



A global leader in the latest cleaning technology solutions

As a leader in the provision of the latest cleaning technology solutions, trusted by organisations globally, our knowledge and experience of component cleaning technology is unrivalled.

Our business success has been built on three core values – to advise, to clean and protect for our customers.

Advise

From filters to baking trays, pumps to medical components we work with our customers to understand their business process and their business requirements.

Clean

Our extensive range of cleaning technology solutions and flexible way of working means that we are able to work across a wide spectrum of industries, specialisms and components. As a one off project or as an on-going contract, to suit.

Protect

Our ultimate aim is to protect your components removing contamination effectively when they are being cleaned and then packing them in a way that ensures that they remain clean until they are required for service or sale.

We can deliver the right service for you, talk to us today.

Thank you.

Call: **01254 680501**

Email: enquiries@bmlongworth.com

Visit our website: www.bmlongworth.com



Our component cleaning solutions

Enhancing the manufacturing or production process, reducing downtime, extending the lifetime of parts and reducing component replacement costs are all key business objectives in many of the industries that we work with.

For many of our clients the operation at Longworth is a perfect alternative to costly in-house cleaning investment and operation.

Our extensive range of cleaning processes allows us to confidently remove most contaminants from a wide range of components.

We meet the highest possible cleaning standards and as a result of this stringent process the success that we have delivered for our customers ensure that they keep coming back to us.

Our solutions allow us to work in many sectors and each process that we use is tailored to meet the requirements and specifications of that industry. We adhere to the latest testing and inspection procedures and hold BS EN ISO 9001:2000 accreditation.

Benefits to you:

- Cost effective alternative to component replacement or in-house cleaning
- Improved operating efficiencies from regular cleaning
- Increased lifetime of components
- Quick turnaround enables customers to have clean, packaged components within a few days
- Adherence to government and business green & sustainable policies.

Our cleaning solutions cover:

- Ultrasonic Cleaning
- Aqueous Cleaning
- Pyrolysis
- DEECOM® steam cleaning
- Clean Room Facility
- Slurry Flushing
- Testing & Monitoring

Ultrasonic cleaning

An effective and efficient cleaning solution

Our ultrasonic cleaning tanks are designed to provide a range of cleaning solutions for components that have small holes or crevices in where contamination can easily get trapped.

The operation is ideal for the removal of such contaminants as catalysts, dirt, oil, pigments, rust, grease, algae, bacteria, limescale, polishing compounds, flux agents, fingerprints, and biological debris.

Again, as with all of our solutions we work with our clients to understand the contaminant so that we can use the correct processes and evaluation techniques for maximum effectiveness of the operation.

The benefits of this process:

- Aqueous solutions are used to avoid harmful solvent cleaning processes
- Reduces the need for supplementary cleaning processes reducing costs
- Exceptional cleaning performance
- Ultrasonics remove inorganic articles as well as oils.

Perfect solution for the following industries:

Automotive, Pharmaceutical, Polymeric & Plastic, Engineering, Printing, Defence, Optical & Glassware, Electronics, Bio-science and Manufacture.







Aqueous cleaning

Designed to clean a diverse range of components

Cleaning components is an inherent part of many industrial processes either as an interim procedure prior to finishing processes such as painting, electroplating or chemical production. It is also used as the final stage to produce clean components.

The aqueous cleaning process has been proven to be a technically feasible and effective alternative to the traditional solvent based cleaning process. All of the aqueous processes used by Longworth meet all of the environmental and legislative guidelines.

The benefits of this process:

- Air agitated aqueous process to ensure all component holes and crevices are flushed out satisfactorily
- Less damaging than traditional abrasive cleaning processes
- No expensive chemical disposal costs
- Complies to latest environmental regulations.

Perfect solution for the following components:

Anilox & gravure rollers, spray gun components, food processing equipment, glassware, pipework, castings and heat exchangers.



Clean room facility

Meticulous precision cleaning of the highest standards

Our precision cleaning and controlled cleaning environments have been designed to meet ISO 14644 Class 5-1 standard, which ensures that the customers who require high specification cleaning to minimise the introduction, generation and retention of particles in the cleaning process can be reassured that our facility delivers.

The process can be tailored to your needs and is a perfect facility for medical, research, optical and pharmaceutical sector businesses where clean room standards need to meet the manufacturing specifications

The benefits of this process:

- Class 5 capability
- The concentration of airborne particles is tightly regulated
- Cleaned components can also be washed in de-mineralised water, dried in a vacuum oven and securely packaged – all within the Class 5 standard environment
- Less damaging and obstructive than normal cleaning environments
- UV inspection capability
- Avoids the need for investment in-house.

Perfect solution for the following industries:

Aerospace / Space, Bio Science, Automotive, Bespoke Engineering, Filter Manufacturing and Naval, Pharmaceutical, Medical and Optical.

Pyrolysis ovens

Highly effective process for the removal of plastic or paint coatings

Our ovens vary in size and configuration and as with all of our processes we work with you to understand the make-up of the contaminant. From this we are able to create an oven process that will effectively deliver results.

This process is extremely effective delivering exceptional results for our customers and is also environmentally friendly when compared with some traditional chemical methods. The process involves heating a contaminated component as a controlled temperature in a low oxygen environment. This has the effect of vapourising the volatile constituents of the contaminations.

The benefits of this process:

- Tailored solution to meet the client's requirements
- Less damaging than traditional cleaning processes
- No expensive chemical disposal costs
- Designed to last in an industrial environment
- Custom designed PLC control
- Complies to latest environmental regulations.

Perfect solution for the following components:

Paint jigs & frames, car & bike parts, food trays, housings, wheel trims, shock absorbers, brake pads and shop shelving.



DEECOM®

steam cleaning

Advanced and efficient
cleaning technology

Launched in 2005 Deecom® has positioned itself as a viable alternative to TEG (Tri –Ethylene Glycol) and other high temperature cleaning systems to remove polymer from a variety of components. Through research and development Deecom® was developed and patented by Longworth and is now sold globally. The technology uses clean superheated steam as a cleaning medium in a pressure swing atmosphere. Steam is absorbed into the mass whilst the low pressure swing atmosphere creates a wash effect to remove bulk residues and exfoliate particles from the component.

The benefits of this process:

- Proven to extend the filter life as it avoids harmful solvent and chemical cleaning processes
- Reduces energy consumption as the process is quicker and more effective
- Reduces the need for supplementary cleaning processes reducing costs
- Its cleaning performance is exceptional
- It is environmentally friendly.

Perfect solution for the following contaminants:

PET (Polyethylene Terephthalate), PA (Polyamide), PE (Polyethylene), and Elastomers and many more.



Slurry flushing

A consistently effective cleaning process

Our cost effective slurry flushing process consistently delivers clean components but also allows our customers to internally pre-inspect the component with an endoscope to identify heavily contaminated areas. This then allows us to focus on these areas ensuring the component is free of any blockages.

Post cleaning we will once again inspect the component with the endoscope to ensure that the process has eliminated all the contamination.

The benefits of this process:

- Reduces hot spots on rollers
- Produces consistent results with pre and post inspection
- Allows customers to focus on particular trouble spots
- The process is environmentally friendly.

Perfect solution for the following industries:

Manufacturing, Textile, Printing and Polymer Production.



Testing & monitoring

To complement the cleaning solution offer we also provide customised testing and validation service so that you achieve maximum performance levels from your components.

Our tests can be configured to meet your requirements to ensure not only the highest level of cleanliness but also to ensure that defective products are recognised and reported to you before being used.

In instances where components may require to be analysed, we arrange for independent inspections by objective third party organisations that identify any findings, via extensive testing and analysis techniques.



Our service

As with all of our customers we use our extensive experience to establish and address what type of cleaning process will achieve the best results for you in relation to the type of component and contamination, the sector that you work in and the cleaning standards required.

We believe that our service offers an alternative to component replacement, costly in-house cleaning and increased operating costs and indeed helps to extend the life of the equipment.

Our environmental vision

With the introduction of Deecom® as a more environmentally friendly alternative to the traditional TEG systems we are confident that our technology allows us to meet our environmental duties and meet legislative requirements.

We strive for continuous improvements and continue to invest in effective cleaning processes with minimum waste and hazardous solvent production both at Longworth and also with the clients where we provide consultancy and bespoke on-site solutions.





Our engineering specialists

Sometimes it makes sense to invest in cleaning processes in-house. At Longworth we have a division which is dedicated to just that.

We work with a growing number of organisations who look to Longworth for our expertise, knowledge to work in collaboration with them to design and manufacture bespoke cleaning processes to suit their individual requirements.

We work with organisations globally and our systems can be found throughout Europe, North and South America and in the Far East.

Typical projects have included:

- A Pyrolysis oven for specialist polymer engineering company, Marbill Developments in Lancashire, UK
- A Pyrolysis oven for Teflon coating company, Product Release in Merseyside, UK
- Two bespoke Deecom® cleaning systems for Carolina Filters in USA
- A bespoke cleaning facility (including a TEG system) for a Pet Bottle chip manufacturer in Indonesia.

Don't take our word for it!

We offer open, honest advice and solutions that deliver.

Our customers vary in size, sector and solutions but they all believe in our service.



"Marbill Developments are a Lancashire based specialist polymer engineering company and we use a Longworth Furnace to remove Polyurethane and Rubber from complex components, rollers and wheels, this eliminates the need to remove material from the metal cores thus ensuring the mechanical integrity of the components"



"Longworth's cleaning services are one of the chosen companies by LCUK and we have been utilising this service for more than 10 years. The Longworth service is responsive to the requirements of LCUK. We also receive guidance/advice from Longworth on our specification or ideas for change via new projects which is greatly appreciated"



"We found both the technical expertise of the staff and after sales service to be excellent and will no doubt use again next time we are in the market for a burn-off oven".



"The Porvair Filtration Group, is a specialist porous media and filtration company with expertise in a wide range of media with many years' experiences in filtration.

The Porvair Filtration Group and B&M Longworth's have a long history of working together. To have an effective partnership you need effective cleaning".

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Want to enhance your
manufacturing or production
process by extending the lifetime
of parts?

Need to reduce component
replacement costs?

Need an environmentally friendly
but highly effective cleaning
solution?



Call Longworth today for a no obligation
meeting on how we can help you and your business.

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