



“ACE Research Center develops a new web cleaner installation for the medical sector”

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Issue n. 7

Thanks! We do not reckon there is a better way to introduce our first 2010 newsletter.

In fact, if we begin by taking stock of the difficult year which has just ended and, despite all, with a decrease in the last year's turnover, a more detailed analysis shows us in a clear way that this decrease has not been caused by the sales reduction of some products, but by the steep price decline that the market has necessarily demanded.

In concomitance with and, at the same time, contrary to all that has mentioned above, one of our departments, instead, has recorded an important growing trend, confirming the adequacy of the business choice taken by ACE of diversifying and expanding, as much as possible, its range of products.

The first thanks are addressed, thus, to our customers that, even in a difficult year for everybody, have decided to cautiously invest a part of their budget in the purchase of equipment and systems from ACE Electrostatic.

More thanks are for our agents and distributors in the world which have shared with us negotiations, sometimes difficult (not to say impossible), but which have given us important and great satisfactions once positively finalised.

Last (but certainly not least) thanks to our company collaborators, that in moments of strong tensions on the market and despite the more and more exigent demands on behalf of their customers, have known how to give their best by showing an important and sincere affection to ACE and its products. This and others are the reasons why our board of directors has decided to further invest in human resources.

From the beginning of 2010 novelties are being recorded both in the technical and in the sales department, confirming ACE burning wish to pursue its way in Research and Development, as well as its big aim: enlarging its own worldwide presence.

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NEWS:

ACE develops a new Web Cleaner installation for the medical sector

A new important and prestigious quality leap has been carried out by ACE regarding its own Web Cleaning systems range.

The R&D Center of our company, in cooperation with our technical department, has overhauled a new installation (featuring important dimensions and high technology solutions) for the cleaning of specific plastics films, which are then to be converted into pouches used as food containers for patients in hospitals.

The main feature of this cleaning installation "without contact" is that it prevents even the least contamination particles from being collected onto the film before its conversion into bags. A contaminated pouch, in fact, will also

pollute the food which is going to be introduced into it.

Maximum care has been paid to each and every single detail of the underway project.

From the mechanical point of view, new cleaning heads have been designed: they have been equipped with a particular and innovative aerodynamic profile and multiple air blades, and have been realised completely with stainless steel (fixing elements included).

These heads will be installed inside the clean room where the main converting process of the product takes place.

The filtering unit has been equipped with independent blowing and sucking groups and foresees the use of different series and models of filters, according to the efficiency and capacity degrees, and taking into account their different position inside the filtering system.

This special unit has then been installed inside a special sound-proofed cabin, built in a way that enables the operators to carry out setting, control and maintenance operations easily.



Filtering Unit of the new system
AK1000-MP

The AK1000-MP is a brand new, completely innovative system for the medical sector; once again ACE has shown its capacity to satisfy customers' specific and detailed requests, starting from clear and well defined standard functional principles of its equipment.

ROTOGRAVURE (publication):

ACE develops a new ESA "Top Loading" system

ESA, electrostatic printing assist systems are a must for rotogravure presses printing periodicals and magazines.

Many are the ESA systems produced and proposed by different manufacturers, but some of them, apart from improving print quality, have also shown obvious technical contraindications and working problems.

"Top Loading" ESA systems, abandoned for a few time in favour of other systems (Side Loading) that promised to be maintenance free, have come back in the limelight in this sector, both for installations on new presses and especially as retrofit on existing machines.

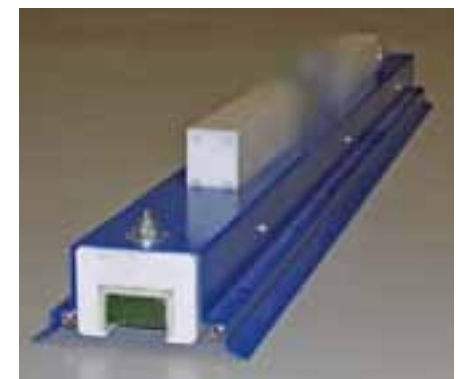
Side Loading systems have in fact clearly shown some lacks with reference to their efficiency to

improve print quality (this is particularly true with the widest webs), as well as in terms of safety and maintenance costs.

On the contrary, ACE "Top Loading DE R40/S system", has shown that charging bar electrodes remain clean without any maintenance operation up to 12/18 months. This astonishing result has been reached thanks to a new technology that combines static charge with air blowing.

Press operators who have already experienced this new introduction, have been positively surprised by the total absence of continuous and periodical maintenance of the charging bar, operation that was necessary with previous Top Loading systems, whose charging bars tended to lose their efficiency with the time.

Nevertheless, ACE R&D didn't stop developing, and, in order to meet market strong demand, has designed and developed its new Top Loading Mod. DE R40/EP system. The new charging bar is not only maintenance free, but also gives the possibility to charge only some portions of the impression roller, according to the different paper widths which are going to be printed.



ESA System - Mod. DE R40/EP

Here below some of the new system advantages:

- No more ink and dust attraction onto the impression roller edges when reduced paper widths are printed.
- Side protections, previously used to cover the charging electrodes exceeding the paper width, are no more necessary.
- DE R40/EP system allows different portions of the impression roller to be charged separately (operation that is not possible with other Top Loading and Side Loading systems on the market).



ROTOGRAVURE (packaging):

SITITALIA (SIT Group),
chooses ACE as supplier
of ESA systems

The diffusion of the ACE ESA Electrostatic Assist system is continuously increasing all over the world among rotogravure printers. Our sales department has recently won important orders in Central Europe, Asia and South America, in addition to more prestigious sales in the Italian market.

As far as the latter is concerned, we are pleased to point out the decision of **SIT Italia** to choose ACE Rotostatic ESA system for its Rotomec 3000-3R ES rotogravure press.



The customer's decision to finalize this order with ACE seems even more important, if we consider both the well-known high technological level of the factory in Pesaro, and the fact that ESA systems of other manufacturers had been previously installed on other existing rotogravure presses in the SIT Group (San Marino),

ACE new version of the system, now provided with GENIUS software and SCT (Sleeve Control Technology) integrated with the supervising PC, will allow customers to work with a top-level electrostatic assist system, able to guarantee the best printing quality on each kind of material.



At SITITALIA, definition of an exclusive process of demetalization makes it possible to realise graphics and colours with a vivid metallic effect. The technical predisposition of the machinery to the lamination and printing of materials that guarantee increasingly excellent performances, shows SIT ability to respond to new market trends, thanks to innovation, expertise, technology and efficiency.



The Group's Research and Development department, which consists of a team of highly qualified professionals, provides technical support and solutions aimed at responding to specific customer problems in the most efficient way possible. From studying new products to customer assistance, the SIT Group is a reliable partner that is always present on several levels, thus allowing for the development of innovative projects.

Furthermore, production in all plants is monitored 24 hours a day, at every stage, by the Quality Control Laboratory, on the basis of the packaging specifications requested.



SIT Group consists of two productive units dedicated to rotogravure printing, SIT San Marino (see above picture) and SIT Italia, and the plant SAREL PLAST, for the flexographic printing.



Production in individual factories guarantees a high level of flexibility, as well as ensures the realisation of products in the volumes and times and of the quality established by corporate standards.

We have decided to invest on ACE ESA systems, says Mr. Federico Palezzato, Technical responsible at Sititalia, after a deep analysis of its safety measures, the simplicity of installation and its user-friendliness. Furthermore, we have considered the reliability of ACE products, as well as the punctual and efficient assistance service provided.

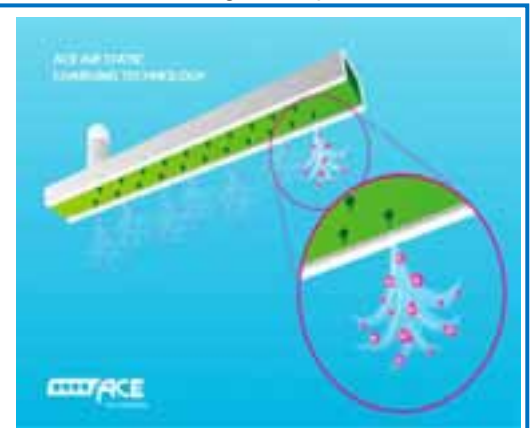
While we are writing this Newsletter more important sales of ACE Total Charge ESA systems are being recorded worldwide. Among these, the second purchase, just a few months after the first one, on behalf of a leading South-American rotogravure printer.

ACE launches the new ESA system with "Air Static Cleaning" technology.

Thanks to its aerodynamic effluvium of ionizing charge (not compressed air), which allows a continuous self-cleaning of the charging electrodes, the system does not require anymore any periodical cleaning maintenance of charging bars from dust and contamination.

Alternative systems, which use compressed air for this purpose, show the following disadvantages:

- Compressed air (and its humidity) tends to get collected onto the charging electrodes of the bar, thus damaging them and altering their proper working.
- The humidity created by compressed air is deposited on the ESA impression rubber roller / sleeve, modifying its electrical parameters, required for a correct working. The consequence is a significant increase of the risk of discharges between charging electrodes and impression rollers, that means a drastic reduction of ESA system safety.





FLEXP (packaging):

Important sales and confirmations for ACE Web Cleaning systems

The year which has just finished has proved to be very positive in terms of sales of Web Cleaners.

A steady growing trend with a double-digit percentage increase of sales represents the confirmation that Web Cleaning systems by ACE are still the benchmark point for the main machinery manufacturers, as well as for an ever growing number of printers and converters.

Paper bags printing, especially, is one of the main sectors in flexo printing where web cleaners are more and more regularly installed, almost as a standard, both for shoppers and for high capacity bags.

Indeed, paper (above all Havana paper) tends to lose lots of particles during its high-speed sliding on rollers; these particles get collected and dried on the photo-polymerical plates surface, thus preventing a proper transfer of all the ink and consequently leaving white dots on the material to be printed (see sample below).



This implies a print quality decrease and above all a remarkable increase in the intervals necessary for plates cleaning; in the worst cases, operators have to carry out cleaning operations with time intervals not superior to 10 minutes, that means relevant costs due to machine stoppages.

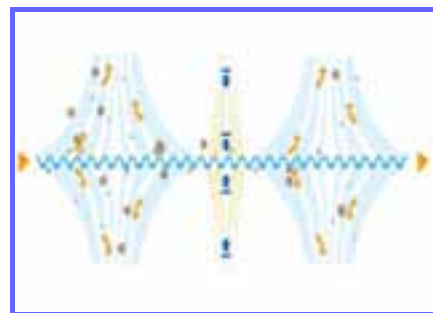
Thanks to their high efficiency, we can say that ACE Web Cleaning systems represent the solution to all the above-mentioned problems for printers and converters.

Web cleaners are usually installed after the unwinder, preferably as close as possible to the printing nip, in order to avoid that other rollers can bring about additional debris on the substrate surface after the cleaning treatment.



ACE cleaning heads are equipped with special air blades with aerodynamic profile, which create high frequency turbulence on the material, thus causing a mechanical vibration of the paper capable of breaking off the air boundary layer.

These micro-vibrations lift up even the smallest paper particles (that would not be removed from the sliding material with a simple vacuum system) which are then caught and removed by the sucking aerodynamic profiles of the cleaning head (see working schema below).



Collected particles are then conveyed to the filtering unit, connected to the cleaning head through flexible and rigid pipes that can be created according to customer's needs and demands.

Our technical office is also available to provide a system installation layout based on press drawings, in order to supply a customized solution for each

customer and flexo printing press model on the market, which will need to be equipped with such a cleaning system.



Important and leading international groups involved in printing of paper bags, as well as numerous private printers, have already found ACE Web Cleaners the perfect solution to their quality demands.

■ TUBERS:

In the same sector, more machines can also need, beside Web Cleaners, a special electrostatic charging system called "ACE Ribbon Charging".

We are talking about tubers, machines for the lamination of paper webs. For a perfect result of this production process, a static charging system is needed, as it allows a perfect adhesion of all different webs, and avoids their sliding on each other (effect due to the high speeds of the machine).

"ACE Ribbon Charging" system thanks to its special "Total Charge" technology, is able to guarantee outstanding results with both maximum and reduced widths, without showing the common problems of electrodes damaging and wasting.

In this way, huge and disturbing protections to be mounted on the border edges of the charging bars won't be needed anymore, and system long life will be guaranteed, as well as its constant performances.





FLE XO (cardboard):

New developments for the AK 3000 system

The contamination problems faced on the finished products are evident in different procedures and productive sectors.

Corrugated board sector is definitely one of them: the growing demand of higher and higher print quality has given an importance to contamination particles that so far had been neglected in most cases.

One of the most frequent inconveniences found is the non-stop dirt deposit upon the photopolymerical plates applied onto the printing cylinders of the single flexo elements; the consequences of such process are easily imaginable, in terms of quality of the final product,

as well as time necessary for cleaning operations. Once again, ACE has taken charge of the needs expressed by the operators of the sector, happy to offer an efficient solution to this kind of problems.

The new ACE **AK3000** no-contact cleaning system has been thus developed and introduced in the market. Thanks to turbulent and ionized air, properly designed aerodynamic profiles and an unprecedented blow/suction capacity, this sheet cleaner is able to remove even the smallest particles.



Placed between the paper plotter and the first printing element, the cleaning head is

manufactured in two different models, depending on the surface to be cleaned (whether upper or lower side, according to the printing technology).



The installation of the ACE AK3000 system enables to get the following results:

- Drastic reduction of downtimes necessary for the cleaning of the printing clichés.
- Ink saving
- Drastic reduction of wastes of finished products not in compliance.

FLE XO (labels):

Different solutions for plastic films and paper optimal cleaning

The web cleaners projected by ACE for the label industry keep on their non-stop expansion, gaining popularity and arising the interest of the sector operators, thanks to their working peculiarities and the construction features.

After its launch into the market, that took place during the last year, the contact cleaner, model AR800, has immediately achieved a positive answer on behalf of the market. Already installed as a standard for the cleaning mainly of plastic films, this system enables the elimination of the tiniest contaminating particles, enabling longer productive cycles and better-quality finished products, which can thus meet the ever-demanding

demands the printers are facing.

But this is not the only solution ACE Electrostatic can provide to its customers: in fact, as an alternative, a no-contact cleaning system can be supplied. This special device combines the ionizing effect of the antistatic bars with the one produced by the three alternated air blades, thus enabling an in-deep cleaning of the treated material, before the printing phases take place.

This system is particularly effective when working with different types of papers, because it allows contaminating particles and debris to be removed without spoiling the support in any way.

In fact, the no-contact web cleaner has recently proved to be especially suitable and important, for example, for wine labels paper printing.

In this case, in fact, the contact and the pressure exerted by the rubber rollers of a contact cleaner would bring about a damage which will

affect the quality of the paper itself; beside this, its sticky rollers would get saturated so frequently that working conditions would get unbearable.

Instead, the experience has confirmed us once again that in such conditions the action carried out by a air blades system is optimal and can guarantee much more elevated performances, comparable with the previously described system, when working with plastics.

An additional advantage coming from the application of such a system is the total absence of consumables, which is translated in a constant saving for the final customer, who will not need to worry about roller changing, maintenance, working controls and more, as ACE no-contact web cleaners are completely autonomous and highly reliable

ACE has the solution to Your satisfaction, no matter the type of Your printing.





CONVERTING:

Special and innovative applications for slitter rewinders.

Placed at the end of flexible packaging production process, slitter rewinders are the guarantee to get a high-quality finished product meeting the quality standards that are demanded today, thanks to their growing automation and the important performances that can be obtained with them.

ACE has developed high technological equipment devices even for these machines, due to the constantly growing demand of a superior treatment of electrostatic charges and cleaning of the webs converted with them.

■ Perfect elimination of electrostatic charges.

Particularly during the cutting phase, the complete elimination of electrostatic charges is crucial to avoid attraction of dust and dirt onto the plastic films, as they are responsible for the contamination of the finished product.

ACE can provide different systems and types of antistatic bars (standard, with air assistance, by means of impulses) for the perfect elimination of the electrostatic charges, depending on the machine they are installed on (central drum or turret slitter rewinders).



■ Electrostatic winding without using any glue or adhesive tape:

Important manufacturers of slitter rewinders have chosen the ACE "electrostatic winding" systems, in order to further enhance the automation of their machines. Our

company, in fact, can boast more than ten years experience in such applications, carried out particularly on cast and blown film extrusion line rewinders. Recently, we have expanded this concept to automatic double turret slitter rewinders.

The system starts operating for a few seconds as soon as the transversal cutting of the material to be rewinded occurs and it switches off automatically once the first material spirals have been wound over the new core.

In order to allow the whole mechanism to work properly, cores will necessarily need to be made out of cardboard (not plastic), and the materials to be treated should be either plastic films (not metallized) or light papers.

■ No-contact cleaning of the webs:

The growing need of printers and converters of plastic films to guarantee their clients an ever better quality and contamination-free finished products (particularly regarding food, medical and pharmaceutical sectors) has increased the demand of material cleaning systems to be installed on slitter rewinders.



DM 1500 Web Cleaner

The web cleaner, that ACE has developed for this kind of applications, is the DM 1500 model. Normally, the system consists of two cleaning heads (to be placed, preferably, after the cutting and the separation of material webs), and a filtering unit connected to them and placed nearby.

ACE web cleaning system can remove even the smallest contaminating particles (down to 1 micron), and their "no contact" treatment action, adjusted by proper systems of blown and sucked air, makes this device ideal to be used with all kind of materials, even the thinnest and most delicate ones.

Without problems the transport of cuttings with "Clear Tube" systems:

Centralized installations for the pneumatic transport and the recycle of waste papers and plastic films coming from the cutting and rewinding sections are getting very important and more and more popular among printers and converters.

Nevertheless, the high-speed sliding of this waste and its in-line cutting and shredding are responsible for the creation of electrostatic charges which tend to get accumulated inside these plants.

As a consequence, wastes (especially plastic film ones) will get stuck to the cyclone walls (sometimes within the tubes themselves) not enabling the regular flow of the material.

A relevant number of manufacturers of such plants have already decided to adopt the ACE "Clear Tube" system, to be integrated with their recovery lines.

ACE system consists of a tube on which antistatic bars are installed, their number varying according to the tube's diameter. The deionizing effect of these bars (connected to their high-tension feeder) eliminates completely any electrostatic charge from wastes passing among them, thus guaranteeing their proper sliding to the collecting final cyclone.



Clear Tube System

The high efficiency and reliability of ACE systems, have enabled a fast spread of such installations in the most varied sectors and with different types of materials (paper, plastic films, tissue, nonwoven), always gaining appreciation from our final customers.





SERVICE

Important acknowledgments for the ACE Technical Assistance Service:

We can state without any doubt that it can be considered one of the crucial strengths of our company: we are talking about the Assistance Service, that qualified technicians of our company are able to provide on a daily basis to our numerous customers spread all over the world.

With the growing number of our installations, and their increasingly worldwide spreading, ACE has decided to invest in a service that could enable our customers to feel fully supported not only when managing and using our systems, but also in getting quick answers and shipment, sometimes immediate, of spare parts or stock pieces.

Close to the customer in a real-time basis!

It is not a slogan, but a true reality, especially for all of our customers who have purchased an ESA electrostatic assist system. In fact, we have developed with our new ESA software a program that allows us to get connected anytime with all our installations worldwide.

In some cases, this service has even permitted us to properly restore the working of ESA systems which, due to misuses, had been modified by their original configuration.



This special service has been highly appreciated by our customers right from the beginning; some of them, after having experienced it, have also

decided to grant our company more ESA system orders to be installed on their rotogravure printing presses.

Furthermore, our service office manages a network of external technicians located in strategic areas of the world; after a proper training carried out at our headquarter, they have gained the acknowledgment of qualified people for the installation and after-sales assistance of our electrostatic systems.

This cooperation between ACE and local technicians has already given very important results in terms of efficiency and cost savings for the final customers.



Furthermore, ACE Service is directly involved in retrofit installations of our devices on printing and converting machines.

Thanks to its qualified technical staff and the important support of our office responsible for new projects, ACE Service is able to assist printers and converters from a customized layout of the most suitable installation, up to (when necessary) the installation and start-up of the system themselves.

Planned assistance:

A service of previously planned assistance is also offered by our company.

Periodical visits agreed with our customers, according to their working programs, enable them:

- to be sure that the systems installed are in the best possible working conditions.

- to keep their staff fully trained concerning the devices they work with.

Technical ability, professionalism and customer orientation: these are the main features that are giving our Service a strong reputation to our people and our company all over the world.

Best-seller for the ESA "Genius" software

The installations of our new software Genius as an upgrade to existing ESA Electrostatic Assist Systems keep proceeding successfully.

Here below the main features and functions of this new born software:

- Setting windows where the material to be printed can be selected (paper or plastic films). The system will work accordingly, with current % working values properly pre-configured by ACE. With these values, the best printing results with each kind of substrate are guaranteed, preventing the ESA system from exceeding not necessary electrical limits.

- **SCT** System (Sleeve Control Technology), that can continuously monitor the electric parameters and, consequently, the conformity of the sleeves to be used with the ESA system. This new technology confirms once again the technical ability of ACE in developing superior ESA systems in terms of both safety and functionality.

Being able to remedy possible mistakes of the operators when installing on the rotogravure press sleeves not suitable to be used with ESA, the **SCT** system can guarantee the following results and advantages in terms of safety and savings:

- no more spark or electrical leakage risks (with fire possibilities inside the printing unit), due to wrong antistatic sleeves installed (with very low or zero electrical surface resistance)

- no more production wastes for low-quality printing, due to wrong installation of completely insulating sleeves (with high electrical surface resistance).

The above software can be easily uploaded as a retrofit on existing ACE ESA systems and is by now proposed as a standard on new applications.

For this and other reasons, important printers have chosen ACE as a partner for new ESA system installations; this decision has been taken, on some occasions, after comparative tests of security and functionality carried out on their rotogravure presses which had been already equipped with devices of our competitors.





SALES:

Strategic expansion of the worldwide sales network

It's right in these moments, when the economy slows down and seems not to forecast anything positive, that a company should double its efforts, invest in new technologies, get more ad more compact internally and , why not, have a deeper look searching for new possibilities in terms of sales and opportunities.

We believe this is the only way to keep growing, despite all the problems; the way ACE Electrostatic conceives its own philosophy, that leads to a non-stop enlargement and improvement of its range of solutions, as well as a constant search for new markets which could be potentially interesting, in the near future, if not immediately.



Shilp Ultratech staff during an official visit to Italy

ACE has decided to move straight in this direction since a long time, investing and focusing its efforts and resources on the expansion of its brand identification worldwide, in order to conquer prestigious international customers who can appreciate the highly technological and top quality level of its systems. That is what has already happened all over the Italian country and is happening step by step worldwide.

First of all, in this sense the arise to an undisputed leading position of ACE Electrostatic in South America can be considered.

Here, in fact, the already strong

relationships with our precious partners, have allowed us to close important and prestigious negotiations with top-class customers settled in most of the countries of this big part of the world.

But the main attention is now paid mostly on the Asiatic continent, that ACE has recently declared as its clear target in terms of sales expected growth results for the 2010 which has just started.



ACE in Japan with Nihon S&H

In particular, ACE has focused on key markets such as India, China and Japan, recognised worldwide as the leading economies of the whole continent. Anyway, this has been done without forgetting the south-eastern part of Asia and the Middle East, realities experiencing a constant development and thus more and more interesting everyday.

In the Indian sub-continent, a recent strategic agreement has been reached with the company Shilp Ultratech, a division of the very popular cylinder engraver Shilp Gravures, well-known and appreciated not only in India, but also outside the country for the quality of the products supplied, as well as its professionalism and reliability. Shilp Ultratech is a branch that has been established as a provider of advanced solutions for quality keen manufacturers, printers and converters, always looking for new devices to improve their production processes.

The wide range of products already offered to its customers has been completed with our electrostatic systems that, right from the beginning, have arisen the interest of top-class customers, ready to equip their machines with Italian technology, in order to come closer to quality standards which are typical of the

European countries.

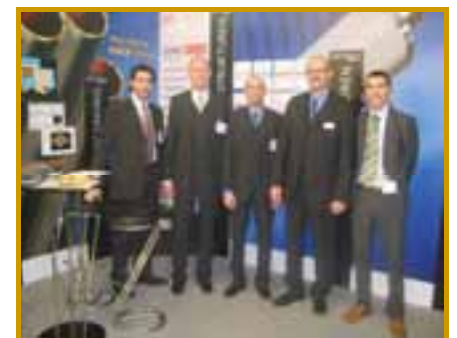
Shilp Ultratech staff also includes skilled and properly trained technicians, who will be able to assist our company during the installation operations on site, as well as to guarantee final customers an excellent after-sales service.

As we previously said, important progresses in Asia have also been done in Japan, where ACE has signed an agreement with the company Nihon S&H, another popular solutions provider for the printing and converting world, as well as an esteemed collaborator of some of the most important Italian companies operating in these sectors. Even in this case, first results have been pretty stimulating for ACE, which is proud of being appreciated for its quality and technology in a country which has based its impeccable reputation on these characteristics.

Finally, a very important news concerning the biggest European market, the German one. Germany, in fact, has put out its hand to the introduction of ACE systems in its market.

The company which has taken on this ambitious and rewarding challenge is Eswe-Flex, a guideline company in terms of rollers provider in printing and converting sectors. During their visit to our plant, Eswe-Flex staff has personally appreciated the performance of the products provided by ACE, and thus decided to become our agent responsible for German-speaking countries.

And these are just some of the most recent news: we are sure that 2010 will speak a lot about ACE Electrostatic.



With Eswe-Flex at the ICE trade fair

