

Ecopaint Blow-Off Car Body Cleaning Equipment

Function **Ecopaint Blow-Off, the Cleaning Equipment for the Dusting of Car Body Interiors and for the Precleaning of the Exterior Body Surface**

Ecopaint Blow-Off is used to remove loose dust and dirt particles from large surfaces in the interiors and for the precleaning of the exterior surfaces of the car body before the painting process. A raising of dust during the painting in the interior is thus avoided.

Horizontally and vertically placed high pressure nozzles blow high air volumes with high air velocity into and on the car body and remove dust and dirt.

An air flow against the conveying direction of the car body transports the dust to the filter area of the system. The high pressure fans placed there are used in the recirculating air operation and guarantee both for the blowing air at the nozzles and for the generation of the air flow in the dust collector.

To prevent air turbulences from interfering with adjacent systems and processes, a blocking air gantry generates an air curtain at the outlet of the system.

Structure The *Ecopaint* Blow-Off cleaning equipment consists of the functional units:

Sound Absorbing Gantry

to reduce the noise level at the system inlet

Fan Air Gantry

Unit with the fans to generate the high pressure and the blocking air circuits as well as the preliminary filters for air cleaning

Air Blowing Ring

with fine filter for air cleaning and sound absorber for noise reduction

Roof and Side Stations

with the blowing nozzles for car body cleaning

Blocking Air Gantry

Generates an air curtain at the system outlet

Highlights

- High cleaning effect
- Increase of the first run rate by up to 5 % (customer information)
- Minimum air consumption due to recirculating air circuit
- Continuously adjustable air flow due to frequency regulated fans
- Stainless steel execution
- Modular configuration due to integrated fans, air cleaners and sound absorbers
- Installation is integrated into the booth wall
- In combination with *Ecopaint* Clean, optimum cleaning of the car body interiors and exteriors
- Commonality in controls, visualization and drive design with *Ecopaint* painting installations
- Easy to service and maintain
- Identical mechanics of the roof machines of *Ecopaint* Blow-Off and *Ecopaint* Clean



Ecopaint Blow-Off in production



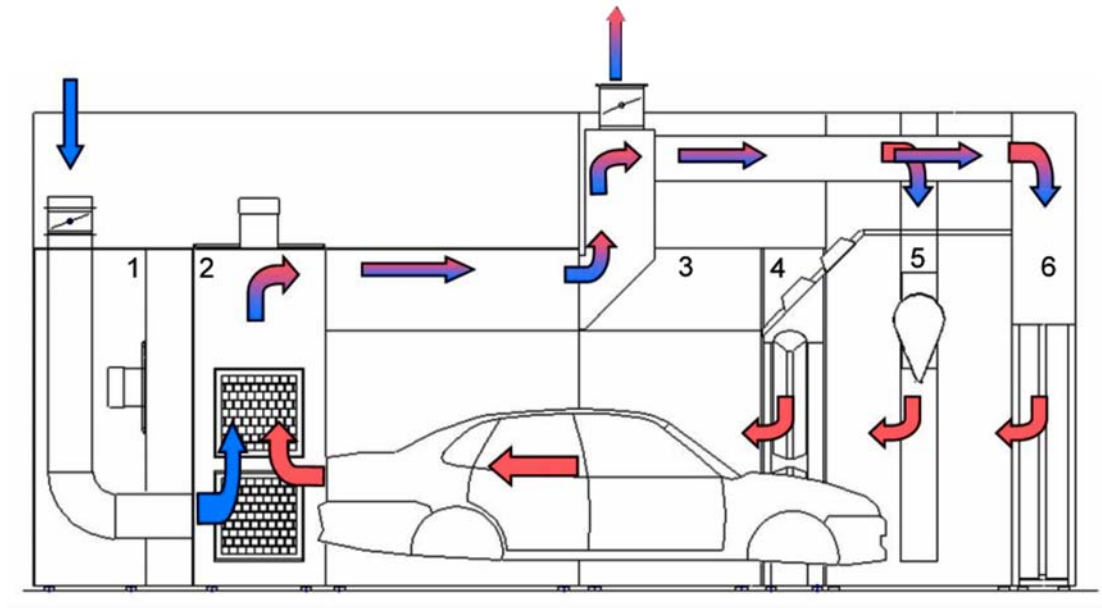
Nozzles at the side station



Nozzles at the side station and roof station

Ecopaint Blow-Off Technical Data

Diagram
Air flow in the
Ecopaint Blow-Off



- 1 sound absorbing gantry
- 2 fan air gantry
- 3 air blowing ring

- 4 side gantry
- 5 roof gantry
- 6 blocking air gantry

Station length (mm)	8200
Station width (mm)	4190
Station height (mm)	3760
Inside width (mm)	2100
Inside height (mm)	2000

2 side nozzles length (mm)	620
2 inclined nozzles length (mm)	820
1 roof nozzle length (mm)	2000

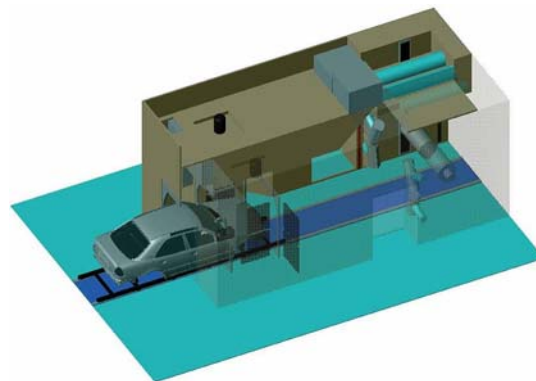
2 high pressure fans	
Power (kW)	2 x 15
Voltage (V)	400/690
Working pressure (Pa)	3200
Volume flow (m ³ /h)	2 x 9000

2 blocking air fans	
Power (kilowatt kW)	2 x 4
Voltage (V)	400/690
Working pressure (Pa)	1500
Volume flow (m ³ /h)	2 x 6000

Necessary total power (kW)	40
Speed control of the fans by frequency controller	

Total volume flow (m ³ /h)	30000
fresh air portion (m ³ /h)	approx. 4000

Filters	
preliminary filter	cartridge filter, filter rating F6
main filter	cartridge filter, filter rating F8
sound absorber	cartridge sound absorber



Ecopaint Blow-Off
Diagram

Hardware limit switch

In addition, electrical hardware limit switches can be used for the linear Z axis.

Door safety switch

The doors can be equipped with electrical door safety switches that prevent an operation when doors are open.

Central lubrication

A manual (*EcoLube M*) or a fully automatic (*EcoLube A*) central lubricating system can be offered.

Options