



# Infection Prevention

A report on the important role  
of Laundry Cycle Management  
in UK care homes







# Electrolux



*"It's safe to say we're saving a lot of money on laundering our microfiber mops and cloths. I'd recommend other hospitals investigate OPL solutions provided by Electrolux Professional if they get the opportunity in terms of infection control and also greater control over their internal processes."*

**Adrian Clarke**  
Domestic Services Manager  
at Milton Keynes Hospital





*"We knew what type of laundry we were aiming for and Electrolux Professional matched our specific criteria. Our barrier laundry is our most important feature and provides complete cleanliness and also peace of mind for our staff."*

**Lisa Wellings**  
Project Manager  
at Kingfisher Court





# Electrolux Professional Laundry Solutions

**Electrolux Professional**, part of the Electrolux Group, offers food service and laundry solutions for professional users. Our smart products and worldwide service network make customers' lives easier and more profitable. With eight manufacturing plants and 10,000 service technicians in 140 countries, we conduct our business in a sustainable way. In 2014, Electrolux Professional had global sales of over £455 million and 2,600 employees.

## The UK care sector: An overview

"With the average age of the British population on the rise, and budgets – particularly in the public sector – as tight as ever, the facilities that support those in need are under mounting pressure to deliver to high standards. This, coupled with the fact that people who may have occupied hospitals for their residential care many years ago are now more likely to live in a care home, means that the industry is faced with a need to evolve and adapt to accommodate a growing demand for its services. Not only that, but the rise in National Living Wage from April 2016, means care homes will be under pressure to find additional funds for staffing – much of which may need to be generated through operational savings.

"Given the ever-present risk of cross infection leading to the outbreak of disease, a rising concern within the healthcare industry is how to combat the spread of bacteria by adopting and maintaining the correct

hygiene procedures throughout every cleaning function. The Care Quality Commission and Public Health England's ongoing quest to minimise the number of Healthcare Associated Infections typifies the need for standardised cleaning processes to be adopted on an industry-wide scale.

"As laundry is a potential carrier of healthcare acquired infections, it is vital that care home staff are able to control its flow, which often means special measures must be taken to ensure hygiene levels are maintained. The ultimate aim is to make sure laundry items themselves do not pose a threat to health and remain harmless at every stage of their storage, usage, and handling. This means that clean linen needs to be handled just as carefully as the dirty, which in turn gives rise to a multi-staged management of the laundry cycle.

"Proper care and attention to the laundering of linen can have a huge impact on infection control in

a healthcare environment, where bed sheets, pillow cases, blankets and residents' garments are often the main vehicle of transmission for superbugs. It can be forgotten that cleaning in general has two main objectives; non-biological cleaning to restore appearance, and hygienic cleaning to keep linen free of the kinds of microorganisms which can pose significant health risks.

"Each step between linen being removed and replaced needs to be completely controlled, extending as far as the transportation of linen, and how long it is stored before being disinfected. Taking a broader approach to Laundry Cycle Management in this way can be the difference between an aesthetically clean environment, and a hygienically clean one."

**Amanda Dufrane**  
Care Segment Manager  
Electrolux Professional  
UK and Ireland



# Executive summary

With some 19,000 care homes registered in the UK, the care industry is not only responsible for the overall welfare of its dependents, but also has a duty to ensure its staff have the knowledge and skillsets required to adopt laundry best practice. This report aims to take a closer look at the specific role care homes' laundry functions are playing in the overall delivery of hygiene and welfare.

*The report is based upon the results of an online survey, which gauged the views of over 160 care home managers and operators, and will offer a series of insights into, and explanations for, the perceptions of laundry systems in the care environment. Crucially, the survey's respondents represent both the public and private sectors, organisations of varying sizes, and both elderly and disability care; giving a cross-section of Britain's care industry as a whole.*

*As well as exploring how cleanliness in a care home is managed, the findings go some way to uncovering whether the use of an on-premises laundry can make a difference in minimising the risk of infection outbreak, and consequently assure staff – and*

*the residents they care for – that contamination can be completely avoided.*

*The research will also take a closer look at the potential for differing attitudes towards laundry processes between those in managerial positions, and those tasked with the day-to-day operations of a care facility.*

*With a need for effective laundry processes and contamination management to be standardised, the concept of Laundry Cycle Management and the manner in which it can impact on existing behaviours will be introduced – giving the sector an achievable objective to work towards.*





# The role of laundry in contamination control

75%

feel the laundering of their residents' clothing has a link to their happiness as individuals

69%

see the loss or damage of clothing as being a highly important concern to the residents' families

15%

rank contamination through linen as being their main concern when it comes to managing cleanliness

Over 75 per cent of those surveyed feel the laundering of their residents' clothing has a link to their happiness as individuals, with 69 per cent seeing the loss or damage of clothing as being a highly important concern to the residents' families. While this may indicate that staff realise the importance of looking after the clothing of those in care, just 15 per cent ranked contamination through linen as being their main concern when it comes to managing cleanliness.

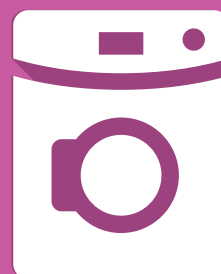
29%

do not think that all staff at their care home fully understand the difference between visual and hygienic cleanliness

The discrepancy between these figures shows that the difference between visual cleanliness and biological cleanliness is one that not enough of the industry's professionals consider to form part of their daily duties. In fact, when asked, 29 per cent of respondents did not think that all staff at their care home fully understood the difference between visual and hygienic cleanliness.

Amanda Dufrane comments:

*"The key point here is that just because something looks clean doesn't necessarily mean it is hygienically clean, and this is a fact that needs to be further up the industry's agenda. There is a belief that not everyone responsible for laundry processes fully understands the difference between the two, so it is time we questioned why nobody is taking action and doing something about it. Through a better understanding of Laundry Cycle Management, residents can be kept much safer; offering that all-important peace of mind to their families in the process."*







**5%**

have knowingly experienced an instance where an infection outbreak was traceable to laundry procedures specifically

**26%**

do not feel their laundry is managed in a way which completely avoids contamination

Just 5 per cent of the survey's respondents had knowingly experienced an instance where an infection outbreak could be traceable to laundry procedures specifically. That anyone would admit to laundry having been the cause of an outbreak is in itself alarming, but this figure also calls into question how many operators and managers have the ability to trace any kind of outbreak back to a specific department within their establishment. Over a quarter (26 per cent) of those surveyed do not feel their laundry is managed in a way which completely avoids contamination, which underlines how vital it is that work is done to significantly reduce this figure.

Today's care homes would be well-advised to consider management systems such as the Risk Analysis Bio-contamination control (RABC) system, which work to avoid indirect contamination through laundry first and foremost. In the unlikely event that there is an infection outbreak, such systems enable the incident to be traced back to its source, which can prove invaluable. Although a myriad of issues such as funding, maintaining the living space, or managing medication may naturally take priority at present, proper management of the laundry cycle should be treated with as much, if not even more, importance.



## Acknowledging the room for improvement

31%

of care home staff rank their laundry procedures as having the biggest scope for improvement when it comes to guaranteeing cleanliness

With as many as 31 per cent of care home staff ranking their laundry procedures as the area of the care home with the biggest scope for improvement when it comes to guaranteeing cleanliness, it is hugely important that the laundry industry's manufacturers, suppliers, governing bodies, and trade associations play their part in giving these staff the help they need. The fact that nearly a third of those working in the care sector have identified the potential to improve their laundry practices represents a golden opportunity for the concept of Laundry Cycle Management to be brought to the fore – and for support to be offered when it comes to using it effectively.

55%

state that general employee training is the area that could be most improved

What is evident within the care sector is that there is a hunger for training and a willingness for staff to build on their own knowledge and skillsets. Over half of respondents (55 per cent) stated that general employee training was the area that could be most improved, which proves that managing hygiene comes down to more than just investing in the latest equipment – it needs to be used to its full capability.

Amanda Dufrane comments:

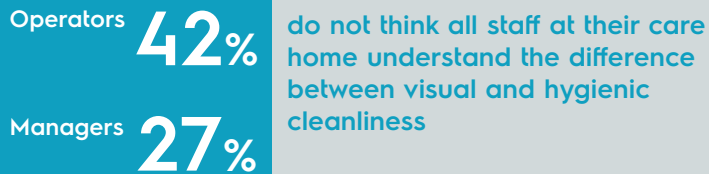
*"We should take encouragement from the fact that so many of the industry's professionals are open to the idea of training in order to right the wrongs they may have encountered in their daily duties. The latest barrier laundry concepts certainly go some way to offering complete hygiene assurance whilst playing their part in helping care homes to achieve positive resident wellbeing ratings, but can only do that if staff have a full understanding of how to use these systems to their full capabilities."*





## Inconsistent attitudes to laundry management

An interesting sub-plot to the survey is the way in which it uncovered startling differences in care home operators' attitudes towards laundry procedures, compared with their managers'.



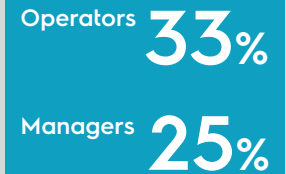
Worryingly, 42 per cent of the operators surveyed admitted that they do not think all staff at their care home understand the difference between visual and hygienic cleanliness. With this confession having also been made by 27 per cent of care home managers, there is a huge job to be done in educating the industry on the importance of this difference and the need to wash linen and clothing to hygienic standards.

Amanda Dufrane comments:

*"Nearly half of operators admitting they don't think staff at their facility understand the difference between visual and hygienic cleanliness is a huge concern that the industry needs to address. There is a high probability that residents within a care environment are being put at risk of serious illness and this is a risk that needs to be eliminated before a severe outbreak occurs."*

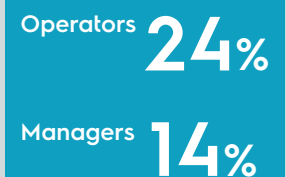


do not feel their laundry system is managed in a way that completely avoids contamination



According to the Journal of Clinical Microbiology, potentially life-threatening superbugs, including MRSA, can live in fabrics for up to 90 days. By raising awareness of the dangers of such superbugs, and the important role of a well-managed laundry operation, the sector can significantly mitigate risks. This is backed up by the fact that a third (33 per cent) of operators and a quarter (25 per cent) of managers do not feel their laundry system is managed in a way that completely avoids contamination. With plenty of room for improvement evident from these results, now is certainly the time for the concept of infection control in laundry to be brought to the fore.

feel contamination through linen is their prime concern when it comes to managing cleanliness



While 24 per cent of operators rank contamination through linen as their prime concern when it comes to managing cleanliness, just 14 per cent of managers feel the same way. Both of these statistics are undoubtedly high enough to be a concern, yet it is arguably more worrying that managers don't appear to hold laundry in as high regard as those operating the equipment when it comes to keeping their environment as clean as possible.

With managers responsible for ever-tightening budgets, there is a concern that laundry processes in the care sector are in danger of not being allocated the investment they need to be brought up to the highest standards.

The survey's findings uncover a huge opportunity for care professionals to implement a Laundry Cycle Management process to eliminate health risks. Not only that, but they also highlight the evident connection laundry processes have with care home residents' overall wellbeing and the vested interest of these residents' families in how clothing is looked after on site.



# Electrolux Professional Laundry Solutions

7

## Clean Linen Transportation

Clean linen should be transported back to source via pre-established clean linen routes



clean zones

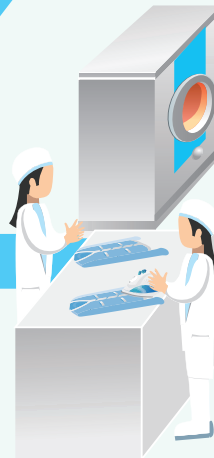
## Laundry Cycle Management

A Critical Component in C

6

## Storing Clean Linen

Clean linen should be stored securely in appropriate trolleys or areas of the laundry, to reduce risk of recontamination



5

## Drying and Finishing

Drying and finishing must be performed as soon as possible after washing to avoid recontamination. This process also provides a further level of thermal disinfection



Contact us for your free Laundry Cycle Management Pack:

Electrolux Professional  
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- Set up of clean zones, whether u
- Barrier washers (recommended to e



8

## Storing of Clean Linen in the Care Home

Wood shelving should be replaced with alternatives such as metal or plastic shelving only, as wood is porous and can harbour germs

Follow the 'first in first out' principle. Linen stored longest should be used first, to avoid prolonged storage times



1

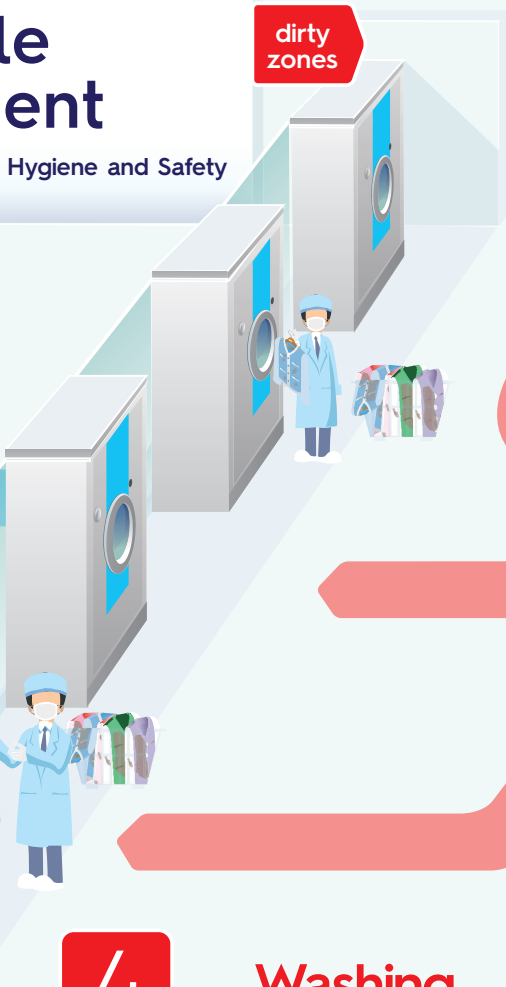
### Presorting

Dirty linen must be presorted at point of collection according to textile family



## Washing Cycle Management

in Care Home Hygiene and Safety



dirty zones

2

### Dirty Linen Transportation

Correct trolleys and dedicated routes for dirty linen, to avoid contamination of environment



3

### Sorting

Before washing, check linen for sharp objects and other waste.

\*Note - do not open red bags!



4

### Washing

Choose the correct wash formula (temperature & chemicals) based on the fabric type



to clean zones and dirty zones in your laundry room, or using a barrier or traditional laundry

s (front load and rear unload washing machines) are to effectively prevent cross contamination of laundry



Electrolux

# Conclusions

## A case for Laundry Cycle Management

One of the main revelations made by the survey as a whole is that professionals working in the care sector don't yet understand the concept of Laundry Cycle Management or the impact it can have on the way they manage hygiene and safety.

The vast majority of care home staff recognise that there is a link between the laundering of their residents clothing and their happiness as individuals. While staff will do everything in their power to limit loss or damage, avoiding contamination doesn't quite sit near the top of their agenda at present. The lack of awareness of the difference between visual cleanliness and hygienic cleanliness is a hurdle that needs to be overcome.

### Process validation

Linen which is contaminated anywhere care is undertaken is likely to contain any one, or even a multitude of visible and non-visible contaminants. Particularly given the volume of staff who are unconvinced that their colleagues truly understand the difference between visual and hygienic cleanliness, it is paramount that industry guidelines are followed and that a strict process validation system is in place. As a result, operators and their managers can be absolutely sure that their facilities act as a top defence

against micro-organisms and cross infections.

It has become clear that laundry involves much more than just the touch of a button and, from cleaning a variety of garments safely to making sure bed linen and upholstery are hygienically clean, each stage of the journey needs to be managed individually.

### A critical component for hygiene and safety

As detailed by the infographic on pages 10-11, Laundry Cycle Management essentially describes the all-encompassing process of managing linen from when it is collected, all the way through to how clean linen is stored once washed. The key to successful Laundry Cycle Management is that every step is monitored so as to significantly minimise the risk of contamination.

### Raising the barrier

The latest innovations in the barrier laundry concept offer care home managers added peace of



mind in the fight against infection and can be the difference between an aesthetically clean environment, and a hygienically clean one.

By ensuring that items are loaded from one side of the machine when dirty, and unloaded from the opposite, clean side when the cycle has finished, operators can be assured that there is absolutely no chance of re-contamination where soiled sheets may have left bacteria.

Managers and those with procurement responsibility should look for equipment which utilises additional features capable of maximising the efficiency of the barrier concept. For example, machines which will not allow laundry to be unloaded from the clean side before a full wash program is complete will further reduce risk of contamination. Moreover, the latest machines offer traceability throughout the whole cleaning procedure, meaning that each process can be tracked - and information stored - should any incidents arise.



## An explanation of each key stage of the Laundry Cycle Management is as follows:

- 1. Pre-sorting:** the first stage of the process entails pre-sorting dirty linen by textile family at the point of collection. This means keeping cottons together with other cottons and doing the same with wools, synthetics, delicates and any other fabric needing to be processed. By doing this, each type of material can be washed using the most appropriate formula, with no risk of damage or contamination.
- 2. Dirty linen transportation:** just as important as avoiding contamination of the linen itself is preventing contamination of the surrounding environment. Proper packaging and dedicated routes for dirty linen will help to avert this.
- 3. Sorting:** Before cleaning, linen should be checked for sharp devices and other waste products that may risk harming the linen.
- 4. Washing:** With the linen having been sorted, it is at this point that the right temperature and chemicals can be selected based on the fabric type.
- 5. Drying & Finishing:** Both drying and ironing should be performed as soon as possible after washing to prevent recontamination. This process also provides a further level of thermal disinfection.
- 6. Packing clean linen:** Similarly, once ironed, it is important that clean linen is packed securely to reduce the risk of contamination from the external environment.
- 7. Post-wash transportation:** Like the transportation of dirty linen prior to washing, it is vital that clean linen is transported to its point of use via pre-established clean linen routes.
- 8. Storing of clean linen:** Over time, it is the storage of clean linen that will ultimately protect it from damage by micro-organisms. Wooden shelving should be replaced with alternatives such as metal or plastic to keep the risk of micro-organism growth in the wood itself to a minimum. Equally important is the need to use the linen which has been stowed away for the longest first, which will help to avoid prolonged storage times.

### Taking care with Electrolux Professional

At Electrolux Professional, we have extensively researched how to create the most functional and reliable laundering environment to provide the fastest and safest machine operation for the care sector.

The Line 5000 barrier washer has been designed with all of this in mind. Unique to these machines is the Electrolux Hygiene Watchdog, which ensures that any wash program is performed in full before it allows unloading on the clean side.

To assure best practice, all washing cycles in the advanced process must either possess a thermal disinfection cycle that

reaches 71°C for at least three minutes, or 65°C for at least ten minutes. Alternatively, the equipment must commence a chemical disinfectant process that satisfies the requirements in the section 'Disinfection of linen' in the 'Management and Provision' Volume of CFPP 01-04. Heavily soiled items or foul and infected laundry should have a sluice wash before the main programme starts. In this regard, operators can benefit from Electrolux Professional's efficient dosing validation, which delivers the best linen quality and can save both time and detergent, thanks to its automatic dosing of detergent.

As the first and only HACCP International Certified laundry manufacturer, Electrolux

Professional's equipment will offer care home managers and operators further peace of mind as they look toward refined contamination control in their environment.

Those investing should look toward a laundry facility and associated procedures which guarantee complete peace of mind for operators, not to mention the safety and dignity of every resident.

Working with manufacturers and seeking bespoke industry laundering solutions guarantees control over the whole laundry process and could prove to be the difference between an aesthetically clean care home, and a hygienically clean one.

# Where hygiene belongs

## Safety first at leading Warrington care home



With staff working in a care home environment constantly being tasked to deliver only the highest of standards when it comes to hygiene, Belong Warrington is showing how a successfully-managed laundry system can play a vital part in infection control.

The Belong Group is part of CLS Care Services Ltd; one of the largest providers of care homes in the North West, and a recognised market leader in dementia care. Built in the summer of 2014, Belong Warrington is a £9.5 million state-of-the-art care village, which is not only home to 72 residents, but also boasts 18 independent living apartments. With a bistro, spa, hair salon, events venue and even a gym, there is a whole manner of facilities available to residents and the local community. Organised days out, activities, and parties, give the residents opportunities to socialise and be entertained within the safety and comfort of their own home.

### No barrier to infection control

In contrast to the unreliable equipment endured by many older care facilities, Belong Warrington is able to allow every one of its residents and their families the assurance that comes with a state-of-the-art barrier laundry system – a suite of technologies designed and laid out to completely avoid any risk of bacterial contamination.

The main laundry comprises of two Electrolux Professional WB5180H Barrier Washing Machines; each of which sits between the laundry's pre- and post-wash areas. This ensures that items are loaded from one side of the machine when dirty and unloaded from a separate, clean side, when the cycle has finished – allowing operators to make sure that there is absolutely no chance of re-contamination. Electrolux Professional's Hygiene Watchdog ensures that any wash program performs to its end before it allows unloading on the clean side for the most robust of hygiene guarantees. Each washing machine also boasts the lightest and largest doors on the market; making it simple to operate.

Thanks to a wall which provides a barrier that avoids any potential for dirty laundry to come into contact with clean, the housekeeping staff at Belong Warrington are able to process all residents' laundry according to a set of Laundry Cycle Management procedures which maximises hygiene.

Jo Watson, head housekeeper at Belong Warrington, explains: "From the outset, the laundry was specifically designed to avoid cross-contamination. The Barrier system we have in place is central to that, but it can only perform to its full capabilities if staff ensure they follow the specific management process we have in place."

### Practice makes perfect

Every housekeeper is required to put on their Personal Protective Equipment (PPE) before emptying the collected laundry into the washing machine on the dirty side. Once they have selected the appropriate setting on the washing machine, they will then walk into an area between the dirty





and clean rooms, where PPE is removed and hands are cleaned before entering the clean side of the laundry.

Once the cycle has finished, the clean linen is emptied into a basket and taken over to the two T5550 tumble dryers, where the appropriate program is selected and excellent finishing results are guaranteed. With a 550l capacity, each dryer is designed specifically to ensure safe and simple operation thanks to its large door opening, easy-to-use interface, and low noise levels. The final action is for each item to be finished and ironed where required using the Electrolux bed type ironer, before being stored appropriately. For those items of clothing requiring extra attention and precision, the use of an ironing table allows for a neat finish.

With the need to ensure each and every item is delivered clean, both from a hygiene and aesthetic perspective, sluice washes are the laundry department's biggest challenge.

Jo continues: "When a resident has a soiled item of clothing to be washed, it is put in a red dissolvable bag, which indicates that it is foul and infected. The default wash setting for this is 71°C, but as some clothes are delicate and need to be washed at a lower temperature, it is important that we select the correct program for delicates so clothes are not returned damaged.

"The best thing about the barrier washing machines we have is the ease in which we are able to change the settings to suit our requirements. I can wash a soiled delicate item on a lower temperature, but change the dosing to that of a foul and infected item, and all at the press of a button."

### Delivering high standards

Each independent living apartment has one W555H Commercial Washing Machine and one T5130C Single Pocket Dryer to enable residents to do their own washing. However they also have the luxury of sending it for the housekeeping staff to wash, dry, and iron, within the same day. With high demand for its services, simple operation of the laundry equipment is vital – something the staff at Belong Warrington have come to expect having relied on their equipment since it was installed a year ago.

Jo concludes: "The best thing about the equipment is how easy it is to use. Although the technology driving each process is very advanced, the interface is simple as a cycle can be started with the push of just a couple of buttons. Not only that, but the cycles are fast and efficient and the machines are able to take a lot on without breaking down or causing us any issues.

"The washing machines are undoubtedly our most vital piece of kit. They are literally running all day, and the vast majority of washes are sluice, yet they still continue to do their job effectively every time. The layout of the laundry certainly helps productivity and cleanliness, but that wouldn't be possible without the style of the machines, and their placement – which Electrolux helped us to design. The system we have in place here at our Warrington Village has worked so well that identical systems have already been specified for our next three villages."

For more information about Electrolux Professional and its range of commercial laundry equipment, visit:

[www.electrolux.co.uk/professional](http://www.electrolux.co.uk/professional)



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Electrolux Professional  
Addington Way  
Luton  
Bedfordshire  
LU4 9QQ

Phone: 08444 631 261  
Email: [epr.info@electrolux.co.uk](mailto:epr.info@electrolux.co.uk)  
Web: [www.electrolux.co.uk/professional](http://www.electrolux.co.uk/professional)

## Excellence

with the environment in mind

- ▶ All our factories are ISO 14001-certified
- ▶ All our solutions are designed for low consumption of water, energy, detergents and harmful emissions
- ▶ In recent years over 70% of our product features have been updated with the environmental needs of our customers in mind
- ▶ Our technology is ROHS and REACH compliant and over 95% recyclable
- ▶ Our products are 100% quality tested by experts

