



Food Processing

Managing Director's Introduction



"With over 35 years in the hygiene technology industry, Holchem brings together high quality products and a client focused service. It's a business that was started by my father in Holcombe Brook when he saw a gap in the market for a company that supplied high quality, specialist cleaning products matched with an unrivalled customer service. It has grown steadily year on year to become the market leading supplier of chemical cleaning solutions across the UK and Ireland in a number of specialist sectors.

The business ethics today echo the ethos of the family business and now with a workforce in excess of 200 people, we still put great emphasis on those family values; building a business that delivers solutions for its clients whilst always being a thoroughly enjoyable place to work. Many of the team around me have been with the business since its early years and together we continue to develop and build a company that is constantly evolving. Our in-house R&D division

brings new hygiene solutions to market to meet the ever-changing needs of our diverse client base; often working with our customers in the heart of their businesses to deliver a cleaning solution that is bespoke to not just that industry, or that sector, but that particular business.

Food processing has been a fundamental part of the growth of the business from day one and as such we have systems and expertise in place that leads the industry. Crucially, we have customers that have been with us since the start of that journey, because they trust us to do the job properly every single time, year on year. The mantra of our company "do what you say you are going to do" remains unchanged in the thirty five years of business underpinning our core values of hard work, innovation, trust and professionalism.

At Holchem our strength lies in our people, with values of delivering on promises found through every level of the business. Working as 'one team' all of our staff aim to deliver a five star service ensuring that our clients benefit from a company they can trust. We never accept defeat and we always find a solution to our customers' challenges and we always deliver on our promises and exceed the expectations of our customers. As a result our company has grown year on year for the past thirty five years and we are looking forward to continuing that growth for many years to come."

A handwritten signature in black ink, appearing to read 'Simon Bell'.

Simon Bell



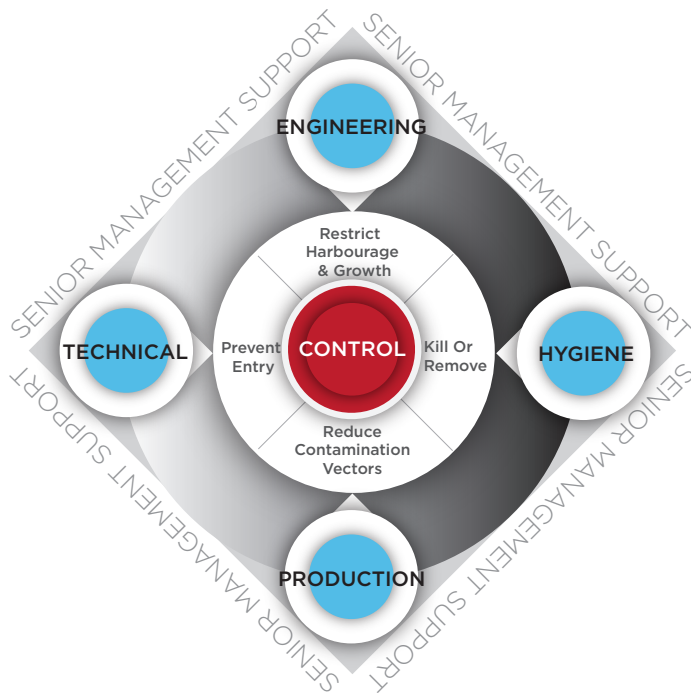
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Developing A Hygiene Plan

With all food production processes, both equipment and surfaces become contaminated with food residues, foreign bodies and microbial contamination. The removal of these contaminants, soil, is the process of cleaning. Cleaning should always be considered an essential and integral part of the production process.



Pathogen Management

Effective pathogen control requires senior management support, alongside specific input across technical, production, engineering and hygiene functions. A pathogen management plan underpins the prominent role each of these functions play in delivering the required best practice level of pathogen control.

Pathogen control is focused on five key themes:

1. Preventing day-to-day entry of the pathogen into the factory and especially into high hygiene areas using effective barriers.
2. Ensuring the manufacturing infrastructure (building structure, equipment and utensils) cannot harbour and/or allow the growth of the pathogen.
3. Ensuring production practices limit the cross-contamination vectors that can carry pathogens from sources to product or product contact surfaces.
4. Designing an effective cleaning and disinfection programme that will kill or remove any pathogen that has entered the high hygiene areas within the current production time frame.
5. Providing an environmental sampling programme which monitors and verifies pathogen control procedures and maximises early detection of a pathogen in the production environment to facilitate immediate control.

Hazard Management

The objectives of a cleaning and disinfection programme are:

- To control a hazard such as a pathogen or an allergen.
- To control a brand protection issue such as the presence of meat in a product labelled 'suitable for vegetarians'.
- To prevent quality and organoleptic issues in subsequent products e.g. the presence of previous products, colours or taints, or to promote process control or safety e.g. prevent fouling of heat-exchangers.

Allergen Management

With the ever-increasing awareness and importance of producing foods that clearly label if a product contains known allergens, either as a deliberate ingredient or as a possible contaminant, Allergen Risk Assessments and Management must be introduced to the food process.

These systems will avoid the unintentional presence of allergens in products, with an evaluation of the likelihood of allergen cross-contamination throughout the production process from raw materials to product.

Existing Good Manufacturing Practice (GMP) controls will assist with allergen management; for instance: avoiding cross contamination via segregation and the use of separate utensils and PPE. In many ways allergen management is an extension of programmes that are already in place.

Validated cleaning is essential as part of allergen control to ensure that allergens are not an unintentional ingredient for the food or beverage being produced.



Holchem provide proactive technical guidance which is available via our technical sales and support teams. We also offer a range of relevant, specialist courses on subjects which form a key part in delivering the optimum pathogen or allergen management procedures, including cleaning and disinfection programmes.

Holchem can also deliver reactive support to businesses that require immediate assistance in the management of issues, and the deployment of processing area decontamination strategies.

The basis of the pathogen and allergen management plans can also be used to manage other hazards, such as brand protection issues; for instance, meat speciation.

Validation, Verification and Monitoring

Hygiene tasks needed to control microbiological and allergenic hazards require validation to demonstrate that they are fit for purpose; this is a requirement of many retail audit standards.

Such controls also need frequent monitoring and verification to demonstrate their on-going effectiveness. In addition, other hygiene tasks such as cleaning to control the cross-contamination of food materials between product runs, or hand hygiene procedures, require more routine monitoring and verification, often to a less sensitive level.

To control a hazard, it is recommended that the cleaning and disinfection of a surface that is exposed to product (product contact surface), is validated. Cleaning validation is not necessarily required for potentially non-critical cleaning of floors, walls and the outside of equipment, unless required by risk assessment.

Cleaning validation involves showing that the defined cleaning sequence and associated parameters achieve the desired cleaning result for a given set of soiling conditions.

Cleaning verification is on-going confirmation through testing or evidence that the cleaning process is meeting the specified standards.



Technical guidance from the Holchem support teams assists customers through the process of validation and the setting up of monitoring and verification plans.

We provide our customers with effective and reliable test kits and equipment for the validation, verification and on-going monitoring of cleaning and hygiene tasks. The choice of test will depend on the hazard that is being controlled (microbiological, physical, chemical) and the level of sensitivity required.

The Validation, Monitoring & Verification Tests catalogue is available on our website.

Safety

We must ensure that the cleaning and disinfection processes, carried out both routinely and periodically, can be done safely and effectively.

To do this we need cleaning instructions that complement the safe systems of work on-site, effective products with the least hazards possible, effective and accurate dosing systems and above all well trained and competent cleaning operatives.

Holchem work tirelessly to protect the safety of both customers and our own staff, with an integrated approach ensuring that products, dispense and application systems, hygiene management systems and training enable cleaning tasks to be carried out in an effective and safe way.

Environment

Cleaning and disinfection will always have an impact on the environment; this is true for all the techniques that we might employ.

The impacts occur generally because of energy usage, water usage, effluent discharges and packaging waste. By optimising the cleaning products and methods, cleaning can be carried out effectively but with less effect on the environment.

The concept of environmentally friendly chemicals, green chemistry and reduced environmental impact is a complex one. It is important to remember that detergents and disinfectants are heavily regulated by instruments such as the Detergent Regulations, the Biocidal Products Regulation and Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

One of the prime objectives of all these regulations is to provide a high level of protection of human health and the environment from the use of chemicals.

Each year there are recovery and recycling targets for UK businesses to meet, which are designed to enable the UK to comply with the Packaging Waste Directive.

It is important to encourage the return, launder and re-use of packaging where possible.



Managing the sustainability of both products and business is massively important to us. We work to protect and lessen our impact on the environment wherever possible. We operate to business management standards, with ISO 9001 ensuring we meet the requirements of our customers to continuously improve our operations, whilst our Environmental Management System ISO 14001 ensures we manage our environmental impact.

By re-using 25 litre kegs, drums and IBC's as well as palletised containers, we go further than solely meeting our obligations under legislation to minimise the impact of packaging as much as we can. Holchem uses returned, laundered and inspected 25 litre containers for more than 50% of its annual production. We do this by encouraging our customers to return empty and rinsed storage containers; which then allows us to fully launder and reuse them.

Choosing A Hygiene Support Company

Expertise and Support

It is important to ensure that any support company has the breadth of technical knowledge and industry expertise to be able to understand your business and the challenges you face. In addition, the support should be local to provide a timely response to issues.

Our locally based field team have in-depth knowledge of their customers, delivering product solutions that respond to a business issue or need. The Technical Centre team back up the field-based teams with analytical and problem solving expertise for our customers.

Sustainability

It is important that not only the products that a company sells are sustainable but that the business is also sustainable.

Philosophy

The philosophy of supplier and client will not always match, but where they do long standing partnerships tend to develop, benefiting both parties.

The mantra of “do what you say you are going to do” remains unchanged since the business was started and the family values of hard work, innovation, trust and professionalism underpin every aspect of our business.

The company was born in 1982 in Bury, Greater Manchester by Steve and Anne Bell, who saw a gap in the UK market for a company which both supplied high quality, specialist cleaning products, and provided unrivalled customer service. Now in its fourth decade, Holchem and its staff continue to deliver 360-degree hygiene solutions to a range of clients through innovative technology and a commitment to service levels which ensures that many of the current clients have been with the business since its inception.



The move to a new chemical supplier isn't particularly easy however the transition to working with Holchem was a very smooth process. In my various roles I have worked with Holchem for over 12 years and always found them to deliver over and above their objectives. The team really got under the skin of our requirements, the nature of the business and understood and solved the issues inherited from our previous supplier. Our new processes and the chemical products we use are now fit for purpose for the hygiene standards that we require and meet our economical demands. The four key factors that are most important to us are a clean factory, the chemicals we are using are doing their job correctly, the staff are trained on how to use them correctly and we produce clean food. Holchem has helped us achieve these objectives over and above our demands and they meet their promises time after time.



How We Can Help

Cleaning Advice

The Holchem team, from sales to scientists, work closely with businesses to advise on all aspects of hygiene including: the selection and application of cleaning and disinfection products, dosing and control, pathogen management, allergen management, cleaning advice, hygiene management systems, training and system audit and review.

The Technical Centre team back up the field-based teams with analytical and problem solving expertise for our customers and is staffed by scientists with experience in a wide range of fields, including Product Development, Scientific Investigation, Chemical Legislation and Quality Control.

The state-of-the-art laboratory at our head office has access to a range of investigative tools including FTIR and X-ray Spectroscopy, Force Gauges and Surface Tension measurement as well as traditional wet chemistry.

A purpose built 'wet test' laboratory allows us to simulate many site cleaning operations and is used for product evaluation and for customer training.

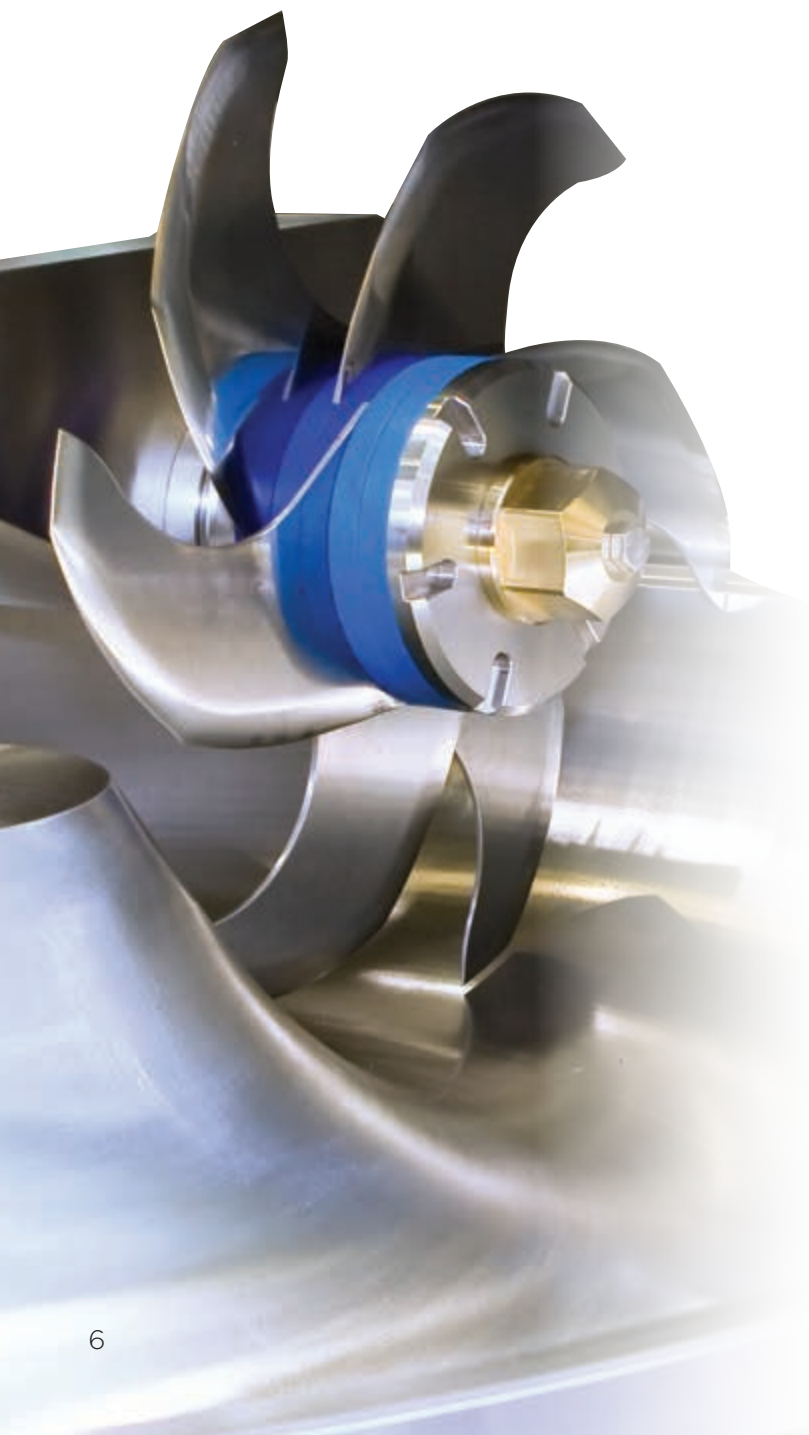
Holchem are members and supportive of the activities and/or committees of the British Association for Chemical Specialities (BACS), the Society of Food Hygiene and Technology (SOFHT), the Society of Dairy Technology (SDT) and Campden BRI.

Holchem also work closely with ZERO2FIVE, the Cardiff Metropolitan University's Food Industry Centre and other universities.

By working with customers and building long-lasting relationships Holchem strive to provide tailor-made cleaning solutions, delivering real results.

The advice we offer has a track record of making a material difference for our clients.

The teams provide on-going reactive and investigative technical advice.



Optimisation

As the cost of cleaning for businesses continues to steadily rise, there is increased pressure on profitability. As part of Holchem's drive to provide a full range of hygiene solutions, we utilise bespoke programmes to make sure our customers are attaining the best level of clean, at the best value. Cleaning needs to be carried out in such a manner that is effective, efficient, without causing damage to personnel, equipment or surfaces and without causing cross or re-contamination.

Cleaning methods need to be reviewed when changes are made which affect risk or process or in the light of new developments, such as cleaning detergents or cleaning tools.

Such reviews can be used to identify opportunities for improvement, but must be carried out against clearly defined objectives; whether this is to improve the efficacy of the clean, to provide a reduction in the cost of cleaning or reduce the cleaning time, allowing a greater process plant up-time.



“Lessening the amount of time that our factory needs to stop production to clean the membrane filter has changed the way we operate, and allowed us to increase productivity and ensure more produce can reach our customers.”

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Holchem work closely with our customers utilising 'cost of clean' benchmarking models and, in the case of CIP, data logging systems to establish the performance of the current cleaning programme before any change.

Our 'cost of clean' model provides an easy to use tool for our customers to calculate the overall cost of a clean, taking into consideration detergent, disinfectant, labour, energy, water and effluent. Once the cost of cleaning for an operation has been determined, the model allows the user to create various scenarios to determine where potential savings can be made, or to benchmark against other areas or sites.

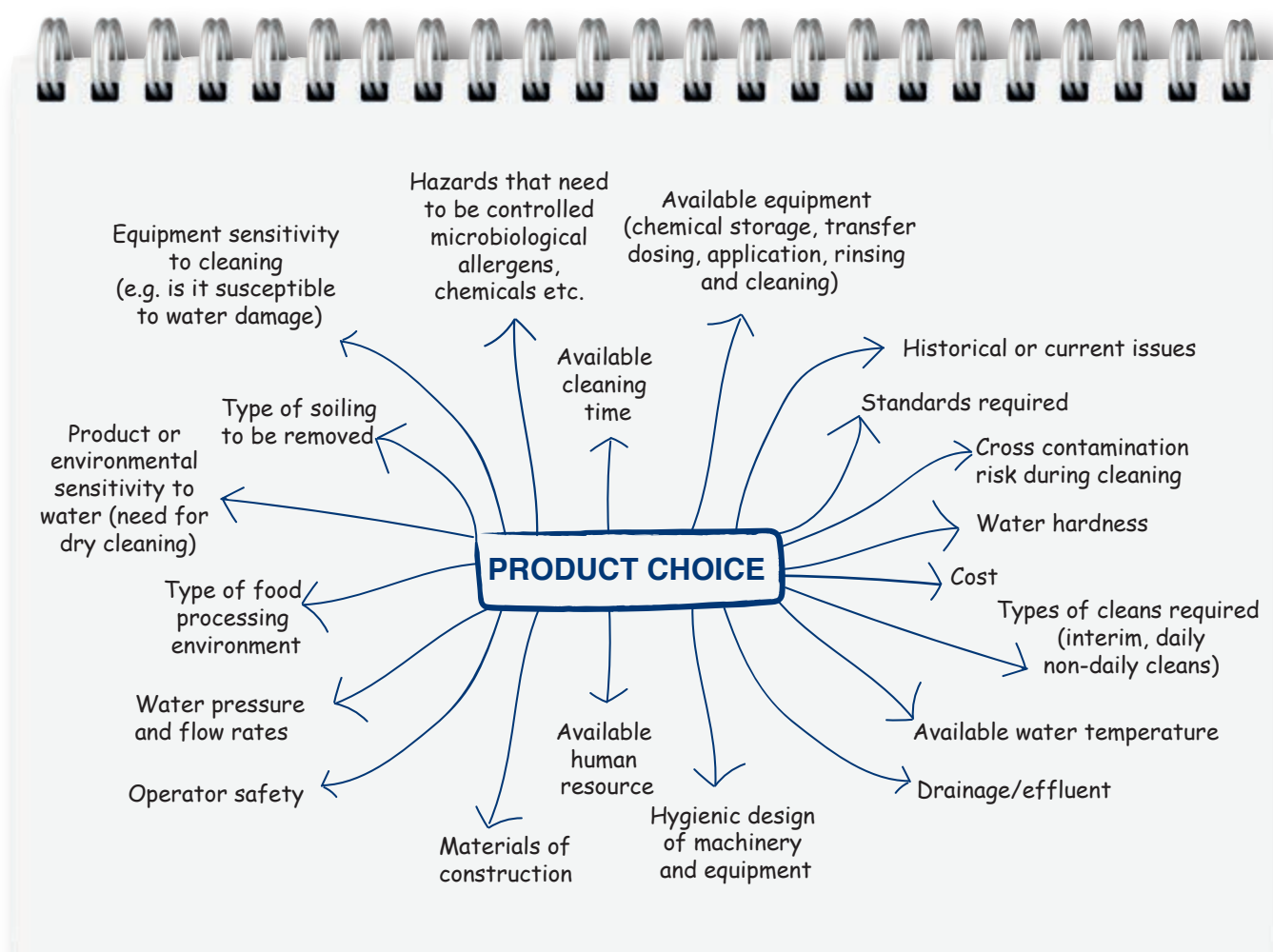
Where sites have CIP sets with little or no capability of recording process variables, such as conductivity, temperature or flow rate, Holchem install data logging instrumentation to allow subsequent analysis of the cycle.

Cleaning

With all food production processes, equipment and surfaces become contaminated with food residues, foreign bodies and microbial contamination. Cleaning is an essential and integral part of the production process as it removes these contaminants. It must be carried out effectively and efficiently to deliver the desired results.

The timing and frequency that cleaning is carried out must be set by risk assessment of the product and process, as well as analysing the potential cross contamination risks from the cleaning itself.

Detergent products tend to be grouped by their main chemical characteristic, such as alkaline, acidic, caustic, chlorinated or neutral. There are many products within each group that are developed to meet the varied soils and conditions encountered. The cleaning methods and products employed are designed to best meet the many factors shown below.



The roll of the hygiene support company is to use their experience and technical knowledge to best match and optimise the cleaning method to the cleaning requirements of the equipment or area. Although there will be specific best solutions for individual pieces of equipment or areas it is often not feasible or sensible to have several different cleaning methods in an area. Again, the skill of the support company working with the site hygiene team is utilised to develop a simple and manageable cleaning programme for the site.

Detergents

Detergents are chemicals designed to assist in the removal of soil from a surface.

Open plant cleaning detergents may be applied manually, as a soak, or by foam. The chemistry of action on the soil is the same, but with foam cleaning the product is designed to enable long contact times with soil on equipment and surfaces.

Detergents used within recirculation systems such as CIP are designed to be low foaming and because of the lower risk of human contact tend to be highly caustic or highly acidic products.

Disinfectants

After the cleaning of surfaces and equipment there may be a need to reduce any residual micro-organisms present, to a safe level, by using a disinfectant.

To achieve the required hygiene result it is vital that the surface to be disinfected is free of food soil or chemical residues.

Disinfectants used in the food, beverage and food service sectors are designed to have low toxicity and taint profiles, working against the organisms of concern which are generally pathogens and food spoilage organisms.

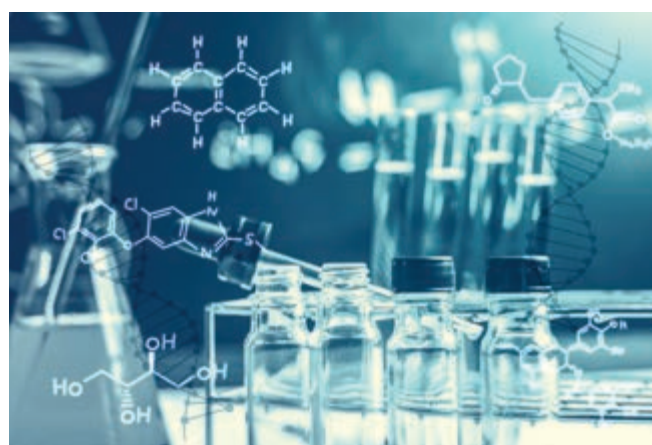
The performance of a disinfectant relies largely on the contact time and the concentration of chemical used. With some effective in minutes, but with most recommended to be left in contact for 15 minutes.



Hand Care

A hand care system which delivers the necessary level of hygiene whilst causing minimum skin irritation is required to ensure that contamination risks are minimised.

Holchem provide all our customers with a wealth of expertise and a comprehensive hand care management system, coupled with an extensive range of hand hygiene products that meet all the requirements of each individual customer. These products include a range of cartridge and pouring hand soaps, hand sanitisers and re-moisturisers.



Chemistry

The combination of raw materials to give the required performance of a product relies on the expertise of the chemist.

Often synergistic effects occur where the performance of the combined raw materials significantly outperform the sum of the individual components.

Supply Chain

The product is packed into a variety of pack sizes to suit the user's requirements while trying always to minimise both cost and environmental impact. The pack sizes commonly used are: 5 litre, 25 litre, 200 litre, 1000 litre and bulk supply.

Application Dosing and Control

Most of our liquid product formulations are provided as concentrates requiring dilution at the point of use at between 1% and 5%. Effective and accurate dosing of chemicals is vital for ensuring that a cleaning and disinfection process delivers the desired result. The use of reliable dosing equipment helps to ensure that these processes are consistent, chemicals are used safely and effectively and costs are controlled. Products can either be dosed neat into water to give the desired solution strength or diluted by a venturi or proportioning unit. Our Washdown, Hygiene & Cleaning Equipment catalogue details the wide range of equipment available. The equipment is available on our e-commerce website.



Engineering Support

The largest element of cost in open plant cleaning is labour. If the efficiency of the clean can be improved savings may be achieved. One option is to provide simple reliable washdown, application and dosing equipment.

For example, the introduction of medium pressure washdown, foam and disinfection systems has been shown to significantly reduce the cleaning time for medium to large areas.

In addition, semi-automated systems can be utilised to carry out 90% of the cleaning without operator involvement. For example: items such

as conveyors and spiral chillers/freezers fitted with automated or semi-automated systems are proven to be more effective and efficient than using manual means.

Our in-house team of qualified service engineers provide their expertise throughout the UK and Ireland in washdown, dosing and application equipment. In addition to the routine planned service visits, they also provide a speedy response to breakdowns and provide an advisory and investigative service.

Hygiene Management Systems



Legislation and codes of practice dictate that businesses must provide the cleaning instructions for all equipment and surfaces on site, including a system of control to show cleaning has been carried out according to the correct method.

A major element of these instructions is the Cleaning Instruction Card. Holchem's hygiene management system, Gateway, provides all documentation required to allow a business to successfully manage their hygiene operation.

Gateway is a web based system that allows both ourselves and our customers quick access for easy creation and amending of the cleaning instruction card system. This allows users to add photos, cleaning frequencies, strip down procedures, key inspection points, chemicals and cleaning tools. Gateway consists of two parts: Head Quarters (HQ) and Client. The HQ module is where each individual site is created and where basic site and area information together with authorised users are activated. In addition, different authorisation levels are set up on the system for the client's users.



The Client module is where the detailed information is entered creating each specific CIC. The Client module is used by our hygiene technologists to create the customer CICs and then if the customer chooses to manage their own system, they take control enabling an authorised site user to modify, add and delete CICs.

“Just to let you know that we have been using the Gateway system for at least the last four months and have found having access to the system has really helped us move forward when updating cleaning procedures in all areas. Being able to log on and have a user friendly programme with instant access to make changes has been instrumental in helping build upon 2 recent external Audits back in June of this year. The BRC Auditor took a great deal of interest in this facility that was offered to use by yourselves and was very complimentary.”

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Training

Delivering relevant, high quality training ensures that a business can increase, modify and develop knowledge, skills and attitude which will help to deliver an effective and efficient performance, and ensure that quality products are delivered.

Holchem's focus has been to develop a range of courses that benefit, primarily, the roles of hygiene and technical teams directly involved in the management of hygiene on their sites.

The courses are classed as Level 1, 2 and 3 reflecting broadly equivalency to the City and Guilds structure.

Level 1 courses are primarily aimed at hygiene operatives and include both tutor given and eLearning courses. The Level 2 courses, tutor given, are aimed at Hygiene Supervisors and the Level 3 courses, tutor given, at Hygiene and Technical Managers.

The courses are designed to work together building knowledge and providing delegates with an opportunity for continuous professional development. The portfolio of courses has been developed primarily as tutor given courses; but with many of the Level 1 training courses developed as interactive eLearning courses. Holchem offer training courses at their head office, on client premises and in independent locations.

The Holchem tutor led courses currently available are:

- Safe Working with Chemicals
- Hygiene Awareness for Cleaning Operatives
- Food Processing Hygiene Management
- Cleaning in Place
- Allergen Management
- Listeria Management

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“The whole 2 days from start to finish was excellent; all my expectations were not just met they were exceeded. The presentations & materials used for training the trainees were just right; the balance of class work versus hands on was perfect. No PowerPoint overload.”

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Endorsement Of Courses

All courses have been developed by experienced and trained Holchem staff in conjunction with tottrain a recognised training organisation. The Level 2 and Level 3 course assessment is through submission of a portfolio of evidence consisting of a series of 'work-books' and assignments.

All Level 2 & Level 3 courses have been endorsed by Highfield Awarding Body for Compliance.

The eLearning Academy



The beauty of the eLearning resource is that it allows the learner to access the training materials they need at a time and place that is convenient to them.

The web resource is an 'always on' service which means that learners can go at their own pace and the time in a classroom is minimised.

The web-based service is easy to use in that it creates an individual account which can then be used to purchase one of several courses. Once the course has been successfully completed a certificate of achievement is generated.

The Holchem eLearning courses currently available are:

- Safe Working with Chemicals
- Hygiene Awareness for Cleaning Operatives
- Listeria Awareness
- Allergen Awareness
- Root Cause Analysis
- Level 2 Food Safety
- HACCP
- Manual Handling
- Display Screen Equipment Assessment

I have used the eLearning academy for a number of training courses and found this learning method is ideal to fit in with our type of fast paced business. The flexibility allows the users to work through the individual modules at their own pace and return at a later date if required.

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The interactivity within the eLearning courses is great and engages with the users for enhanced learning. The feedback from all learners has been very positive and the training packages found to be user friendly and subject focussed.

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Audit and Review

Maintaining good standards of safety and hygiene depends, in part, on regular and critical self-assessment of the operational standards and practices. A successful self-auditing system is recommended to make sure these are both measured and maintained.



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We have found the background support excellent; the response to all requests was done so in a timely manner and was extremely helpful.

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Alongside this, 2nd or 3rd party audits should be utilised to review procedures with non-compliances rectified and signed off once changes have been made. All actions should be designed to prevent recurrence of the issue; i.e. identify and rectify the root cause of the identified non-conformity. The hygiene system in place should be reviewed on a regular, continuous basis but no less than annually, as well as if any change in the process or products is made.



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We have got a very strong relationship with Holchem. As a business, they share the same values as us, which is innovation and customer focus.

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