



your partner for Electrostatic  
and Web-Cleaning  
solutions

# ACE FOR **CORRUGATED INDUSTRY**

Dust Removal Technology and Flexo Printing Clichè  
Washing Machine

NO MORE DUST ON YOUR PACKAGING





# Your Global Partner for the Electrostatic and Web Cleaning solutions

ACE is the market leader, with its high technologies, in electrostatic systems and sheets and web cleaners, in dedusters, in vertical machines for cleaning large-format flexo plates, designed and manufactured in the factory in Legnano.

For years now the electrostatic solutions designed by ACE for the industry are synonymous with problem solving along all the production phases, with their efficiency and reliability. Today, ACE is highly valued as a supplier partner by leading manufacturers of printing and converting machines; thanks to the synergies and collaborations with these companies, ACE has developed the most advanced electrostatic systems and many systems to remove dust and contaminants, such as web cleaners.

The continuing development made by our own R&D on these products, have allowed us to add to the range new, sophisticated systems for applications in the areas of Non-woven, Tissue, Paper and Corrugated board. The product portfolio developed and presented by ACE is now the most comprehensive in the world market with regard to the solutions of dedusting and electrostatic charge and discharge of materials and substrates in various industries. To complete its product range, ACE has developed and made available on the market a new series of large-format plates cleaning machines, and a system that represents the State of the art for dust removal in continuous cutting groups.

Meeting the needs expressed by customers is the focus of attention of ACE, which with its network of agents and technicians is ready to follow the customer and provide assistance worldwide. Respect for the environment and for the health of the workers are very important factors for ACE R&D department in the preparation of new products and projects, to continuously increase our environmental friendliness.

## NEW IDEAS FOR TROUBLE-FREE PRODUCTION



## Dust Removal System for Slitter Scorer Units

### Description

Specifically designed for Slitter Scorer units on corrugated lines, ACE DM6000 System is a dust removal system working on both sides of the substrate running. Paper dust generated by the longitudinal slitting in these units, accumulates the paper dust which is generated by the paper web during the unwinding process. Removal of these particles requires a powerful action granted by ACE DM6000 dust removal systems. A low tension, high efficiency antistatic bar BB Iondual, placed at the cleaning head entrance, frees the particles to be removed. Immediately afterwards, within the cleaning head HC24 model, a powerful combination of blown air (including air blades) and suction, successfully removes 100% of the free dust.

The SPB91A2 filtering unit which generates the blown and suction airflows, is inclusive of self-cleaning filtering cartridges. Thus the dust is captured and further delivered into a drawer where it is finally collected.

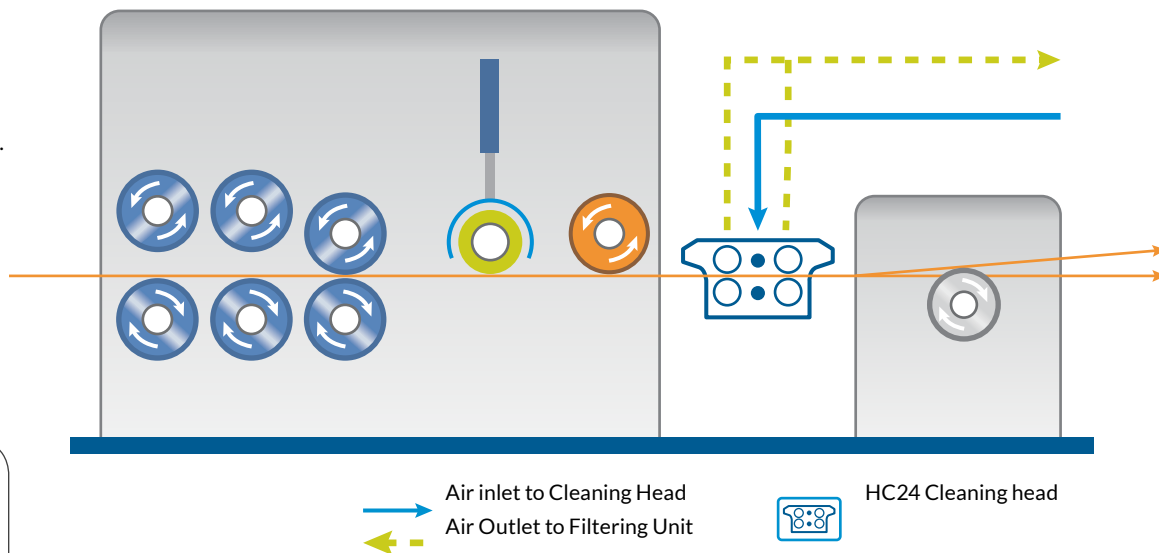
### Advantages

- Cleaning head equipped with substrate anti-blocking system
- High efficiency blown air and suction combination
- Removal of micro dust
- Inner brush to detect fibres and bulky waste
- 24V technology antistatic bar
- Highest performance at any production speed

**HC24 Cleaning Head and Filtering Unit SPB91A2** to eliminate any trace of dust on Slitter Scorer Lines.

### Process

1. Static charges neutralization by 24Vdc BB-Iondual antistatic bar
2. Generation of air flows, blown and suction
3. Suction of the dust particles



**HC24**



**SPB91A2**



## Dust Removal System for Corrugators

### Description

After the Slitter Scorer is the Cross Cutting Device. Ribbons are cut into sheets in this line section. Therefore, it is no more a question of removing dust off the web, but from the sheets. Thanks to the ACE COR-TR28, every single sheet is completely set free from any paper dust, generated in the cross cutting device. Typically, this system is provided with two different cleaning heads, one above and one below the substrate and positioned one after the other along the process.

These special cleaning heads are provided with a low voltage high efficiency 24V antistatic bar, in order to eliminate the electrostatic bond which makes the impurities sticking to the carton-board surface. The high volume suction channels inside the cleaning head have a special rotating brush which is equipped with properly designed bristles to stop any kind of contamination. Aerodynamic and mechanical combined actions allow the total removal of residual dust.

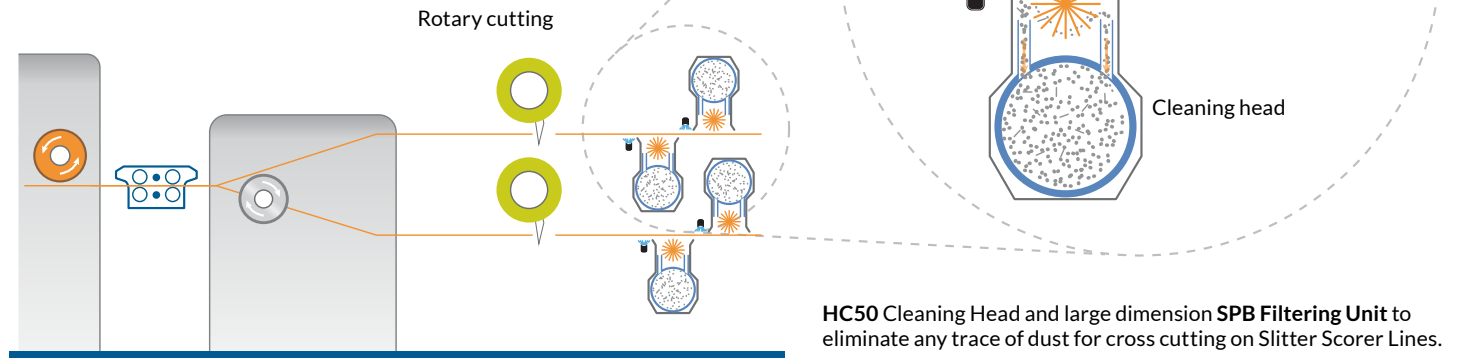
The system is comprehensive of a high capacity filtering unit, inclusive of suitable rigid and flexible pipes designed ad-hoc for every type of installation.

### Advantages

- High efficiency combination of air flow and vacuum
- Micro dust removal
- Inner brush to remove fibers and scraps
- 24 Volt technology antistatic bar
- Dust free sheets stacking

### Process

1. Static charges neutralization by 24Vdc BB-londual antistatic bar
2. Removal of dust and scraps by rotary brush
3. Suction of the dust particles



# CUT CLEANER

## Description

It is a fact that any slitting unit generates dust. Dust and fibres are pulled along with the substrates after slitting, remaining imprisoned within the web during winding process. Dust and fibres build up into the slitting unit, either sticking to the blades or lying on materials before winding, thus giving origin to final webs having an incorrect thickness, leading to a costly waste of materials due to the non-conformity. In fact, dust and fibres trapped into the webs will then be set free once those webs will be unwound at the next production process, certainly influencing the quality of the final product.

Further to that, the dust sticking to slitting knives generates a build up that will interfere with the trimming quality, depending on the type of material and may even generate a breakage of the ribbons leading to stoppages in production.

Installation of a Cut Cleaner System onto the slitting unit will completely eliminate these problems, significantly increasing the blades' life.

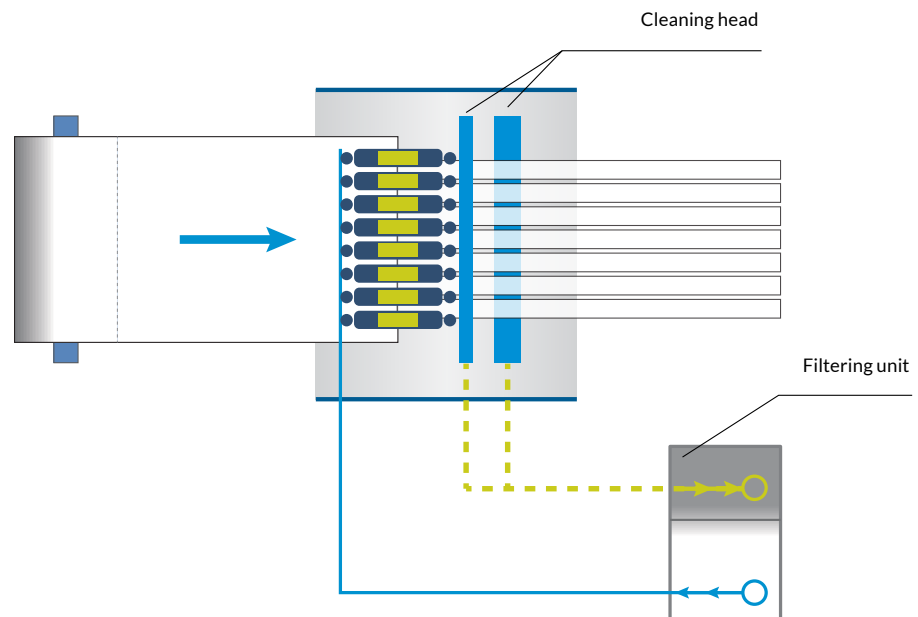
Combination of Cut Cleaner System and Contactless Web Cleaning System type DM, including an adequate filtering unit, represents the state-of-the-art application for dusty materials, like paper, carton-board, tissue and non-woven.

## Advantages

- Dedusting hoods customized respect to the type of slitting unit
- High efficiency combination of air flow and vacuum
- Removal of micro dust, fibers and scraps
- 24 Volt technology antistatic bar
- Highest performance at limitless production speed
- Contaminants free ended product

## Process

Every knife enclosed into a properly designed hood provided of powerful ventilation on the blade and large vacuum volume; ACE's brilliant solution to dust and fibers problem on slitting unit.



**Installation of SPB91**



**Cut Cleaner installed onto a slitter - non-woven production line**



## Dust Removal Systems designed for Flexo Printing Presses

### Description

Properly designed to remove dust and waste, AK Systems are installed onto flexo printing presses for corrugated carton. Cleaning heads work on the side of the substrate to be printed by means of a turbulence of high velocity blown air and suction. A 24V new technology antistatic system and rotating or fixed brush, removes micro and bulk contaminants.

These actions together grant the highest and unmatched level of cleaning efficiency over carton-board sheets, thus allowing the highest performance of the printing presses, leading to high quality printing products.

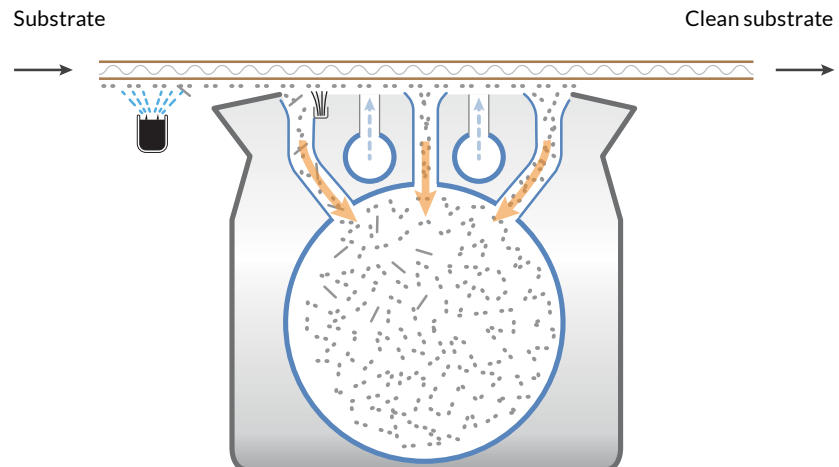
Cleaning heads are equipped with proper mechanical and electronical devices, in order to optimize the setting of their distance to the surface to be cleaned in respect of its thickness.

The correct combination between the right cleaning head, relating to the size of carton board sheet and the proper filtering unit determines the ideal solution to fulfil every specific requirement.

### Advantages

- Cleaning head with material anti-blocking system
- High efficiency combination of blown air and suction
- Removal of very fine particles
- Integrated brush for fibers and scraps removal
- 24Vdc technology antistatic bar
- High performance at any production speed
- Top printing quality on cardboard sheets

**AK3000 & AK4000** – Single side Cleaning Head and Filtering Unit **SPB91A2** to eliminate any trace of dust on corrugated printing lines



### Process

1. Removing of static charges through the BB-londual 24V bar
2. Moving of dusts through air blades
3. Suction of the contaminating particles
4. Fixed or rotating brushes

**AK3000**



**AK4000**



**SPB91-A**



# Vertical Washing Machine

To wash polymer plates of large dimensions

**SERIES:** LCV-30S / LCV-40S

## Description

ACE cliché washing machine models LCV 30 and LCV 40 have been designed to provide a perfect washing of polymer plates of large dimensions, which are vertically positioned in the machine. These machines have been studied to reduce their footprint to the minimum. They are designed to accept polymer with a format up to 1.700mm height by 2.200 mm (LCV 30 S) and up to 2.100mm height by 2.800mm width (LCV 40 S). The surface where the polymers are hung, is made up of two sections. This is in order to wash polymer plates of narrower size too. LCV Series from ACE are equipped with a folding door access system. These doors are made of polycarbonate and are designed to allow an easy insertion of the largest polymer plates.

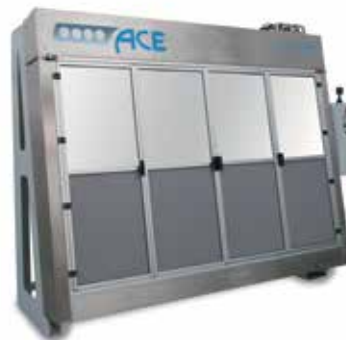
## Available options

- Polymer plates drying system
- Recirculating system and waste water filtering device

## Features

- All parts being in contact with water or detergent are stainless steel made.
- The system is equipped with external tank to include a high pressure pump, needed to allow the detergent to be homogeneously distributed onto the entire polymer plate by means of high pressure nozzles.
- A brush made of specially designed bristles allows a deep but smooth cleaning of the polymer.
- Brush assembly is installed onto a shifting trolley which has bearings that are resistant to cleaning agents.
- Different multiple cycle washing programs are available, inclusive of detergent-based washing cycles and water based rinsing. The brush assembly trolley speed can be set accordingly.
- Washing machine is equipped with safety systems.

**LCV-30S**



**LCV-40S**



Technology and Ergonomics, winning duo for ACE large format cliché vertical washing machine. Easy access and simple operation mark the technology of a high efficiency cleaning system. Washing and rinsing multi programs, easy cliché fitting, washing table designed to allow also narrow plates cleaning at one time.



**Hunging polymer plate in LCV washing machine**



**Dirty polymer plate just removed from printing unit, hung in LCV washing machine, ready for washing.**



**Polymer plate just cleaned from LCV washing machine, ready for storing.**

## ASSISTANCE

ACE products are conceived and designed to improve production performance of the lines on which they are installed in order to solve problems of static or antistatic, or remove any type of dust or contaminant from virtually any substrate, but also to improve the working environment for the benefit of the health of employees.

For these reasons, ACE wants to make sure that all its installed equipment reach 100% of its performances. A key role in this regard is the assistance service, which responds to the needs of our customers with competence and professionalism. Experienced technicians are always available, either by phone or with remote access, as with our ESA systems, or with the direct presence at the premises of customers to provide maintenance, repair and consulting.

Our technicians are always available to reach the Customers to offer assistance of all kinds, instruction and support.

- Immediate response to support requests
  - Computer devices like the ESA monitored and assisted online 24/7
  - Readily available spare parts for worldwide shipping
  - Revision/repair and shipping Service for static and antistatic bars
- Customer satisfaction is the prime objective of ACE!



REMOTE AND ONSITE  
TECHNICAL HELP DESK

TESTING ON YOUR SUPPORTS  
BEFORE PRODUCTION



## DEMO LINE

ACE invests in the new R&D Department of the factory in Legnano. A very important strategic decision, in response to the continued growth of our company and the acquiring of new market shares worldwide. This is a further step in the qualification of the Brand as an international Partner of machinery manufacturers, but also of the end users of our systems. At ACE, we build our success day after day, gaining the trust of our customers thanks to the performance of our static and antistatic solutions, web cleaners and dust collectors. With the aim to achieve the highest quality standards, we believe that the new DemoLine development is essential to achieve our purposes. The Ace DemoLine is equipped with high definition cameras installed after the web cleaners to monitor and check the quality of the action of the cleaning devices.

You can easily reach the ACE plant, located close to Milan Malpensa airport, just north of the city.

The DemoLine unit will be available to our customers' testing and the demo to the machine manufacturers and for the following activities:

- Test of new technologies in our R&D department
- Certification of quality of the equipment before shipment to our Customers
- Availability for Customers and Prospects, not only for needs related to the testing of our systems, but also to understand in practice how our systems work after entering in the production lines. Testing them with their own materials and verifying the performance levels attainable in their production with the inclusion of ACE technologies.

MATERIALS CLEANING AND ELECTROSTATIC SYSTEMS WITH CERTIFIED TECHNOLOGY.

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