## Dust abatement device

DEP-04 (or 05 for small cabin sizes) is the most advanced version of the exhausted air purification systems produced in Todesco, with an abatement capacity up to 99,93%.

Entirely made in AISI 304 stainless steel, thanks to the three blast chilling stages, it is one of the most efficient machines actually available on the market.

1) Mixing and decanting with water

The contaminated air inside the spray booth is sucked in by the main turbine and is immediately mixed with the water delivered by the spray nozzles. Due to the centrifugal effect, the color / water mixture impacts the walls around the impeller and decays. The high speed of the dry particles and water droplets increases the mixing between the two.

2 Settling and separation of powders

A stage of  $\Omega$  metal filters retains a high quantity of drops, which fall by gravity into the settling tank.

The "S" filters force the continuous change of the direction of the humid air towards the outlet. Passing through the metal circuits, the percentage of water contained in the outlet mixture is less than 1%.

3 Final filtering

The last stage of filtration consists of absolute polyester filters that permanently block the dried molecules still present in the outlet air.

Turbine features		
Motor power	15 kW	
Maximum capacity	25000 m³ / h	nominal 18.000 m3 / h
Pressione massima	115 kgf / m²	
Water recirculation pump		
Electric power	1,5 kW	
Maximum flow rate	500 l / min	
Capacity of settling tank	1.700 l	with automatic loading and level control with internal capacity
Fluid discharge size	4"	
Material	AISI 304 stainless steel	
Impeller in steel coated with PTFE treatment		
Abatement capacity	> 99,93%	