Supporting UK Manufacturing



Supporting UK Manufacturing



Introduction

About GTMA

GTMA is a UK-based engineering trade association certified to ISO 9001: 2015 (CA14472). GTMA represents leading companies in precision engineering, toolmaking, additive manufacturing, metrology and tooling technologies.

We embrace technology, procurement and supply chain initiatives to offer solutions across a full range of business needs. We have a committed strategy to focus on major market sector opportunities, from aerospace and automotive to medical and marine.

Our work with OEMs and Tier 1s has seen a significant number of manufacturers using the GTMA website to source suppliers or use our procurement service. This service provides a free of charge individual sourcing service through our Manufacturing Resource Centre which is specifically dedicated to providing supply chain solutions.

Future Strategy

Over the last few years GTMA has been involved in providing a route for sourcing engineering companies for the manufacturing supply chain.

Building on the ground work achieved through our website we now can reach over 25,000 identified manufacturers who have visited our website and this number will grow substantially as we move forward.

Though this is only about 15% of the total visitors it provides an ongoing connection with manufacturing companies and sectors in which our industry is involved. We believe that this is a very powerful tool and puts the GTMA in the driving seat to set up Cluster Groups to strengthen the Supply Chain and identify the 'lost SME engineering skills' not visible to the OEMs.

GTMA promotes the individual expertise of our members and the collective engineering resource they represent to manufacturers

Technology Focus

Overview

The UK has an abundance of companies in the engineering sector with the ability to innovate. These companies can provide not only solutions but their technology is able to be pulled through for transfer into various sectors of industry.

Innovation is the key point in tooling to support global markets and customers; continuous training is a must to maintain leverage of knowledge within the most advanced fields of materials and technology application and investment is needed to maintain a competitive edge.

Tooling is the infrastructure that supports product development.

Some of the challenges identified include:

- Continuous Fibre Injection Process (CFIP)
- Coatings and Surface Technologies
- Production of structural composite parts
- Additive Manufacturing
- Invar tooling for composite layup

Additive Manufacturing (AM) cannot be ignored as the market for products and services is forecast to grow at around 30% per year. This is helping to foster new commercial opportunities, enhance awareness and build UK capability and capacity in AM. The UK has the potential to be one of the leaders in AM development as new materials and technology are brought into scope.

As the desire to adopt composite materials increases, suppliers face mounting pressure to deliver higher volumes with increased speed and quality, reducing failure rates and manufacturing costs. Whilst material costs are a key factor for any given component, the tooling process can make a significant impact on the cost of manufacture. GTMA is working to develop the ISF process for invar tooling for composite layou and introducing the CFIP for strengthening injection moulded parts.

Incremental Sheet Forming (ISF)

GTMA was part of an EU Research programme on developing the incremental sheet forming process for the automotive industry to aid the press tool industry to offer a cost effective prototype tool. The process is suited to low volume and one-off manufacture.

ISF utilises a very small tool contact area to achieve controlled deformation with low applied loads and provides a very high accuracy and repeatability. The tooling costs and lead times are a fraction of what is currently used in traditional sheet forming operations.

Some of the benefits identified include:

- The investment in tooling is minimal and the former can be modified as the part design evolves.
- Low tooling costs and reduced lead times
- High tolerance and high level of detail can be achieved.
- Low volume, and variants produced easily.
- Ability to work hard materials -up to 5mm thick.
- Complex shapes achieved without the need for welding.
- ISF process has been developed to provide cost effective tooling for composite layup
- Invar Tooling for composite layup



Aluminium vehicle firewall

Industry Focus

Meeting the challenges of global demand

Through an understanding of sector specifics, the GTMA supports member companies in accessing opportunities to diversify and develop opportunities in cross industry knowledge transfer through the formation of Industry Cluster Groups'. These 'Cluster Groups' pull together interested companies to form a supply chain resource for manufacturers.

Technological advances and shifts in global demand place significant pressure on manufacturing supply chains. Companies need to build a diverse portfolio of work to ensure they have resilience and agility to respond to challenges. Recognising this, the GTMA has developed a strategy to identify market trends and build specific intelligence in sectors where there is supply chain demand.

GTMA has formed several sector specific and technology specific Cluster Groups, bringing together member companies to generate manufacturing supply chain opportunities.

Sector Cluster Groups

As sector demand surges and recedes manufacturers need to respond, providing capacity and capability to meet demand.

Skills and capability are often transferable between sectors but understanding sector specific procurement, accreditation, and other characteristics is essential. GTMA has already formed some sector Cluster Groups to address growing demand in the Medical, Rail, and Space industries. These sectors need manufacturing supply chains with similar characteristics seen in Automotive and Aerospace. Companies able to diversify across sectors are best placed to grow and take advantage of demand surges.





GTMA strategy to support members includes building intelligence in these sectors and engaging companies in the sector to understand their supply chain challenges. This has led to new work opportunities for GTMA members and positioned the GTMA as a 'go to' for resource. This has proved a successful strategy and will be replicated for other sectors as we recognise opportunity and demand for manufacturing supply chain products and services.

Technology Cluster Groups

As new technologies emerge there are opportunities for adoption and exploitation. An example of this is Additive Manufacture (AM), also referred to as 3D-Printing. AM has matured to a point where it can readily be integrated with more established manufacturing technology to increase productivity and capability.

GTMA has built a Cluster Group of interested companies to increase understanding and exploitation of AM, identifying manufacturing opportunities across several sectors. Further Cluster groups will be formed by the GTMA around other emerging techniques and technologies to ensure UK-based manufacturing supply chains are in place to meet demand.

UK Tooling Alliance

Our alliance of accredited toolmakers provides a complete single source for the purchase of suites of tools. The service offers a range of sector qualified, quality assured mould ϑ press toolmakers that work within a specific project management system to ensure quality, delivery and technical support for tooling.





Digital Marketing

Website and social media

GTMA's website is strategically marketed as a "one stop shop" for supply chain requirements in a variety of sectors. The website has over 3,400 products and services for buyers, providing technical and up to date information, and has dedicated Technical Experts section on the website.

Profiles of member companies on the website include press releases, case studies, technical papers, new product/service announcements, company videos, image galleries as well as links to catalogues and brochures. Analytical software has been installed on the website to search for products and services supplied by our member companies, as well as SEO.

GTMA has been able to identify over 25,000 manufacturing companies looking for suppliers to help with their supply chain needs, and this number is steadily growing. 70% of our website visitors are UK based and 30% from outside the UK.

As part of our unique service, GTMA is able to inform our members within an hour of any visitor to their profile who has searched for their products or services on line. Our many testimonials endorse the benefit this service provides to our members.

Our Social Media programme is offered as a free service to all our members and promotes their news and events in real time or as they appear in our publications.









""The Alliance Group would like to take this opportunity to thank the GTMA, for continued support and assistance. We have been found the analytical information provided by your systems to be an essential insight into our potential customer base, giving us invaluable data as to whom may be looking for one of the services we offer. The support we have received is s a complimentary element to our marketing campaign."

Ruth Whittaker, Commercial Manager, The Alliance Group

"The GTMA provide us with valuable insight into which potential customers are looking at our profile online and which services they are most interested in. The information is detailed, relevant and provided very quickly, meaning we can respond in a timely manner. Through their online Supplier Directory, the GTMA combine a powerful pro-active marketing resource with this additional, dynamic and reactive marketing service."

Caroline Faulkner, Director, Faulkner Moulds

Sector Focus Meetings

- · Meet the Toolmaker
- Make Measurement Matter Roadshow
- Additive Manufacturing Webinars
- Manufacturing Solutions UK
- · Manufacturing Solutions Ireland
- Business Webinar Programme
- Special Interest Group Webinars in Rail, Medical, Aerospace, Automotive and Technical applications

Exhibitions

- · Autosport Engineering
- MACH
- Subcon
- PDM / Interplas
- Southern & Northern Exhibitions
- · Advanced Engineering
- Med Tech

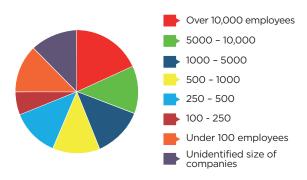




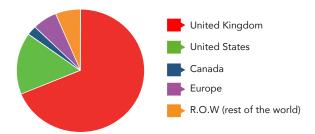
GTMA Analytics

Analytics Service Identifies 85,000 unique hits with over 25,000 companies identified.

Size of companies



Countries



Publications

GTMA produces a Supply Chain Solutions magazine to highlight technical achievements, new launches of products and services and showcasing events and exhibitions, press releases and case studies from GTMA members, together with industry news.

Each year an Executive Briefing is produced on one of the high value manufacturing sectors, such as Aerospace, Automotive, Rail, Marine, Energy, Medical and others. Included in these publications is a business zone, case studies and in depth editorial from the industry sectors.

A fortnightly Market Report on current news on manufacturing is distributed and provides a comprehensive 'bite size' comment on recent developments in the industries.

Our annual Suppliers Directory is produced from our members' profiles and is distributed to buyers at numerous exhibitions and events throughout the Year.

All our publications, press releases and case studies are all posted on our GTMA website at www.gtma.co.uk and posted on social media.

Filter your alerts

GTMA runs an analytic service that informs members within 60 minutes of a company landing on their GTMA on-line profile.





Quick guide to GTMA membership services

Business Services

- Supply Chain / Cluster Groups
- Statistical Service
- Discounted BSI standards
- · Procurement service
- Credit Reports
- · Grant funding advice
- Apprenticeship Indentures
- Surveys/International and UK Trends
- GTMA world class standards
- Fortnightly Market Reports
- Mediation Service
- Business Alert Service

Marketing Services

We can increase your web profile by:

- Keyword SEO
- Free Social Media support
- Press Releases
- · Improve your analytics
- Free report on your website
- Industry experts
- Supply Chain Solutions Magazine
- Industry Executive Briefing
- · Suppliers Directory

Events

- Engineering Exhibitions
- · Brochure Services
- GTMA Special Interest Group Meetings
- · Additive Manufacturing
- Composite Tooling
- Reshoring UK
- · Meet the Toolmaker
- GTMA Manufacturing Solutions Roadshow, UK & Ireland
- Social Media Workshops

GTMA Business Partners Provide



- Free Employment Law Helpline
- Free Health & Safety Helpline
- Free IT Systems Review
- · Recruitment Service
- Commercial & Healthcare insurance
- Business Seminars
- ISO standard specialists
- Industrial Maintenance Programme

GTMA Manufacturing Resource Centre

- Procurement Services for Manufacturers
- Product Innovation Service
- Engineering Projects
- UK Tooling Alliance

Technical Services

- Technical Experts / Member Blogs on GTMA website
- Special section on GTMA website for Technical Experts
- Technical Information on members profiles
- Supporting Development programmes
- Composite Tooling
- · Additive Manufacturing
- Incremental Sheet Forming (ISF)
- Continuous Fibre Injection Process (CFIP)
- Manufacturing systems



Certificate No: CA14472



To Join GTMA email: admin@gtma.co.uk

Spotlight Export Opportunities

NEW GTMA EXPORT HUB

The Export Hub is a new GTMA initiative designed to increase the number of GTMA SME manufacturers looking to export for the first time.

Exporting can provide new global supply chain opportunities, but with that will come new challenges to companies who may not have had previous experience of exporting.

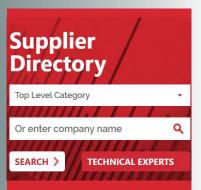
The Export Hub will look to advise and guide companies through the elements of exporting globally with information and contacts through our Export Advisor Philip Gray that could make the process a more simple process.

INTERNATIONAL PORTAL

The International Portal offers a comprehensive data on the biggest markets in your industry — and provides a full picture of where your product is in demand!



For further information or assistance please contact the GTMA Export Hub on +44 (0)121 392 8994



GTMA 'Technical Experts'

page will cover a wide range of topics relevant to the manufacturing sector and we will continually expand this area with relevant case studies, technical papers and new product/service announcement.

International Portal

GTMA Export Hub

The International Trade Portal offers comprehensive data on the biggest markets in your industry - and the fastest growing import and export flows provide a full picture of where your product is most in demand. While exporting can be difficult, the chance to dip one's toes in the international marketplace and the potential of new revenue streams, makes the task very appealing to companies of all sizes.

The Export Hub can assist and advise on key issues

- Understanding the Marketplace and Channels to Market
- Cultural Fit
- Finance
- Regulatory Compliance
- Strategy
- The Bigger picture

Support Available

- Free initial conversation
- Market assessments
- · Partner identification and initial contact
- Problem solving



ISTMA World

The International Special Tooling & Machining Association represents 30 special tooling and machining associations throughout the world. Collectively, ISTMA member associations represent over 8000 companies and over \$40 billion dollars.

United under one roof, ISTMA World directs the central coordination and organisation of all international activities in respect of: ISTMA Americas, ISTMA Asia / FADMA and ISTMA Europe.

Globalisation of markets requires the introduction of uniform terms for standard parts which has been developed as a specialized dictionary to help overcome errors in translation.

ISTMA World: Canada, United States, Mexico, Brazil, Argentina, Europe, South Africa, China, Japan.



ISTMA Technology Directory

This online and interactive technical web-based tool is invaluable for companies operating in the global market as it includes:

- International glossary for tool die and mould making
- Technical terms in three Asian and eleven Western languages
- · Search, browsing and printing functionalities
- Free of charge for GTMA members

In addition **ISTMA Statistical Year Book** provides a detailed analysis of data concerning production, exports, imports and apparent market dimension, as well as value unit indices for the most important classes of product in the industry under analysis for:

- Injection and compression moulds for plastics
- · Mould tools for metal carbides
- Tools for pressing, stamping, punching and forming (dies)
- Both year books available electronically free of charge for GTMA members

ISTMA Europe

To help national industry associations and their member companies achieve business success in the global economy through advocacy, networking, information, programmes and services.

Our objectives include:

- To act as the spokesman for the industry
- Improve industry competitiveness through research and innovation
- Promote information exchange and collaboration
- Organise conferences at European level
- Obtain the most updated statistics on the mould and die industry

ISTMA Europe countries: United Kingdom, Sweden, Finland, Estonia, Germany, Switzerland, France, Portugal, Italy, Slovenia, Czech Republic, Turkey

GTMA - UK INDUSTRY REPRESENTATIVE

Manufacturing Solutions Ireland

NOW A TWO DAY EVENT!

Manufacturing Solutions Ireland is a focal point for manufacturing technologies and engineering solutions, providing an ideal conduit for the transfer of technology from the specialist suppliers to the practical industrial landscape, where its take-up and practical application can be used to gain a competitive business advantage.



With over 100 suppliers exhibiting from both the UK and Ireland the event, organised jointly by GTMA and the Technological University Shannon, promises to surpass last year's event.

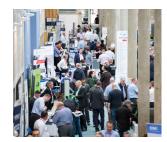
It is again being held at the Technological University Shannon (TUS), Moylish Campus on 15 & 16th June 2022.





In many ways we underestimated its potential success. Manufacturing Solutions is now Ireland's largest manufacturing supply chain trade exhibition, and continues to grow year on year. It is a focal point for manufacturing technologies and engineering solutions.

There are suppliers covering everything from 3D printing to automation and robotics, from machine tools, work holding, precision engineering and cutting tools, to Cad/Cam, PLC manufacturing software and ancillary products and precision engineering services.



There is also strength in depth in the measurement companies, a particular area where the GTMA supplier base is among the industry leaders. It is a discipline recognised as essential to manufacturers worldwide in achieving and maintaining quality in production and delivery.



The enthusiastic response we have received from the engineering and technology businesses based in the UK and Ireland, that constitute the exhibitors and visitors alike, highlights the value of this quickly established key event in the industrial calendar.

Manufacturing Solutions Ireland has earned a strong reputation for bringing together all the leading technology suppliers from Ireland, the UK and indeed Europe.

Through this event the GTMA and TUS are

providing an ideal conduit for the transfer of technology from the specialist suppliers to the practical industrial landscape, where its take-up and practical application can be used to gain a competitive business advantage.

Manufacturing Solutions Ireland has also grown to include a special area for Irish SMEs organised by the PTMA (the Irish Precision Turned Parts Association).

NEW for 2022 - Technology Demonstration Zone

This part of the event allows technology providers to demonstrate Machining Centres, Robotics, Automation along with other new technologies, to a variety of visitors over the course of the two day event.

GTMA & TUS are delighted to be part of an event that not only allows us to build strong partnerships but facilitates an exchange of ideas.

As a higher education institution TUS plays a leading role in ensuring that manufacturing in the mid west region of Ireland continues to have the ability to adapt, change and remain at the cutting edge when it comes to technology.

GTMA brings all the leading technology suppliers together, so that industry can also benefit from our collective knowledge of products and technology.







The ReshoringUK website www.reshoring.uk represents a unique collaboration of leading industrial engineering associations which has been developed with the aim of connecting manufacturers with trusted, accredited suppliers capable of providing technical support, specialist products and niche services. As the UK's engineering marketplace, Reshoring UK puts a wealth of information at the fingertips of manufacturers to make informed business decisions.

- Advanced Forming Research Centre
- Agricultural Engineers Association
- Association of British HealthTech Industries
- Aluminium Federation
- Association of Industrial Laser Users
- British Compressed Air Society
- · British Abrasives Federation
- British Coatings Federation
- British Plastics Federation
- British Turned Parts & Manufacturing Assn
- British Measurement &
- Testing Association
- Cast Metals Federation
- Catapult High Value Manufacturing
- Composites UK
- · Confederation of British Metalforming
- Engineering Industries Association
- Farnborough Aerospace Consortium
- Gambica

- Gauge & Toolmakers Association
- · Healthcare Engineering Facilitator
- Innovate UK
- · Invest Northern Ireland
- Manufacturing Technology Centre
- Metalforming Machinery Makers Association
- Midlands Hydrogen & Fuel Cell Network
- National Composites Centre
- Polymer Machinery Manufacturers
 Distributors Association
- Railway Industry Association
- Rail Forum Midlands
- Scottish Plastics & Rubber Association
- Surface Engineering Association
- UK Manufacturing Unite
- UK Tooling Alliance
- University of Warwick
- · Welsh Automotive Forum

































NATIONAL COMPOSITES CENTRE





































The Reshoring network will launch the iQluster supply chain collaborative **Valuechain** platform. With the growing network of Trade Associations on the Reshoring platform the focus will be to improve the visitor experience and focus the needs of the manufacturing industry to identify SMEs capabilities to supply local and global manufacturing clients and innovation partners.

*Valuechain

It will enable a targeted approach to a comprehensive 'search and connect' for new customers, suppliers and partners to seek opportunities for collaborative tenders, work packages and innovation projects. SMEs can also accelerate productivity improvements through the self-assessment diagnostics, peer-to-peer collaboration and FREE access to the Fitfactory.com smart manufacturing app-store, all available alongside the Reshoring platform.

www.reshoring.uk

Supporting UK Manufacturing



Gauge & Toolmakers Association

Manufacturing Resource Centre Adams Way, Alcester, Warwickshire B49 6PU T: 0121 392 8994 E: admin@gtma.co.uk



