



your partner for Electrostatic  
and Web-Cleaning  
solutions

# WEB & SHEET CLEANING SYSTEMS

ACE Contact and Contactless  
technologies to remove dust and fibers from:

Plastic film  
Paper  
Corrugated board  
Tissue  
Non-woven  
Aluminium  
Glass  
Wood  
Electronic parts

*In the printing, converting, extrusion, packaging, medical and  
pharmaceutic, electronic and automotive sectors.*

NO MORE DUST ON YOUR SUBSTRATE





# 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



# No-contact Cleaning Systems for web materials

**SERIES:** NW 600 / DM 1000 / DM 1500 / DM 2000 / DM 3000 / DM 4000 / DM 5000

## Description

Depending on the application sector, non-contact ACE web cleaners can be installed at various points of the production machinery.

The ACE Web Cleaners guarantee complete removal of dust from the web, resulting in a total reduction of scraps of material derived from non-conforming product, and better yield performance in the absence of downtime caused by dust during the processes.

The ACE Web Cleaners clean simultaneously on both sides of the material without touching them. The cleaning heads, amid which the material passes, create turbulent air currents (blown and sucked) that produce short-wave vibrations in the material to be treated. The vibrations break the air barrier created by the high moving speed of the material, removing contaminants particles on both surfaces of the substrate. The dirt collected by the cleaning heads are then sent through special rigid and flexible pipes to the ACE filter units.

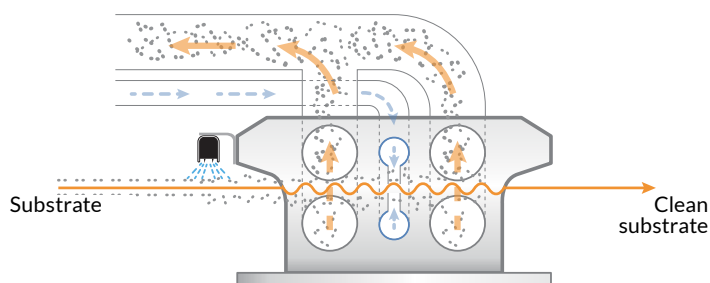
## Advantages

- Wide combination cleaning heads /filtering units to cover every need
- Available size minimum 250mm up to 5.000mm
- 24Volt technology antistatic bar
- High capacity blown and suction combination
- 100% dust removing from micro to bulk contaminants
- High performance at limitless production speed

SERIES	Web Width	Paper Printing & Converting	Printing Flim / Foil & converting	Labels	Printing Editorial	Corrugated	Non Woven	Tissue	Pharma Medical
NW600	(up to 500 mm)	●	●	●	-	-	-	-	-
DM1000	(450 ÷ 800 mm)	●	●	●	-	-	-	-	-
DM1500	(400 ÷ 1.300 mm)	●	●	●	-	-	●	●	●
DM2000	(900 ÷ 2.000 mm)	●	●	-	●	-	●	●	-
DM3000	(2.000 ÷ 3.500 mm)	●	●	-	●	●	●	●	-
DM4000	(2.500 ÷ 5.000 mm)	●	●	-	●	●	●	●	-
DM5000	(over 5.000 mm)	●	●	-	●	●	●	●	-

## Process

1. Removing of static charges through the BB-londual 24V bar
2. Generation of short-wave vibrations through blown air
3. Suction of the contaminating particles



**HC16**



**HC18**



**HC21**



**HC22**



**HC24**



**SPB60**



**SPB62-92**



**SPB90**



**SPB91**



# No-contact Cleaning Systems for sheets

**SERIES:** AK 1000 / AK 2000 / AK 3000 / AK 4000

## Description

Specially designed for removing particles, fibres and dust from paper, corrugated board, plastic sheets and other materials in sheet. The cleaning heads of the AK series only work on one side of the substrate to be treated, and in combination with the proper filtering unit SPB model guarantee 100% cleaning action. The working principle of the system is based on removing the static charge from the substrate before it enters the cleaning head, so as to detach dust and particles from the substrate. A blowing and a suction air flow create a turbulence that allows removing all the particles found on the surface of the substrate.

In some versions for special applications on materials that create a lot of dust, the use of a brush is provided, which is placed inside the system ensuring the removal of scraps or other major contaminants. The air flows are generated inside the filter units, equipped in high capacity models with automatic filter cleaning.

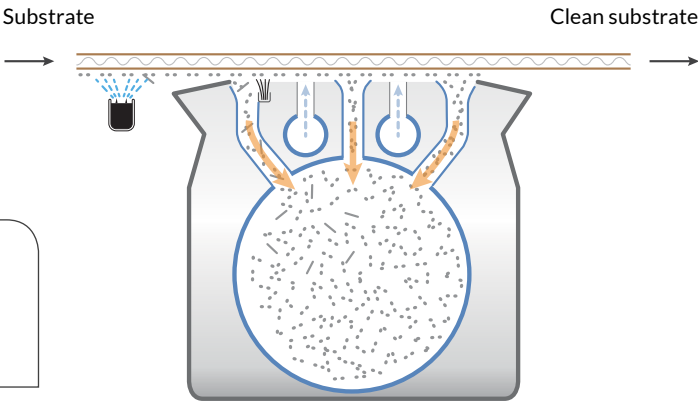
## Advantages

- 100% removing of substrates heavy dust particles
- 24Volt technology antistatic bar
- Inner brush to remove paper strips and other materials
- Available size minimum 600mm up to 4.000mm
- High performance at limitless production speed

SERIES	Web Width	Corrugated Cartonboard	Paper	Plastic	Wood	Metals	Glass
AK1000	(600 ÷ 1.500 mm)	●	●	●	●	●	●
AK2000	(1.000 ÷ 2.000 mm)	●	●	●	●	●	●
AK3000	(1.600 ÷ 3.000 mm)	●	●	●	●	●	●
AK4000	(1.600 ÷ 4.000 mm)	●	-	-	-	-	-

## 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



**AK10**



**AK20**



**AK50**



**AK2000**



**SPB91**



**SPB93**



**AK50 installed**

# Contact Cleaning Systems for web and sheet

**SERIES:** AR 700 / AR 800 / AR 850 / AR 900 / AR 1000 / AR 1500 / AR 2000

## Description

Great advantages in production with the AR Series Contact Systems. Removing 100% of contaminating particles (up to 0.5 microns), they ensure that the sheet entering the print unit does not release powders which may result in lower quality. In-line cleaning on converting machines ensures contamination-free final products.

At the entrance of the AR unit a static suppression bar eliminates static charges from the material, releasing any anchored contaminating particles.

Soft rubber rollers (one per side respect to type of AR), are in contact with the paper passing through, thus collecting all dust particles. On top of the soft rollers, one adhesive roller each is mounted to receive all dust, keeping the rubber rollers clean. When rubber rollers cannot be cleaned, it's time to cut off one round of the adhesive roller winding. At the exit of the AR unit a second static suppression bar is mounted, to eliminate any residual static charge.

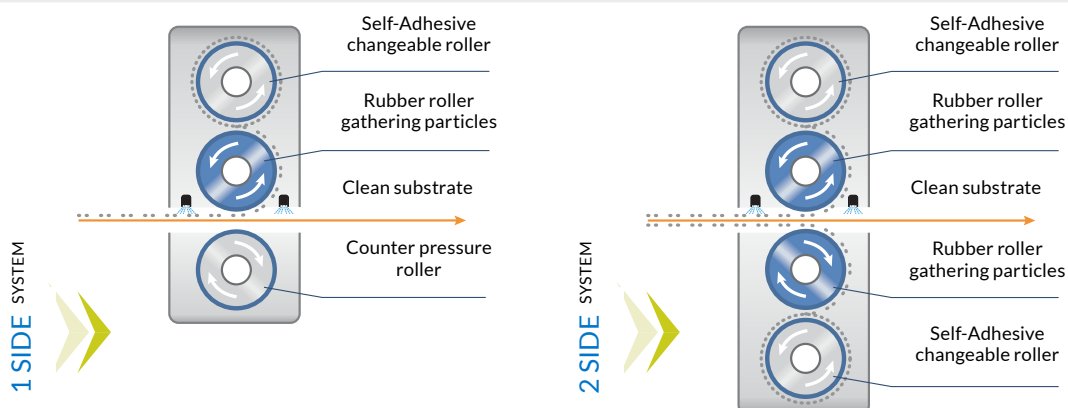
## Advantages

- Single and Double Side cleaning
- 24Volt technology antistatic bar, at unit inlet and exit
- Interchangeable adhesive rollers
- Fine pressure adjustment
- Available size minimum 250mm up to 2.000mm
- 100% contamination particles removing till to 0,5 microns

SERIES	Web Width	Flexible Packaging Paper (coated)	Flexible Packaging Film & Foil	Labels	Laminating	Pharma
AR 700 1S - 2S	(250 ÷ 700 mm)	●	●	●	-	●
AR 800 1S - 2S	(250 ÷ 800 mm)	●	●	●	-	●
AR 850 1S - 2S	(400 ÷ 850 mm)	●	●	●	-	●
AR 900 1S - 2S	(600 ÷ 1.200 mm)	●	●	●	●	●
AR 1000 1S - 2S	(900 ÷ 1.600 mm)	●	●	-	●	●
AR 1500 1S - 2S	(1.000 ÷ 2.000 mm)	●	●	-	●	●

## Process

1. BB Ionduol 24V infeed static charges stop
2. Particles collection through rubber rollers
3. Transfer of particles to the adhesive rollers
4. BB Ionduol 24V outfeed static charges stop



### AR700



### AR800



### AR850



### AR900



### AR1500



# Tubers Dedusting Systems

**SERIES: AK 2000-TU**

## Description

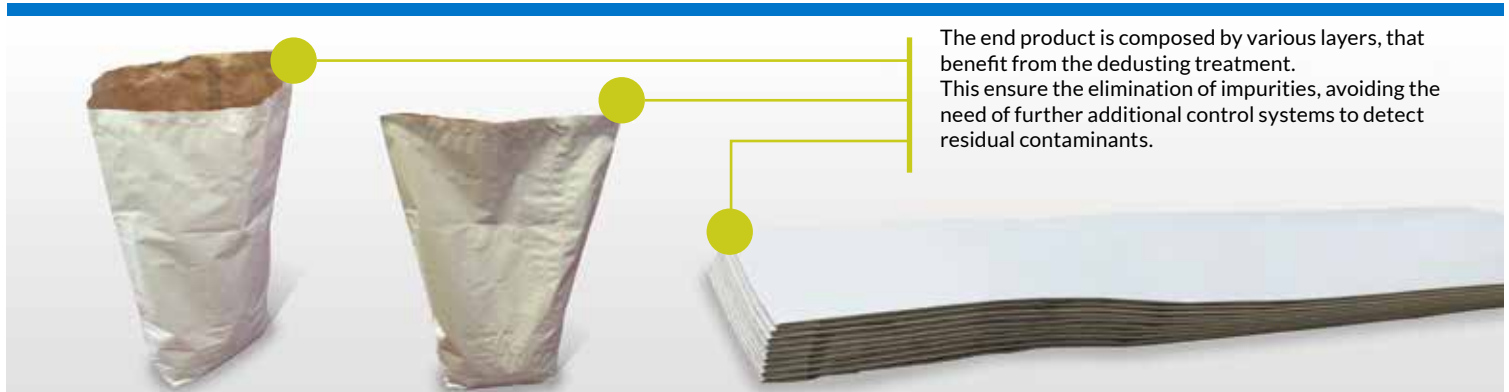
The system AK2000-ensures the removal of small or large contaminants, it is installed on the tubers before the web pairing sector, combined with a paper band conveyor roller which is used to drive the web inside the device. First of all, it deletes the electrostatic charge present in the paper. Immediately after, within the AK2000-TU structure a great turbulence is generated, in a combination with blowing and suction of large volumes of air. The new generation SPB93 filtering unit creates the necessary air flow, equipped with automatic self-cleaning filters and removable contaminant collection drawer. The unit is connected to the cleaning head through rigid and flexible pipes.

AK2000-TU is the best solution for ensuring production absolutely free of any contaminant, continuous and without need for manual control, or elimination of not perfectly clean bags by the operator.

Its use avoids the installation on the line of contaminants detectors.

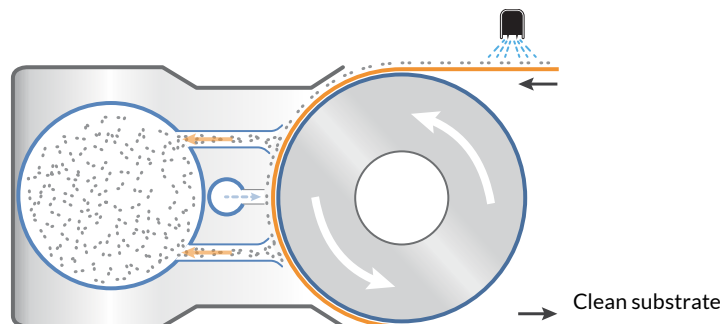
## Advantages

- Wide combination cleaning heads/filtering units to cover every need
- Compact assembly for easy installation
- 24V technology antistatic bar
- Combination of high capacity air blown and suction
- 100% dust removing from micro to bulk contaminants
- High performance at limitless production speed



## 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



**AK2000-TU system installation**

# Web Cleaning – Medical and Pharmaceutical

## A new special application

ACE has successfully developed a series of high-technology cleaning systems for the medical sector. Thanks to them, it is possible to ensure that the substrates such as plastic film and Tyvek, used for building medical envelopes, are absolutely uncontaminated from dust and particles in the air. Extensive experience in the treatment of the smallest contaminants, combined with the use of special materials and electroplating treatments for building cleaning heads, ensure that the instrument itself is suitable to be installed in environments with a high degree of cleanliness and cleanrooms. The filter units are equipped with special filters especially designed for these types of uses.

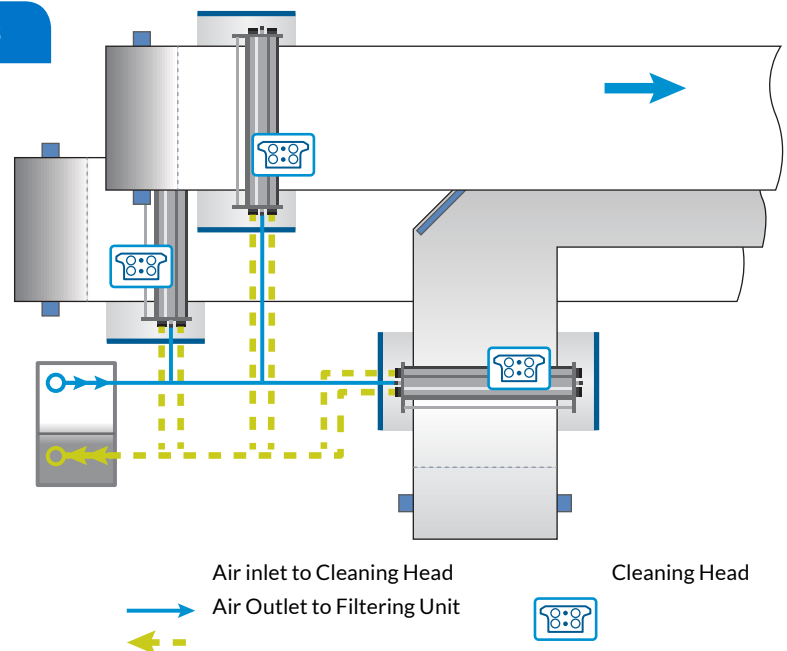
Standard equipment includes the electrostatic discharge bar with new 24V technology which, placed at the entrance of the material in the unit, allows the complete elimination of electrostatic charges that hold smaller contaminants particles onto the materials, thus facilitating their removal with both contact and non-contact ACE Web cleaning systems.

## BB Ionduol (24 V), ideal for the pharmaceutical sector

The construction components and operating technology guarantee its high deionizing efficiency. It can be installed anywhere on the envelopes production line. It is also used to ensure that the blisters containing tablets are statically neutral, and that therefore the tablets lay freely at the bottom of each individual seat.

The metal film for sealing packages can thus be applied without problems or interruptions in production. 24V power supply, double row of ionized tips to ensure high efficiency and working distance of up to 500 mm from substrate make this static discharging bar the state of the art in medical applications.

### Process



## 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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