with a spray booth which is safe for his health and at the

same time fully capable of satisfying his professional requirements.







EASY AND COMPLETE CONTROL OF EACH WORK PHASE





AC PLUS

Operator interface control panel with softtouch membrane keyboard allows for the complete control of all functions so as to facilitate and optimize the production flow and the work of the operator.

Provided with a software package completely developed by POLIN-AC, it facilitates the control of all work phases, indicating time, temperature and signaling eventual malfunctions. Ergonomic design and the user-friendly symbols make it immediately easy to use.

AC TOUCH

AC Touch is the control panel with 7" color Touch-Screen operator interface. The touch screen is equipped with an easy and intuitive advanced software which gives the operator the possibility to manage all the functions that control the booth in each single working phase. AC Touch also allows the operator to plan filter replacement and optimize energy consumption thanks to pre-set programs that can be customized by the operator.

AIRTHERM

The Computerized version of control panel for the complete control of AirForce, with 10" color Touch-Screen operator interface.

The AIRTHERM software is the most sophisticated and allows for the programming of each bake cycle by precisely choosing each parameter so as to obtain the best curing procedure of flash off, baking and cooling according to the paint utilized.

AIRTHERM allows all Client Supervision functions to be managed locally or remotely.



CLIENT SUPERVISION

- Evaluation of operating costs and work times, grouping them according to job and/or operator.
- Precise identification of any waste of time or energy and related causes.
- Keeping control of all type of energy in use (fuel, electricity)
- Control the quality of the energy and identify the possible causes of malfunctions
- Optimize the programming of service: report the occurrence of anomalies
- Provide basic information to evaluate operational interventions (modification of work shifts; reprogramming of jobs) or actions to be taken in order to reduce the energy consumption.

	AC PLUS	AC TOUCH 7" Colour	AIRTHERM 10" Colour
FUNCTIONS			
Intake and exhaust motors with inverters	0	0	V
Energy saving mode (ECO)	0	0	0
Automatic pressure adjustment	-	-	0
Semiautomatic pressure adjustment	0	0	0
Energy saving Slow Mo:from max. ventilation to min. controlled by the use of the spray gu	n <mark>o</mark>	0	V
Automatic curing cycle	V	V	V
Recipe – Pre-set cure cycles	5	5	3X999
HFO – Hot Flash Off Phase for water borne paints	V	V	V
Remote system supervision	-	0	V
Possibility to send e-mail (alarms, energy consumption reports,)	-	0	V
Client Supervision	-	0	V
Management of maintenance schedule	V	V	V

PRIMA, PERFORMANCE AND VERSATILITY

VERSATILE, FUNCTIONAL AND CUSTOMIZED

PRIMA is the sturdy and reliable spray booth which guarantees long lasting top level performance.

Practical and rational thanks to its modularity, PRIMA allows for optimal solutions according to the available space.



TECHNICAL CHARACTERISTICS

	PRIMA	AIRFORCE AVANT	AIRFORCE KING	AIRFORCE HD
CONTROL PANEL				
Soft Touch Keyboard (AC PLUS)	V	/	V	V
Touch screen 7" (AC TOUCH) Touch screen 10" with PLC and inverter (AIRTHERM)	V	V	V	V
Touch screen 10" with PLC and inverter (AIRTHERM)	-	V	V	V
ВООТН				
White Pre-painted modular panels dimension 500 mm	-	V	V	V
40 mm thick walls with polyurethane insulation	/	-	-	-
60 mm thick walls with mineral wool insulation	-	V	V	V
Doors with large glasses	V	V	V	V
Pre-painted galvanized corrosion proof panels	V	V	V	V
Vertical corner lights	0	0	0	0
Inclined ceiling lights	V	/	-	-
Horizontal side wall lights	-	-	-	V
Vertical side/rear wall lights	0	0	V	-
Partial filtration filtering plenum	V	V	-	-
Total filtration filtering plenum	-	-	V	V
Easy service hinged ceiling filter frames	V	V	V	V
Metal base floor (in alternative to pit floor)	0	0	0	0
Downdraft air flow	V	V	V	V
Semi-downdraft air flow	0	0	0	0
Service door	0	0	0	0
CNC machined aluminum hinges	-	V	0	0
Machined aluminum door handle	-	V	0	0
Integrated control panel in door pillar	-	V	0	0
HEATING SYSTEMS				
Gas direct flame	V	V	V	V
Gas direct flame Stainless steel combustion chamber with 4 smoke revolutions Hot water or steam heat exchanger	V	V	V	V
Hot water or steam heat exchanger	0	0	0	0
Electric heating battery	0	0	0	0
Cross flow or rotative heat recovery unit	0	0	0	0

✓ STANDARD ○ OPTIONAL - NOT AVAILABLE

ALTERNATIVES

Leader in the production of spray painting booths

Since 1935 we have been designing and producing spray booths equipped with heating system and air generators for automotive refinishing and industrial applications.

Our company has a long history made of passion, constant technological innovation and growth which have brought us to become trend setters on a worldwide scale. Our aim is to constantly offer our clients a top quality product designed so as to respond with excellence to the most specific requests.









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