

MOULD DEWAXING AND CERAMIC CORE LEACHING AUTOCLAVES

For the investment
casting industry

LBBC TECHNOLOGIES
LBBC TECHNOLOGIES

SAFE  CONSISTENT  RELIABLE  SUPPORTED



Texmo have worked with LBBC for many years and their products and support always provide the reliable performance that we require in our world class foundries.

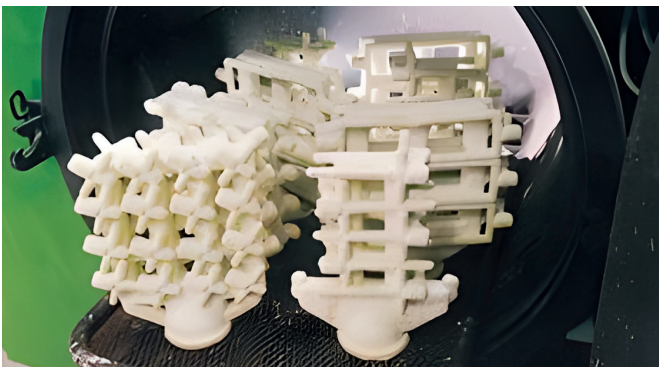


ARJUNAN RAMACHANDRAN
Managing Director » Texmo Blank

Key challenges our customers face

Investment casting plays a key role in the manufacturing supply chain for precision components used in many sectors, principally the aerospace and gas turbine market. Mould dewaxing and ceramic core removal are key processes within an investment casting foundry. However, whilst successful for many of our customers, these critical processes present a number of challenges and there is an inherent risk associated with the high pressure process used in investment casting. Poor control over the process parameters and equipment breakdowns can have a catastrophic effect on the whole production cycle exacerbated by slow service response times. From a user point of view, autoclaves can be complex to maintain, leading to inefficiency, high operating costs, and poor yield and many provide limited process or cycle data.

MOULD DEWAXING



Removing wax from moulds is a crucial step in preparing them for metal casting. While seemingly straightforward, improper execution can lead to significant issues in manufacturing. Common problems include:



**CRACKED
MOULDS**



**HIGH
MAINTENANCE**

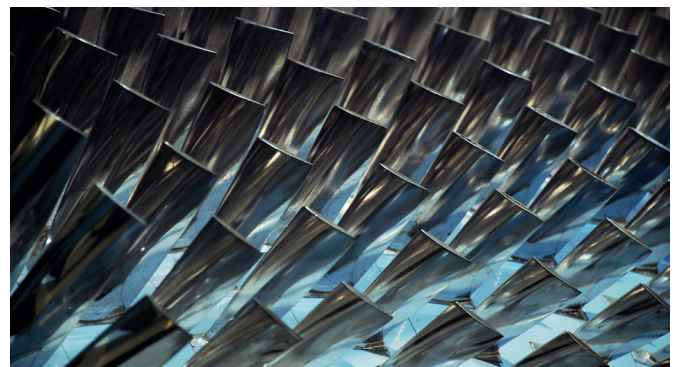


**UNRELIABLE
OPERATION**



**WAX PIPEWORK
BLOCKAGE**

CERAMIC CORE REMOVAL



Cores are typically used for aerofoils and gas turbine blades with complex passageways. Core removal is a challenging operation that requires expert process knowledge. Common issues include:



**LONG CYCLE
TIMES**



**HAZARDOUS
CHEMICAL
ENVIRONMENT**



**POOR PROCESS
KNOWLEDGE**



**INCOMPLETE/
UNPREDICTABLE
REMOVAL OF CORE**

LBBC Boilerclave[®] and Core Leaching Autoclave

Drawing from extensive collaboration with world leading investment foundries, we've tailored our products to meet their distinct needs. Our in-house design facility use top-tier components from Siemens, Allen Bradley PLC, and Festo valves to ensure reliability. Safety is paramount in our designs, demonstrated by our continued innovation in our safety systems. Our user-friendly products minimise operator involvement with pre-programmed features. We ensure consistent performance and offer comprehensive support that includes connected real-time maintenance diagnostics and a global service team.

MOULD DEWAXING BOILERCLAVE[®]

RAPID PRESSURISATION

Fast pressurisation
and consistent
steam supply

NO WAX BLOCKAGES

Steam jacketed pipework

SERVICE SUPPORT

Maintenance offering
rapid fault diagnosis
and resolution

QUICKLOCK[®] DOOR

Fast, safe operation



CERAMIC CORE LEACHING AUTOCLAVE

SAFE

Effective caustic
agitation system

CONTAINED CAUSTIC MANAGEMENT

Sealed caustic
transfer system

MINIMAL ENVIRONMENTAL IMPACT

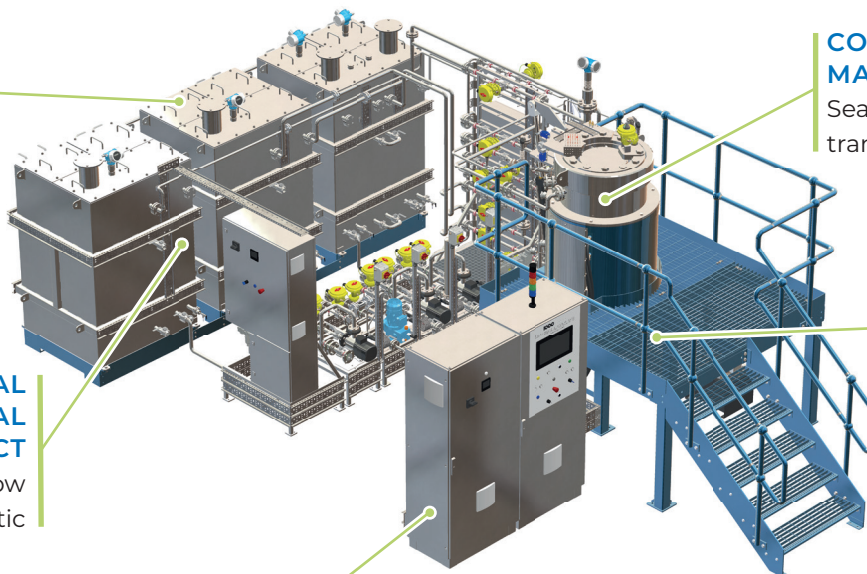
Impact using low
concentration caustic

EXTENSIVE PROCESS KNOWLEDGE

Developed with
customers

LOW MAINTENANCE

No mechanical agitation



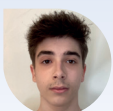
SAFE % CONSISTENT % RELIABLE % SUPPORTED

Working with us

We understand that Investment Casting machinery is a significant investment, so our aim is to make the process of purchasing and operating them as smooth and risk free as possible. Our experienced team will work alongside you throughout the project ensuring your requirements are exceeded and your equipment is delivered on schedule, wherever you are in the world.



I really enjoy working here at LBBC Technologies. The policy of reinvesting in people, equipment, and innovation for the future along with the positive and supportive culture meant that for me it was an ideal career choice as an aspiring apprentice engineer.



ETHAN HRYNDYJ
Apprentice Engineer » LBBC Technologies

Find out more

BOOK A FREE EXPLORATORY CALL

The first step to find out if we can help you with your requirements is to book an exploratory call.

This 30 minute call will be with one of our industry experts. The main objective is to understand your processes and the specification you want to achieve.

We will explain our unique approach and experience in the world of investment casting and Boilerclave® /Core Leaching Autoclave supply.

At the end of the call we will advise the best way to proceed.

Contact us on

+44 (0)113 256 2155

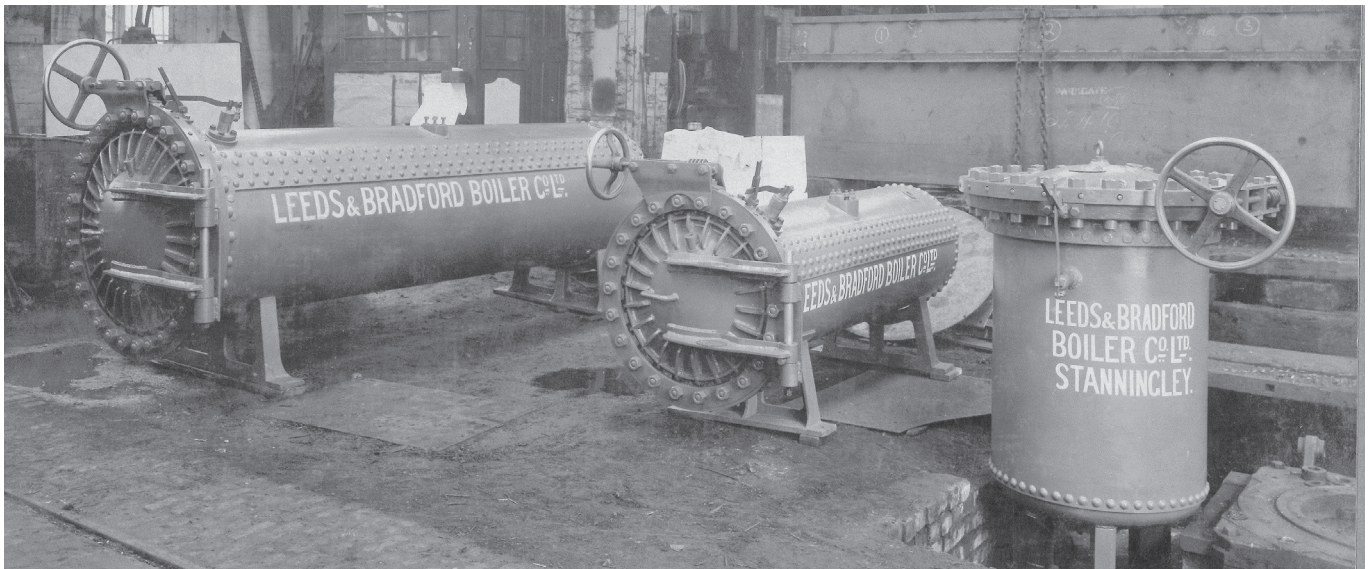
or

sales@lbbc.co.uk



About LBBC Technologies

We are a world leading manufacturer of autoclaves for mould dewaxing and ceramic core leaching for the investment casting industry.



LBBC is a 5th generation family-owned engineering company. Since 1876, the group has manufactured thousands of complex pressure vessel based assemblies for customers all over the world including BAE Systems, Rolls Royce and GE Aviation.

The LBBC Boilerclave® has become synonymous with mould dewaxing throughout the world. LBBC technology has enabled advances in the cooling design of the blade and supplies ceramic core leaching equipment to the worlds leading gas turbine manufacturers.

In depth engineering knowledge and machine capabilities at the Leeds, England site are able to provide highly technical and reliable manufacturing services. LBBC can design and manufacture to CE, ASME, and China Manufacture License standards.

With an ongoing commitment to research and innovation, LBBC Technologies regularly collaborates with UK academic institutions resulting in continuous innovation.

FOUNDED IN

1876

100s

HUNDREDS OF SERVICE VISITS
CONDUCTED EVERY YEAR

100s

HUNDREDS OF
SYSTEMS SUPPLIED

1960

FIRST PRODUCT SOLD TO
INVESTMENT CASTING

Ms

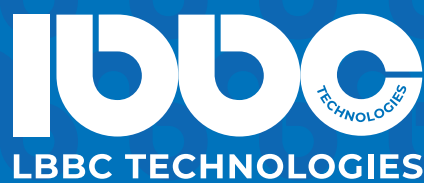
MILLIONS OF INDIVIDUAL DEWAXING
OPERATIONS PERFORMED

5th

GENERATION
FAMILY RUN BUSINESS

1000s

THOUSANDS OF AUTOCLAVES OF MANY SIZES AND
PRESSURES SUPPLIED GLOBALLY



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