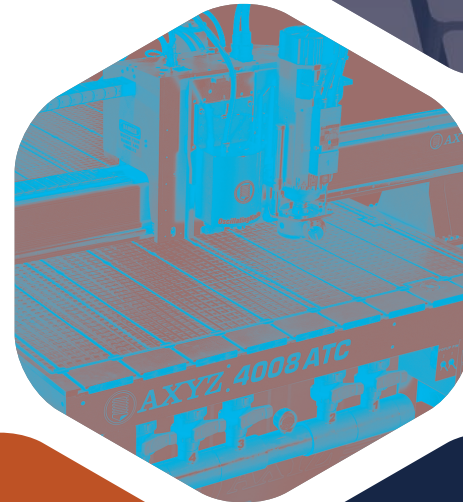




FOAM ENGINEERS
INNOVATE ▶ DESIGN ▶ MANUFACTURE

Company Profile





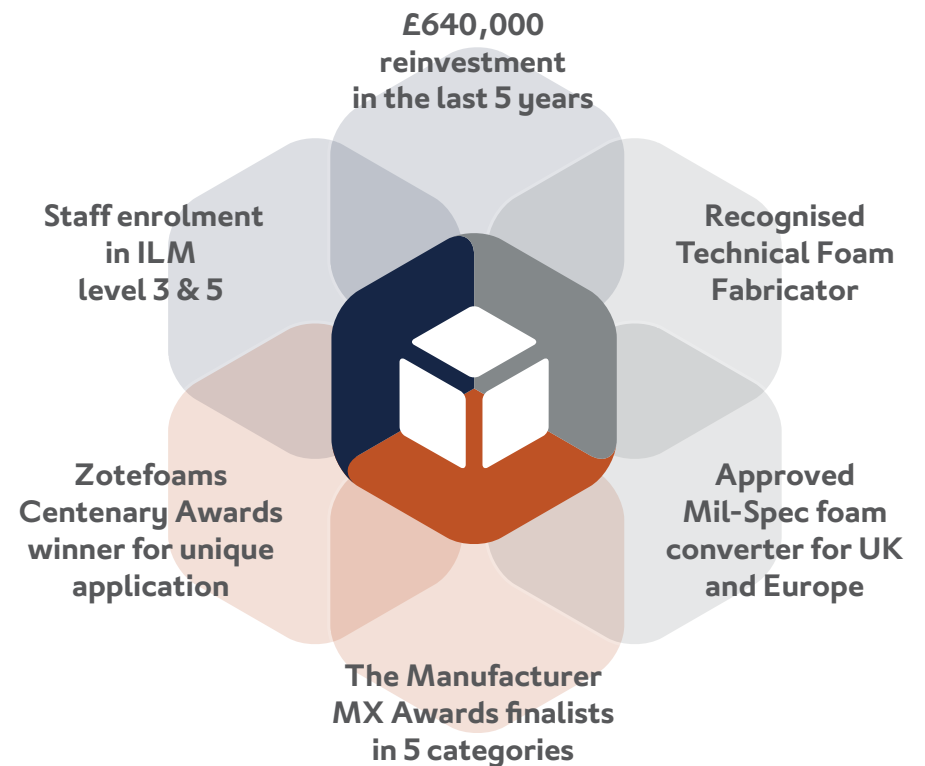
About Foam Engineers

Formed in 1928 and celebrating 94 years of heritage, Foam Engineers has built up a position of leadership and is recognised as an outstanding manufacturer. The company was invited to showcase in the prestigious Parliamentary Review Manufacturing and Services Edition.

The switch from metal springs to plastic foam

In the 1950's the Bayer Chemical Company invented and produced the first polyurethane foams. Our furniture customers were quick to see the benefits of this new and versatile material and by 1962 metal spring production had ceased and foam conversion had taken over. The company Foam Engineers was formed in 1965 to expand the market into insulation and technical products. Foam Engineers pioneered the use of foam in various applications and the company was partly owned by the Dunlop Group between 1965 and 1982.

Our Achievements





**Rated
Excellent**
★ Trustpilot

Having total control over our manufacturing means we can offer our customers unbeatable flexibility and cost efficiencies

The Headlines

- Independent company with global foam sourcing capabilities from top tier foam manufacturers
- Market leaders in design and manufacturing
- Skilled, qualified and experienced employees
- 3D CNC cutting technology
- UK's fuel tank safety foam supplier and distributor
- Rapid prototyping and technology team
- Full utilisation of the R&D tax credits and capital allowances support scheme
- Controlled Environment Rooms
- ISO 9001: 2015

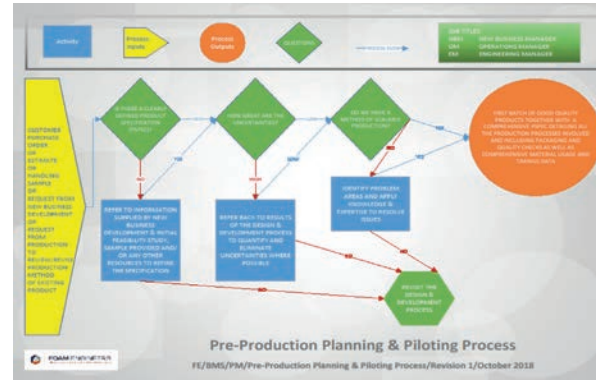
The Benefits

- Application Expertise
- Turnkey Solution – Innovation Design
- Manufacture
- Investment and training in staff and business
- Lean Enterprise Model
- Sustainable Products and Processes
- Waste Reducing Efficiencies
- Research and Investment in Eco Foams
- Cutting edge machines and equipment
- Independent family business
- Comprehensive range of material grades
- Global customer and supplier base
- Years of experience and knowledge
- Bespoke tailor-made solutions
- Quality and performance driven
- Airbus approved



Our customer product requirement challenges drive our passion to innovate

The Turnkey Solution



We have foam solutions that are tailored in both design and function, according to specific industry needs and customer requirements. We have a strong emphasis throughout the business on designing and innovating.

At Foam Engineers, we have a dedicated design and development team who have extensive knowledge and experience across a wide range of manufacturing processes and cutting methods. Our customers have a specific technical requirement which we assess, discuss, and develop through our daily new product introduction meetings. These meetings involve our sales, production, and technology teams

and allow Foam Engineers to rapidly prototype, explore new opportunities, create, and design new parts.

We pride ourselves in offering excellent and impartial guidance during the design and development process. As an independent company with global foam sourcing, we are not restricted in the selection of foam or advanced machining processes, enabling us to cut complex and technical foam products. Once a design concept has been agreed, our engineers will create initial prototypes through our technology team, which can be tested and approved before committing to any order or tooling.

We specialise in converting foam products for Aerospace, Medical, Autosport, Military and technical packaging sectors which has reinforced our experience and knowledge giving us the capability to innovate the best solution.

Manufacturing is constantly evolving, and Foam Engineers has invested heavily in new cutting technology and automated machines for specialised processes which enables Foam Engineers to create technical and complex foam products. Using a range of advanced cutting techniques allows us to achieve bespoke production of technical and essential foam products for any industry.



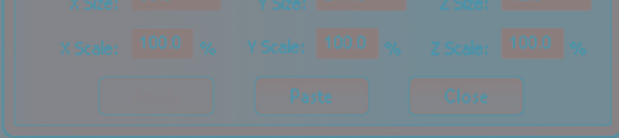
How we Innovate

Using Zotefoams Plastazote materials Foam Engineers CNC machined in 3D a Motorcycle and Moped.

Our customer, Moshon Data Ltd, who specialise in vehicle safety testing, commissioned us to design, develop and build a full scale set of motorbikes for use as props in NCAP vehicle safety testing.

The motorcycles had to be based on a Suzuki Bandit and a Vespa and needed to accommodate an internal aluminium frame to allow it to pick up the radar signature from the test vehicle.





X: 1029.6482
Y: 508.0402
Z: 8.0000

Our Approach to Design

The key is for our team is to understand our customer specifications, this is achieved through our technology and innovation team. We create lasting relationships based on trust, transparency, and open exchange of experience and know-how.

We create functional design solutions

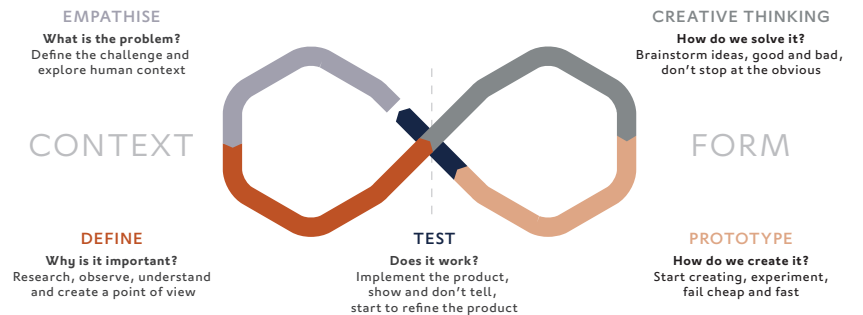
We are not afraid of the unknowns and challenges. We bring design, prototyping expertise, engineering, and knowledge of the manufacturing process to your project.

Our creative team can offer intricate knowledge in industrial design – we drive your idea from the first sketches to the real product.

Already in the first phases of the project, we use our practical knowledge of manufacturing processes and material properties. We design realistic and feasible solutions from the beginning of the collaboration.

We approach each project individually and always try to come up with the best possible solution for the technology and material.

DESIGN THINKING A FRAMEWORK FOR INNOVATION



1. Project Definition
2. Design Research
3. Concept Design
4. Cad, Visualisation, Mock-Ups
5. Design Concepts in Detail
6. Rapid Prototyping and Testing
7. Engineering
8. Create Factory documentation (works order & standard operating procedure)
9. Design for Manufacture (DFM), First off Production and Quality Control



Design for **Manufacture**

We design from scratch based on your criteria

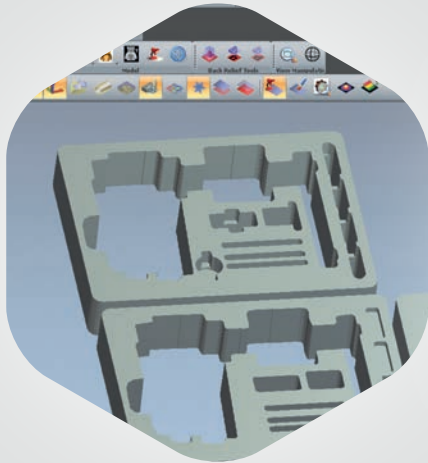
We have access to all the latest CAD software

We design rapid prototypes to full production runs

We can accept most drawing formats

We have full 3D CNC capability

Our design team are qualified and experienced



"Foam Engineers did it again - Foam Engineers did a great job again hitting our ever-decreasing deadline, 40,000 foam plugs cut, packed and delivered on time. With a great service like this, it's Foam Engineers every time."



Manufacture

Foam solutions jointly developed with our customers

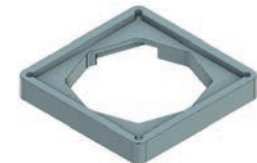
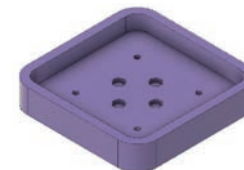
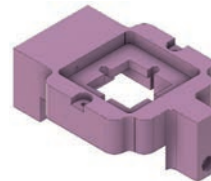
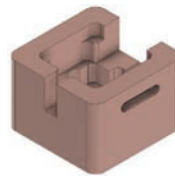
Foam Engineers has all the technologies required to create technical foam products and shapes.

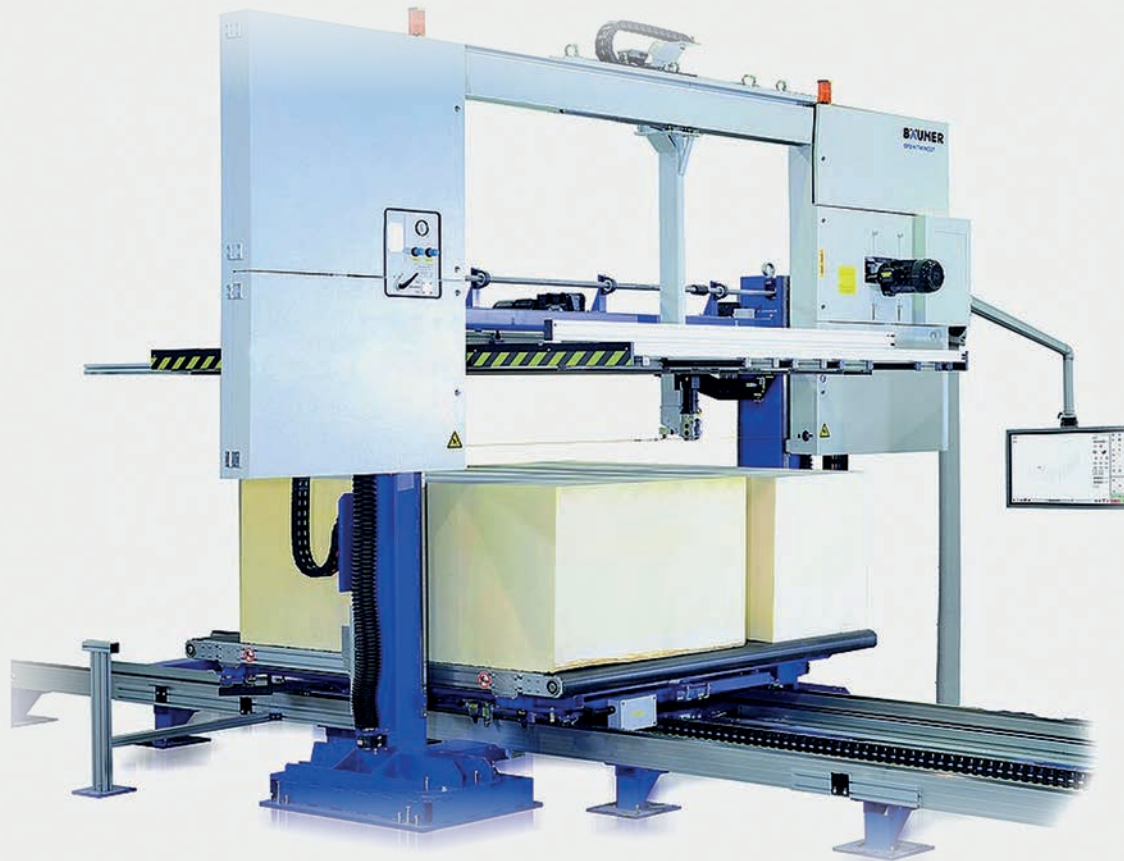
Our state-of-the-art production equipment and operations make processing and finishing possible to the highest standard. The attention to detail and quality and our strive to create precision parts are of paramount importance in our business. Our relationships with suppliers makes it possible to access a diverse range of technical foam grades to serve a wide and diverse range of applications and markets.














Foam Engineers has developed an advanced and protected way of 3D machining complex open cell reticulated foam shapes on our CNC routers creating an ultimate and unparalleled foam product for use in applications such as void filling and methods for carrying resin to solidify into a permanent structure. This application is typically found in aerospace applications using our Military specification conductive foam grades.



Cross Linked Closed Cell Polyethylene Foam supplied by Zotefoams UK allows Foam Engineers to machine precise and complex assemblies shown below. It's thanks to our technology team and CNC experience which made achieving such shapes possible, one of our latest customer products and achievements, which is now our typical CNC routed work.





-  CNC routing and knife cutting
-  CNC contour cutting
-  Moulding
-  Self-adhesive paper
-  Die cutting
-  Slitting
-  Bonding and laminating
-  Thermoforming
-  Welding
-  Drilling and cylinder production
-  Profiling
-  Hand cutting and fabrication
-  Vertical cutting

WE ARE CONVERTORS OF:

- Polyurethane
- Polyethylene
- Polyethers
- Polyesters
- Safety foam and explosion suppression foam
- Open and closed cell
- Cross-linked foams
- Anti-static foams
- Acoustic foams
- Conductive foams
- Fire retardant and class 0 foams
- Eco foams



Medical Foam

We convert and process a range of medically approved foams for various applications within the medical sector through our clean and controlled environments rooms within our facility.

We source foams approved to ISO 10993 bio compatibility standards used in a range of medical applications

Polyurethane, polyester and polyether reticulated foams available in a range of PPI and density

Hydrophilic foams in standard and antimicrobial options

Negative Pressure Wound Therapy Foams (NPWT)

"Excellent service - Excellent service and speedy delivery for urgent material needed for the NHS."

FOAM PRODUCTS FOR:

- Advance wound care
- Skin contact
- Cushioning
- Standalone dressings
- Medical wipes
- Preoperative skin preparation
- Medical swabs
- Medical devices



Explosion Suppressant and Safety Foam Specialist Converter

Explosion Suppressant Foam (ESF) is an established critical product for applications in aerospace, military and motorsport. We provide a full range of safety foam grades, approved by FIA, U.S. Air Force, Navy, Army and foreign governments.

Safety Foam can be machined and fabricated into any configuration to form inside a complex rigid or flexible bladder or rigid-type fuel tank including many sensitive and protected applications.

Reticulated Polyurethane foams for explosion suppression and surge/noise mitigation are unique materials for use in fuel tanks of aircraft, boats, military vehicles, competition, automobiles and trucks, virtually any vehicle where the possibility of fuel tank explosion exists.



MITIGATES
FUEL SPRAY

EFFECTIVELY
BAFFLES FUEL

LOWEST
LOGISTICS
SUPPORT

COST
EFFECTIVE

PREVENTS
CATASTROPHIC
EXPLOSIONS

MAINTENANCE
FREE

EFFICACY

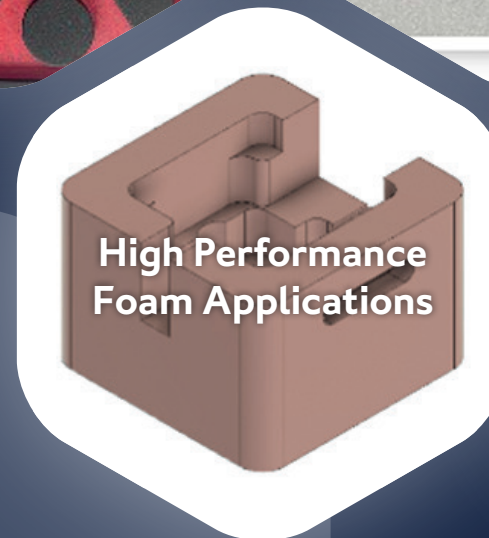
PASSIVE
OPERATION

MAY BE
FABRICATED
INTO ANY
SHAPE



Applications & Markets

- Military specification conductive foams for aerospace
- Lathe machined prosthetic limbs
- Medical devices
- Water testing
- Protective packaging
- Marine
- Water and air filtration
- Vehicle impact safety foam
- Autosport fuel tank safety foam
- Military vehicle safety foam





Foam Engineers - Meet the Team



Steve MacWhirter
Managing Director



Heather Mumford
Finance Director



Matt Wright
Commercial Director



Beth Wiles
Sales Manager



David Cordell
Engineering Manager



Lukasz Bednarek
Production & Technology
Manager



Ireneusz Kolon
Assistant Production
Manager



Natalie Brown
Customer Care &
Supply Chain Manager



Jason Rawlings
Logistics &
Warehouse Manager



Rebecca Clarke
Customer Care
Assistant



Dear Reader

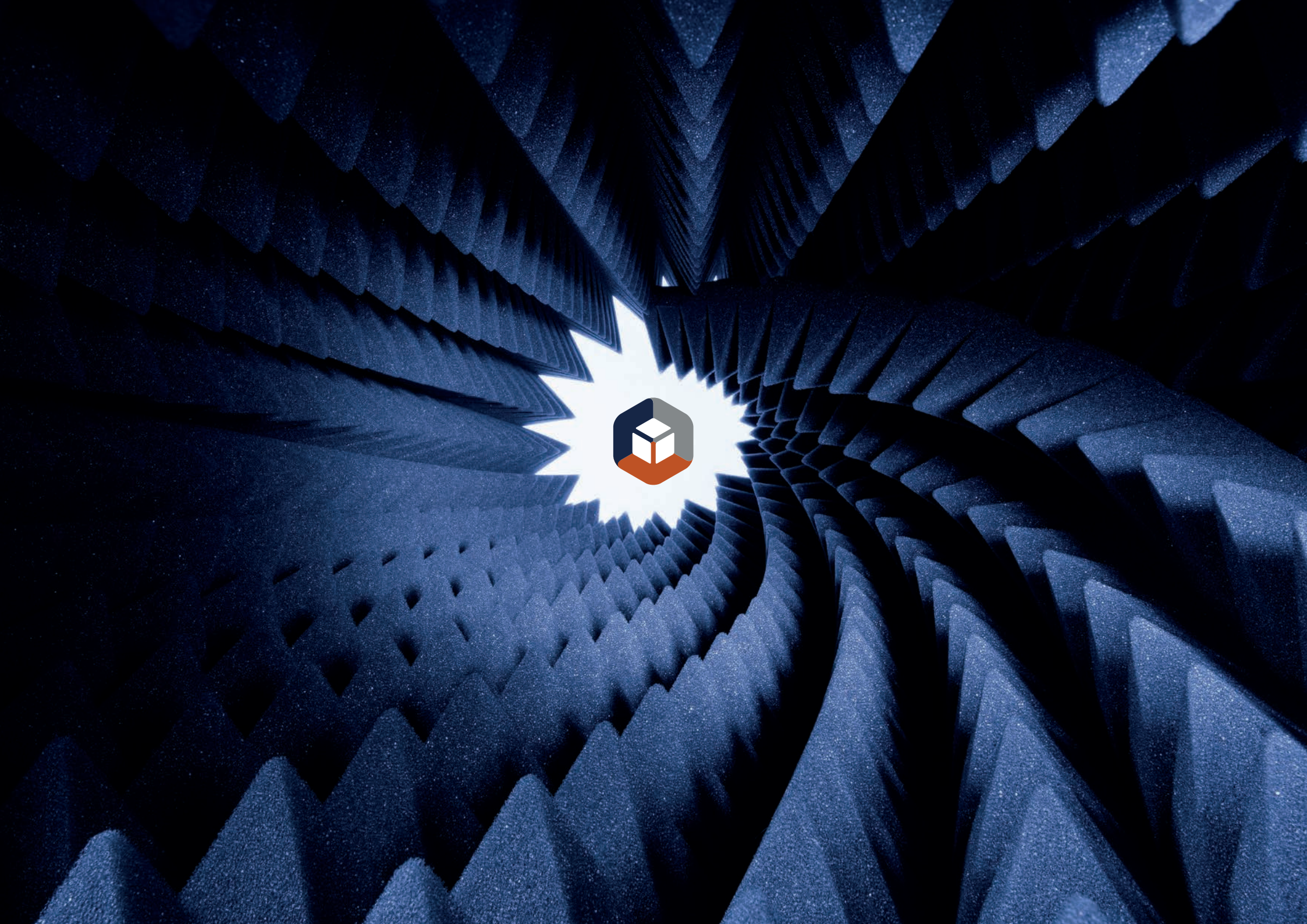
Thank you for reading this edition of the Foam Engineers brochure, we hope you found it useful and interesting and would welcome any questions or enquires you may have.

Please get in touch

www.foamengineers.co.uk

sales@foamengineers.co.uk

+44 (0) 1494 448855





FOAM ENGINEERS

INNOVATE ▶ DESIGN ▶ MANUFACTURE

FOAM ENGINEERS LIMITED

Dashwood Avenue
High Wycombe
Buckinghamshire, HP12 3EA
United Kingdom

Tel : +44 (0) 1494 448855

Fax : +44 (0) 1494 461841

Email: sales@foamengineers.co.uk

www.foamengineers.co.uk



Follow us on

