



your partner for Electrostatic
and Web-Cleaning
solutions

ACE SYSTEMS & TECHNOLOGIES

Clear Tube waste removal

Electrostatic Devices

Chill Roll anti-condensation system

Pile Charging bundle blocking in post press systems

Ribbon Charging perfect bond of ribbons at folder

WG50 – WG70 Static Changeover

EP3 Edge Pinning Cast Extrusion

ACE YOUR PROBLEM SOLVING
TECHNOLOGY PARTNER



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



Clear Tube

Description

Many industrial processes generate waste and scraps of materials which are gathered by means of removal systems throughout vacuum pipelines.

A good example is the printing industry, where paper wastes are moved to containers outside production plant or the sector of film extrusion, where during the production of plastic film, the web edges are trimmed and sucked away to the gathering and collecting system.

During the run inside the pipelines, material gets charged by static and once they reach the cyclone or separator they stick to the wall of it which goes out of order. ACE technology easily solved the problem, in fact, installing a segment of pipeline equipped with high performance BN/PR antistatic bars, just prior the entrance of the cyclone or separator, wastes and scraps running inside at high speed, are completely statically discharged and run free till the final gathering point.

No more static charges inside the cyclone or separator, no more waste and scraps sticking to their walls, no more waste removal system failure!
Little ideas, great benefit!

Advantages

- Dedicated antistatic bars installed all around a special pipe segment, will grant 100% discharge of waste paper/film passing through, on their way to the cyclone or separator.
- No more jams in waste removal system.
- No more production stoppages due to waste removal system clogging.



Clear Tube installation, mounted just prior to the separator inlet.



Clear Tube installed on the last pipeline section inside the plant.

Antistatic Bars

BB IONDUAL



Bars BB Iondual and BB Iondual Plus

Designed for applications on almost every material: paper; carton; plastic film; tissue; non-woven; plastic materials.
DC-Pulse Technology.
Electronic assembly integrated within the body's bar.
ISF Technology for power setting.
24V dc feeding.
LED indicating working status.
Ionizing field: BB Iondual up to 500mm; BB Iondual Plus up to 1.000mm.
Standard, UL and ATEX versions.
Optional: remote control by means of RS22 line.

A/T2NB1



Feeder Type A/T2NB1

Standard and ATEX versions.

Technical specs:

Primary voltage 230V (115-240 V on request).
Primary current 50-100mA
Frequency 50/60 Hz
Secondary voltage 6750/7000V

Dimensions:

L 170 x D 130 x H 200mm

BN/2P - BS/2P



BN/2P

Antistatic bar largely used into environments having temperature up to 50°C.
Standard and ATEX versions.

BS/2P

Antistatic bar largely used into environments having temperature up to 200°C.
Standard and ATEX versions.

Ionizing head SB2000

Equipped with BN antistatic bar and air blown to neutralize electrostatic charges at long distance. Particularly suited for extrusion lines.



SB2000

Ionizing head DA600

Specifically designed for customized applications in order to cover a wide range of special enquiries to eliminate static charges into complex areas.



DA600

Electrostatic Bars

Generator HF 50/LZ

Electrostatic generator with two outlets, positive and negative. Front control panel, including digital display and independent setting for tension and current. It can be interfaced with the machine it's installed on.

Technical specs:

Primary Voltage: 230V (115 - 240 V on request).
Primary Current: 0,10 - 0,15A
Frequency 200Hz
Output Voltage: 0 - 40/50kVCC
Positive or negative polarity.

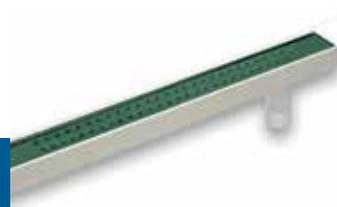
Dimensions: L 300 x D 150 x H 400mm



HF 50/LZ

Electrostatic Bar DE R40

Designed to charge wide surfaces, it is ideal for applications in many sectors. It is provided with two rows of electrodes and inner body is treated with resin.



DE R40

Electrostatic Bar SE R40

Designed to charge wide surfaces, it is ideal for applications in many sectors. It is provided with a single row of electrodes and inner body is treated with resin.



SE R40

Ribbon Charging

Description

ACE Ribbon Charging, the new concept of electrostatic charging for the ribbons inside the folder assembly in high speed web offset and gravure machines. The system is made of two modular slabs, installed one in front of the other; ribbons run in between getting perfectly and homogeneously charged by static. Single powerful charging vertical elements, mounted side by side are the slab components.

Each vertical element is easily and quickly mounted or extracted from the slab assembly, in order to grant a full coverage of the ribbons width, avoiding the traditional bar problems which needs to be protected by cap on those parts not covered by the paper ribbons, not to generate dangerous electrical arch. Slabs are mounted on linear guides, allowing the slabs to be moved sideways manually or by remote control to be installed nearby the press desk, so that slabs can be centered respect to the ribbons and to set the power respect to the number of ribbons as well as the time the sticking effect has to last. In case one of the static element should need to be replaced, further to the simplicity of the replacement operation, remaining bars can compensate the effect, thus avoiding an urgent production stoppage to provide the service.

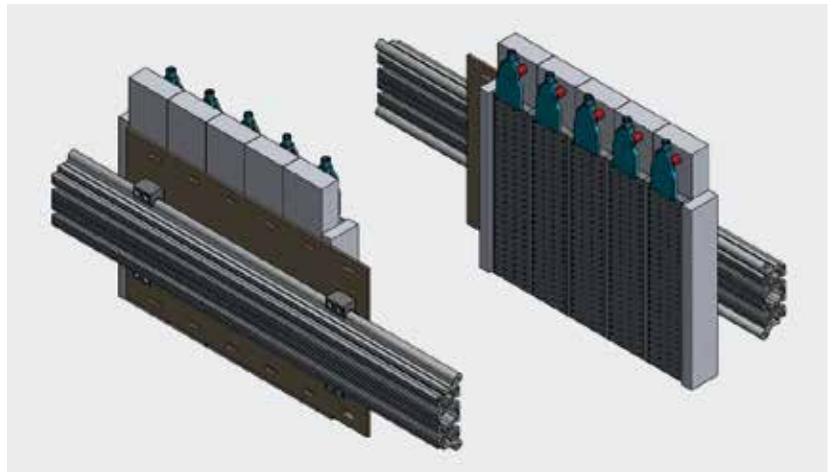
System installation is fast and easy, the slabs assembly has been designed to be installed in few simple operations; system can also be installed on existing mechanical set up.

Advantages

Making sure the ribbons keeps aligned and steady during the run to the accumulation cylinder.

- Bar's body made of special materials to keep it stiff and hot resistant
- Special Iron and Tungsten made needles
- Two row needles, positive an negative side by side, as efficient to grant continuous effect and long lasting paper sticking
- Bars body easy to clean up if needed
- Anti shock cables, pulling-proof

Ribbon Charging new concept, two opposite plates including interchangeable single charging bars. Ribbon size adjustable by remote control.



Ribbon Charging, horizontal assembly, suitable to web digital presses



Paper webs running through Ribbon Charging assembly

Chill Charging

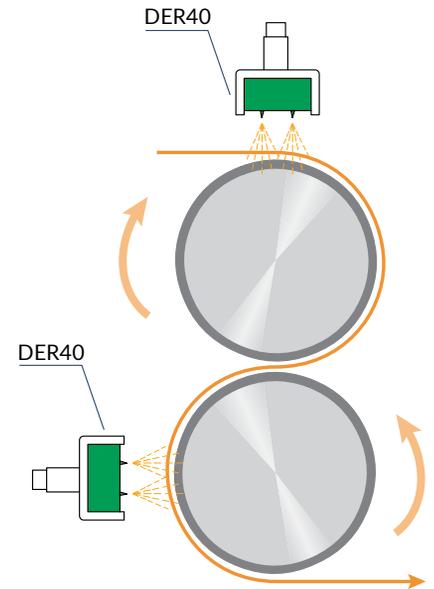
Description

In printing web offset, especially when using light paper, the web might break due to forming of condensation over the first chill roll; sometimes even over the second chill roll as well. Condensation forms due to the difference in temperature between the paper's, just passed through the dryer and cylinder' surface (Chill roll). The air-cushion which forms between the back of the web and the chill roll' surface foster the generation of condensation, wetting the paper that due to the traction from the folder easily breaks.

Another problem is the reduction of printing quality. Due to above mentioned condensation, the chilling rolls tend to get dirty of ink residues. Thus they transfer ink back again to the printed substrate leaving smears that affect the printing quality.

ACE solution to avoid paper breakages and printing quality reduction at the chill roll stand is made of two static bars DE-R40 each of those influencing the paper with static charges before getting in touch with respective chill rolls. Making the paper perfectly and homogeneously bonding to chill roll' surface, thus eliminating the air-cushion and consequent creation of moistening between the two surfaces facilitating a perfect thermal exchange.

High speed, optimal thermal exchange, no more risks of paper breakages and printing quality reduction over the chill roll stand after the dryer, in web offset printing. Another successful application from ACE.



Pile Charging

Description

At bundle compensating stacker delivery, along the post press lines, the bundles of compensated signatures often result instable. Bundles tend to break up or fall apart during the process and when they pass through the strapping machine, its pressure gauge or the strapping cord tension breaks up the bundle in the turning copies. This condition creates a problem also with the palletizer, when receiving disordered and unstable bundles, to risk to jam.

ACE Pile Charging System perfectly solves the problem of instable bundles, in fact, three static charging bars, two placed at the sides and one on top of the blocking unit, transfer a powerful and homogeneous charge inside the bundle, firmly blocking it. This action prevents the bundle to break up or fall apart during its run over conveyor belts to the palletizer. By using Pile Charging System, unstrapped bundles, electrostatically blocked, can be automatically palletized by robot palletizers.

Electrostatic Reel Changeover

Description

This ACE electrostatic system is used to automatically wind up films and paper on cardboard or metallic cores without using glues or adhesive tapes.

The system is made up of a special ACE electrostatic bar and a generator. When connected, they produce a powerful and homogeneous electrostatic ionization, which makes the material adhere perfectly and firmly to the core.

The type of electrostatic bar to be used (as well as its electrostatic generator) varies depending on the machine the system WG50 will be installed on. This equipment can be used on machines with stationary or moving shafts, and is normally installed on final winders of cast-film plants, blown film extrusion lines, reeling cutters, flexo machines and more machines with final winders which allow its installation.



At right, between the cylinder and the line' shoulders, the white disk is the high voltage joint used to feed energy to the charging bar, visible underneath the cylinder.

EP3 Edge Pinning

Description

ACE's Edge Pinning electrostatic charging bars type ACE EP/3 have been designed to meet the most challenging situation during production of film on "cast" extrusion machines. In fact, its powerful action fixes the film edges onto the chill-roll at maximum operating speed in order to prevent the film neck-in (shrinking) during manufacturing process.

All ACE Edge Pinning bars are equipped with special interchangeable heads which, thanks to their technical features, ensure the highest performance, offering 100% efficiency and safety to the cast line.



Edge pinning bar visible in the foreground. Installation is including two bars, one at each edge of the film.



Front view clearly showing the pinning bar action, resulting in a flat film kept in correct position onto the chill-roll, avoiding any shrinking.

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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