



SprayTron



Passion
for BODYSHOPS
TECHNOLOGY
PROCESS and
LAYOUT



SPRAYTRON

The SprayTron is the newest generation of spray booths on the market to date. It is high-performing, automated and it is built with the best burner, the best fans and the best material available on the market. It can work as a conventional spray booth using hot air from the burner or with radiant waves using a robot.

Since Symach doesn't compete in the general spray booth market, the company set out to produce the best paint booth in the world: SprayTron. It is constructed out of the most high-quality components available, the fans are from the German manufacturer Ziehl-Abegg, a worldwide leader for fans, the burner is manufactured by NA Maxon-Honeywell and all electro-mechanical components are from Siemens.

SprayTron can be used in a conventional way using a direct flame burner producing hot air reaching 60°C or 140°F in five minutes measured on the vehicle body or by using the Symach robot.

The ventilation consists of a backward impeller fan of 34.000 cubic meters per hour or 20,000 CFM for a performance of air speed inside the booth of a maximum of 0,4 meters per second or 1.3 feet per second. This offers fantastic abatement of overspray.

The floor is designed with four different chambers unique to Symach. This guarantees a perfect, consistent and balanced airflow even when the floor filters are in need of replacement due to excess overspray or build-up.

The SprayTron uses PowerLight - an innovative lamp developed by Symach's research and development department. This product delivers superior lighting performance. PowerLight has a new and exclusive reflector that focuses the light beam with an angle and covers the vehicle from the roof to the vertical bottom side without any dispersion. The new light delivers quality and power superior to other lights on the market, both on the vertical and horizontal sides of the vehicle. PowerLight lights are also critical in the painting area.

The SprayTron recognizes the different operations performed in the booth and automatically changes the program using the maximum speed of ventilation for the spraying phases and the average speed for drying. Both use a conventional burner or robot and the minimum air speed for climatization during the masking and cleaning phases. Using this product, the painter never has to push any buttons.

The SprayTron can be configured with or without two pneumatic side doors. It is available in lengths of 8 meters (26.24 feet) or 9 meters (29.52 feet), and in heights of 2,7 meters (8.85 feet) or 3,2 meters (10.49 feet).

The front doors are constructed of glass, offering good visibility to the painter inside and out and the external cover is in CoverTop, ABS plastic panels, available in eight different colors.

In new FixLine projects, Symach typically installs a SprayTron with the robot to produce 8-10 paint cycles per day.

DRYING PERFORMANCE



The SprayTron drying performance, without the robot, is of superior quality reaching 60°C or 140°F in five minutes measured on the vehicle. In special circumstances, SprayTron can also reach a temperature of 80°C or 176°F.

> For the drying performance of the SprayTron using the Robot, please refer to the robot catalogs.

CONFIGURATION

The SprayTron is available in:

- two different lengths (8 m or 26.24 ft and 9 m or 29.52 ft)
- two different heights (2,7 m or 8,85 ft and 3,2 m or 20.49 ft)
- without side door
- with one pneumatic side door
- with two pneumatic side doors
- with oven KombiTron aside
- with a burner of 200 kW or 682,800 BTU/H
- with a burner of 300 kW or 1,024,000 BTU/H



2 SIDE DOORS



COMPUTER



The SprayTron computer automatically manages the four different programs without the operator selecting or pushing any buttons. It also automatically increases the speed of ventilation when the filters are dirty.

The programs: **Spraying** / This program uses 80% of the total ventilation and automatically starts when the painter uses the spray gun and automatically stops when the painter finishes spraying. **Drying with FlyDry robot** / This program uses 40% of the total ventilation to remove the gas and solvent produced during drying treatment. **Climatization** / This program is available only in the version with inlet warm air. It uses 30% of the ventilation and starts automatically when one of the phases mentioned earlier ends. This program offers clean and warm air to the painter during the operation of preparing the car to be painted.

PLENUM



The plenum is a tubular-welded frame to support the air ventilation channel and the filters, which are divided into six different boxes, are easy to open and change.

GRID BASEMENT



The basement is 50 cm or 20" deep and the standard grids support a weight of 850 kg or 1,870 lb per point of 10" x 10".

WALL FRAME



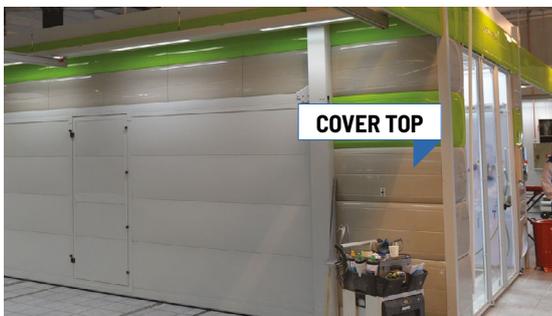
The SprayTron side panel is a tubular-welded frame. Inside the booth on the side, there is a metal sheet powder coating painted, in the middle there is 5 cm or 2" of insulation and on the external side there is the CoverTop ABS plastic panel available in eight different colors.

DOORS



La SprayTron ha la porta frontale divisa in tre parti con ante in vetro, la porta laterale pneumatica si apre e chiude verticalmente evitando sposamento di polvere.

COVER TOP



The outer covering of the SprayTron consists of CoverTop panels, made in ABS injection plastic mold. It can be opened and closed, which allows the installation of the electric or air compressed plant inside the SprayTron wall.

MECHANIC VENTILATION GROUPS



Burner / The SprayTron can be set up with two different burners, both with direct flame of 210 kW and 350 kW.

Ventilation group / The ventilation inlet and outlet have two backward impeller fans of 34.000 m³ per hour or 20,000 CFM, each one with two electric engines or 11 kW. The group of ventilation has two sets of pre-filter: the first one is for inlet and the second one is for outlet air.

LIGHT



The SprayTron uses the light PowerLux, an innovative lamp developed by Symach's research department that offers superior lighting performance. PowerLux has a new and exclusive reflector that focuses the light beam with an angle that covers the car from the roof to the vertical bottom side without any dispersion. This new light reaches a quality and power superior to other lights on the market, both on the vertical side of the car, as well as the horizontal side. This is very useful to the painter.



SPRAYTRON TECHNICAL DATA

MEASURES AND DATA

External length mod. A	9,00 m	29,52 ft
External length mod. B	8,00 m	26,24 ft
External width	4,10 m	13,4 ft
External height mod. A	3,70 m	8,85 ft
External height mod. B	3,20 m	10,49 ft
Weight	4.500 kg	9,920 lb
Air speed	0,3 - 0,4 m/sec	0.9 - 1.3 ft/sec
Maximum solvent quantity	8.400 g/h	18,518 lb/h
Paint application method	manual	
Compressed air system	8 Bar	116 psi
Standard warranty	12 months	

PNEUMATIC SIDE DOOR POLYCARBONATE OR ALUMINUM

Side door width mod. A	6,80 m	22.3 ft
Side door width mod. B	5,80 m	19 ft
Side door height useful	2,10 m	6.8 ft
Open side door height	4,46 m	14.6 ft
Double skin panel with wool insulation	40 mm	1.5"
Withstand temperature up to	100 °C	
Rating fire	class B according to EN 13501-1:2002	
Optional emergency door	0,90 x H 2 m	2.9 x H 6.5 ft

CONTROL BOX

Electronic card	microcontroller
Keyboard	membrane
Display	2 x 20 DIGIT
Installed power	24,5 kW
Supply voltage	400 V~ - 230 V~ (3Ph)
Frequency	50/60 Hz
Controls voltage	24 V~

FRONT DOOR

Width	2,80 m	9.1 ft
Height mod. A	3,20 m	10.4 ft
Height mod. B	2,70 m	8.8 ft
Panel width	0,85 m	2.7 ft
Material	clear glass panel	

GAS

LPG gas (G31) / Natural gas (G20) line pressure	300 mbar	1 PSI
Fitting size	1/2"	

210 kW burner

Power output	209 kW	72,000 BTU/hr
Hourly consumption LPG (G31) at 12 mbar	17 kg/h	37.4 lb/h
Hourly consumption Natural gas (G20) at 12 mbar	22 m ³ /h	13 CFM
210 kW burner air temperature	25°C ΔT	
210 kW burner drying temperature	80°C ΔT	

350 kW burner

Power output	350 kW	12,000 BTU/hr
Hourly consumption LPG (G31) at 12 mbar	28 kg/h	61.7 lb/h
Hourly consumption Natural gas (G20) at 12 mbar	35 m ³ /h	20 CFM
350 kW burner air temperature	38°C ΔT	
350 kW burner drying temperature	80°C ΔT	

SPRAYTRON TECHNICAL DATA

EXHAUST AND INLET FAN (PLUGS FANS TYPE)

Outlet diameter	800 mm	31.4"
Max flow rate	34.000 m ³ /h	20,000 CFM
Motor power supply	400 V~ - 230 V~/60 Hz	
Motor rated power	11 kW	
Inverter	15 kW	
Duct flange	0,90 x 0,90 m	2.9 x 2.9 ft

AIR FILTERS

Prefilters entry extraction	G3	
Paint shop filter	50 mm	1.9"
Plenum filter	50 mm	0.7"

FLOOR SPECIFICATIONS

Grid (LxWxH)	760 x 330 x 40 mm	2.9 x 1.2 x 1.5"
CarMover rails	pz. 5 x 4 m	pz. 5 x 13.1 ft
Load capacity	800 Kg footprint	1763 lb footprint

PIT

Building works width	3,10 m	10.1 ft
Building works length mod. A	9,875 m	29.5 ft
Building works length mod. B	8,875 m	29.1 ft
Building works depth	0,69 m	2.2 ft

APPROVAL

Europe	EU: CE - ATEX II 3 G X
Australia	Compliant to Australian safety standards AS/NZS 4114.1:2003 - AS 3814.1:2009
North America	cETLus Listed - Intertek 5000803 ISO 9001



LIGHTS

Total installed power	1,944 kW
Chromatic yield index	0,93 Ra
Light flow of lamp	EL 35 °C 4.300 Lm
Supply voltage	120 V~
Frequency	50/60 Hz
No. of ceiling lights	12 (36 neon)
Estimated neon life	24.000 hours
Color type	daylight color
Color temperature	5.200 °K
Mean lighting	1.000 Lux

OPTIONAL

Activated carbon filter basement

Activated carbon used	Norit Vapure 612	
No. of used trays	40	
Maximum flow during painting	29.200 Nm ³ /h	
Maximum flow during drying	14.000 Nm ³ /h	6,5 ft/s
Face velocity	0,2 m/s	26.6 ft/s
Activated carbon total volume	0,755 m ³	26,622 ft ³
Total weight of the activated carbon used	500 kg	
Iodine number	920 mg/g	
% saturated weight	120 g/kg	
Uptake efficiency	80%	

Emergency door

Width	1,00 m	3.2 ft
Height	2,00 m	6.5 ft
Door in tempered glass	5 mm	0.19"

Heating exchanger

Dimension	120 x 120 x 120 cm	47 x 47 x 47"
Flow	28.000 m ³ /h	
Inlet Pressure Loss	245 Pa	
Inlet Flow Temperature Increase	DT = 15 °C	

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