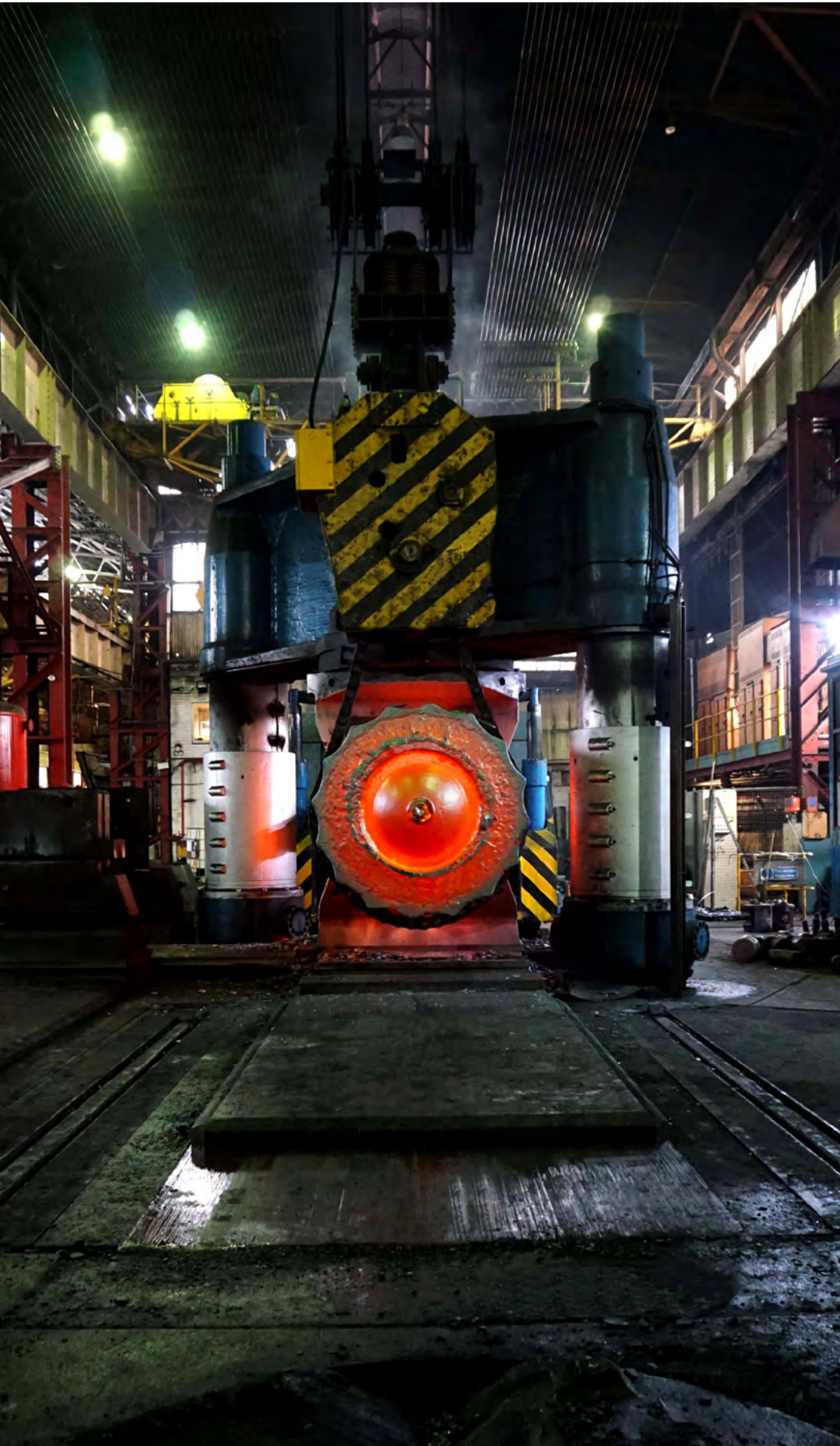


METAL MATTERS



FORGING

Specialised forged traction rods keep locomotive refurbishment project on track

Page 8

FORGING

Somers Forge has acquired A&B Richardson Engineering

Page 9

FASTENERS

JCS Torque, summer fun - saving and maintaining a classic kit car

Page 10

FASTENERS

Bolt self-loosening and the critical slip distance

Page 11

SHEET METAL

We are not out of the woods yetupdate

Page 12

SHEET METAL

Autoform Tube - Software solution for successful design and simulation of tubular parts

Page 15

SHEET METAL

The saga of steel safeguarding

Page 16

ENERGY

Flexible energy enables you to spread risk when the markets are high

Page 22



BROOKS FORGINGS



FORGING, BENDING AND FABRICATION SERVICES OVER 20 MANUFACTURING PROCESSES



Robot Forging



Upset Forging



Drop Forging



Counterblow Forging



Open Die Forging



Hand Forging



Hot & Cold Bending



Hot & Cold Pressing



Swaging & Pointing



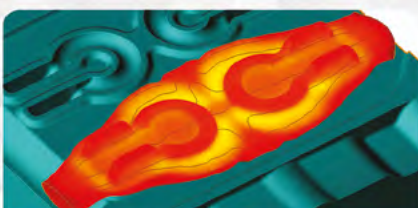
Machining



Fabrication & Assembly



Flash Butt Welding



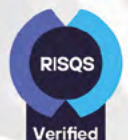
Forging Simulation



Quality Control



Warehousing



President's review

- 2: President's review

CBM Membership

- 3: What's in it for you?

CBM News

- 4: Global Metalforming event returns to Birmingham after eighteen years away

New Members

- 6: CBM would like to welcome Plus Automation as new members.
6: CBM would like to welcome Soma Health as new members.

Forging

- 8: Specialised Forged Traction Rods Keep Locomotive Refurbishment Project on Track
9: Somers Forge the UK's Leading open die forge has acquired A&B Richardson Engineering

Fasteners

- 10: Summer Fun - Saving and maintaining a classic kit car, JCS Torque
11: Bolt Self-loosening and the critical slip distance

Sheet Metal

- 12: We are not out of the woods yet.... update
15: Autoform Tube - Software solution for successful design and simulation of tubular parts
16: The saga of steel safeguarding

NMC News

- 19: Running successful meetings just got easier thanks to updates at 'warm and welcoming' NMC Venue
19: Thank you to Hawk-eye Vision for helping show off the NMC new look

Health & Safety

- 20: CBM has a new health & safety roadmap - and we need your input
21: Drive health and safety improvements with your CBM Membership

Energy

- 22: Flexible energy enables you to spread risk when the markets are high
23: Energy savings opportunity scheme (ESOS) phase 3 compliance has started

Member News

- 24: Innovate UK SMART project - SECA
24: Clamp down on tax relief abuse
25: Manufacturing partner firm celebrates major milestone

Membership Directory

- 28: Fastener Manufacturer Members
28: Forging Manufacturer Members
29: Sheet Metal Manufacturer Members
30: Cold Rolled Manufacturer Members
31: Fastener Supplier Members
31: Forging Supplier Members
31: Sheet Metal Supplier Members
32: Commercial Supplier Members

Front cover image courtesy of Somers Forge.

up and coming events

Best Practice for Time Pressed Sales Leaders:

6th September, 12.30. Please email Melinda.jean@thebcm.co.uk to Join

Forging and Fastener Sector Meeting:

7th September 2021, 2pm. Please email Louise.Campbell@thebcm.co.uk to join.

UK Metals Expo:

14-15th September, NEC Birmingham.

Health, Safety & Environment Group Meeting:

27th September, 9.30am. Please email Melinda.jean@thebcm.co.uk to join

Euroforge:

28-29th September, Euskalduna Conference Center in Bilbao, Spain

The Good Grant Guide, Online Workshop:

28th September, 9.30am. Please email Melinda.jean@thebcm.co.uk to join

Engineering Design Show:

13-14th October, Coventry Building Society Arena.

International Council of Sheet Metal Pressworkers Association (ICOSPA):

19-20th October, NMC, West Bromwich. Please email licospacongress@thebcm.co.uk to book.

Advanced Engineering 2022:

2nd - 3rd November, NEC Birmingham

Metallurgy for Non-Metallurgist:

15-16th November, online course to register please email Melinda.jean@thebcm.co.uk.

• President

Steve Morley
president@thebcm.co.uk

• Chief Executive

Geraldine Bolton
MCMI, Dip.OCR, MAAT, M.IIM
geraldine.bolton@thebcm.co.uk

• Company Secretary & Office Manager

Louise Campbell
louise.campbell@thebcm.co.uk

• Membership & Events Secretary

Melinda Jean
melinda.jean@thebcm.co.uk

• Media & Communications Administrator

Rachael Bromley
rachael.bromley@thebcm.co.uk

• Accounts

Marie Williams
marie.williams@thebcm.co.uk

• Fastener Sector Specialist

Derek Barnes
derek.barnes@thebcm.co.uk

• Forging Sector Specialist

Derek Bond
derek.bond@thebcm.co.uk

• Sheet Metal & Cold Rolled Specialist

Adrian Nicklin ISME
adrian.nicklin@thebcm.co.uk

• Health, Safety & Environment Consultant

Mark Sutton
AIEMA, MRSPH
mark.sutton@thebcm.co.uk

• Energy Specialist

Kevin Kirk
kevin.kirk@thebcm.co.uk

• Policy Advisor

Phil Matten
phil.matten@thebcm.co.uk

• NMC Conferencing Supervisor

Marie Williams
marie.williams@nmcvenue.com

• Receptionist

reception@nmcvenue.com

How to contact us

Confederation of British Metalforming
National Metalforming Centre,
47 Birmingham Road,
West Bromwich,
West Midlands B70 6PY.

Telephone: 0121 601 6350

Enquiries & Advertising:

Rachael Bromley

Media & Communications Administrator

Email: Rachael.bromley@thebcm.co.uk

Web: www.thebcm.co.uk

Find us on LinkedIn

Follow us on Twitter

Manufacturing given a Mountain to Climb

I ended my last review by commending you all on your own resilience and that of your respective companies on battling through all of the predicament's you've been facing with little respite.

Following that edition, the manufacturing sector has seen output and orders have softened amid ongoing cost pressures, supply challenges and a generalised weakening in economic conditions both in the UK and globally.

We've seen unequivocal evidence of decline of UK exports to the EU but it is not just the UK exports to EU that are in decline which is in contrast to the EU import trend from other non-member states. This is the same with EU exports to UK.

Unemployment is currently at record lows; most sectors are reporting extreme difficulty in finding skilled or even just appropriate labour despite offering higher wages. This trend is continuing but more on that later.

We have already seen insolvency practitioners start to benefit from the issues that businesses have been facing. Whilst the rise we've seen wasn't unexpected the level is somewhat alarming compared to 2019. This is before I get on to the extreme conditions we are facing now and with more energy increases still to come and the full impact of inflation yet to be felt!

As I write this inflation has just reached 10.1% with a peak forecast of 13%. In my humble opinion even, that could be too low, especially as we have members reporting increases between 400% and 500%, which aren't even impacting on these latest figures.

Labour is second behind energy in terms of major concerns. I've received just as many concerns over this as energy in recent weeks. Some members have won new orders or see good long-term sales forecasts, but any optimism

is offset with the concerns in securing labour to meet existing demands never mind new opportunities.

Inflation will also be impacted by increased labour costs and we are already seeing the escalation of union disputes indicative of both cost-of-living pressure and awareness that the labour market is tight so activity is more likely to be effective.

If we add these factors to trading conditions we faced coming into this year after the pandemic with manufacturing stalled by severe supply chain shortages and increased material costs, our members really have been left with a mountain to climb.

I also said in the last edition we are not politically motivated at the CBM, but with this government it's becoming increasingly difficult, as from a manufacturing perspective they can't get anything right. It appears they either don't care about our sector or don't understand it!

If they do help it's the elite few who hold perceived political sway in vote catching areas or high-profile sectors whilst ignoring the tier one auto and aerospace companies and the thousands of SME's who employ hundreds of thousands more people.

We have continued to tackle BEIS on energy costs and have now pushed our concerns through the media channels, in the hope that something will give, but at present it looks like forlorn hope.

If manufacturing is to recover, we need to be listened to. We need a clear strategy to allow us to be able to attract labour back to manufacturing to



• Steve Morley,
CBM President

support the orders we do have. In addition, we need immediate resolution to the energy cost crisis, only then can we begin to climb the mountain.

Finally, CBM are preparing to host the ICOSPA Congress and dinner on the 20th October. We hope our members will join us for this event and more details on the programme and how to book can be found on page 4 and 5.

Steve Morley
President of the
Confederation of British
Metallforming



The UK's only specialist manufacturers' organisation for experts in metalforming

Why Join the CBM

You get valuable influence, business support, technical expertise and market insight as a CBM member.

Lobbying & Promotion

Get your voice heard within Government and the wider manufacturing industry

- Benefit from our active lobbying support, which has played a key role as post-brexit trade negotiations accelerate and the Government makes crucial coronavirus decisions.
- We collaborate with the Department for Business, Energy & Industrial Strategy (BEIS) on a weekly basis, covering issues ranging from Rules of Origin, electricity prices, Steel Safeguarding, to name but a few.
- Our mission is to represent UK in those industry discussions – and help you access opportunities through collaboration with a broad stakeholder group.

Compliance & Cost Management

Save money through your CBM membership

- As a CBM member, you get access to a range of practical services that save money and make operations easier.
- Our accredited energy tax rebate service is a key benefit – it's saved members £4 million+ annually in Climate Change Levy.
- You can boost your savings with our cost-effective Streamlined Energy & Carbon Reporting compliance service and Energy Saving Opportunity Scheme assessments – as well as discounted meeting room hire, our free business support hotline and more.

Marketing & Business Development Support

- Build relationships and develop opportunities
- CBM members come from across the supply chain – and work across automotive, aerospace, rail, defence, energy and Construction. We help you build relationships with potential customers and partners.
- You can also use our platform to promote your business – in Metal Matters magazine, at industry events and among our growing social media audience. Our popular website directory and Buyers' Guide is a popular way to get noticed by supply chain managers.

Technical Support

Leverage expert knowledge of metalforming techniques

- Whether you have a problem or want advice on a new process, our sector specialists are here to help. With your CBM membership, technical support is quick and cost-effective.
- Over 130 years' experience with our Sector Specialists who cover Forging, Fastening, Press work and Sheet Metal

Innovation & Knowledge Sharing

Keep your business on the front foot

- CBM events give you opportunities to share knowledge and best practice. Thanks to member days, sector group meetings, monthly market reports and more, it's easy to learn about developments that will help your business.
- Through your membership, you also benefit from our established links with universities and innovation hubs like Warwick Manufacturing Group, Advanced Forming Research Centre, Imperial College and Advanced Manufacturing Research Centre.

Training & Skills Development

Fill skills gaps and boost retention

- We offer training opportunities for technical and non-technical roles, so you can fill gaps in your business.
- In response to CBM member feedback, level 6 Apprenticeship (degree level) programme was developed by the CBMs Trailblazer group.
- The level 6 Tool Process Design Engineer Apprenticeship was specifically created for the metal forming sector in recognition of increasing skills shortages. It is the only Apprenticeship that recognises the unique and specialist skills for this senior technical role.

Health & Safety

- Our popular Health & Safety Group meetings provide a vital forum for sharing successes and getting advice on overcoming challenges.
- You have access to our HSE helpline, as well as discounted private healthcare and occupational health services.

NEW HR Support

- Exclusive access to a CBM dedicated website
- Designated Client Relationship Manager
- Discounted rates for litigated matters in any Employment tribunal

CBM membership pays for itself thanks to the opportunities, access and cost management benefits you receive. Contact us to discuss your business needs and the best membership

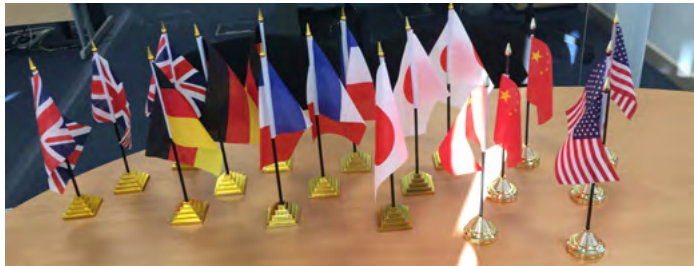
CONTACT CBM NOW ON
0121 601 6350 or
email Melinda.jean@thebcm.co.uk



Global metalforming event returns to Birmingham after eighteen years away

More than 120 of the world's leading sheet metal pressworkers will be heading to Birmingham in October as part of a major global manufacturing event.

The 20th ICOSPA (International Council of Sheet Metal Presswork Associations) Congress will return to the UK for the first time in 18 years, with the emphasis firmly on 'New Tech, New Skills and New Challenges.'



Held over two days (19th-20th October), delegates from China, France, Germany, Japan, Spain, the US and the UK will meet to discuss some of the biggest topics facing their sector, including innovative technologies transforming metalforming, how to deliver sustainable performance, bridging the skills gap and remaining profitable in the face of economic struggles.



Francisco J. Riberas



Ian Harnett

They will hear keynote addresses from Francisco J. Riberas (Executive Chairman of Gestamp), Ian Harnett (Chairman of Tevva Electrical Trucks) and Antonio Costa, (CEO of Congress Diamond Sponsor Kaizen Institute) and Gianfranco Ruggiero, (Senior Product Manager of Congress Gold Sponsor AutoForm Group).



Antonio Costa



Gianfranco Ruggiero



Dan Hurd



Jianguo Lin

Insights will also be delivered by Dan Hurd (EY-Parthenon) on global supply chain issues for the future and from Jianguo Lin (Imperial College London) on vehicle light-weighting.

Stephen Morley, President of the Confederation of British Metalforming, is in his fourth and final year as President of ICOSPA.



Stephen Morley

"This is one of the biggest industrial events in the calendar and we are looking forward to welcoming more than a hundred delegates from across the world to the original birthplace of the industrial revolution.

"Despite the challenges, Birmingham and the UK still has a strong and prosperous sheet metal and presswork sector and there is an appetite to understand the new technologies that are developing and how we can make the most of them.

"Our congress is headlined by some of the world's leading voices in the sector, including the man who shaped the creation of Gestamp and the Chairman of one of the UK's pioneering manufacturers of electric trucks."

He continued: "This is very much a global event and is set to attract sheet metal pressworkers, suppliers, academics and metallurgists all keen to share best practice, views and 'hacks' on how to move forward as an industry. There's a limited number of spaces still available if people are interested."

The International Council of Sheet Metal Presswork Associations is the main platform for the cross-national exchange of the sheet metal engineering industry.

Over the past 50 years, the six member associations have represented the voices of over 12,300 companies and 600,000 employees throughout the world.

This year's congress, which is also sponsored by Dayton Progress and Autoform, starts on Wednesday 19th with two company visits to Brandauer in Birmingham and Gestamp's new factory in Four Ashes, Wolverhampton.

The next day will see the National Metalforming Centre in West Bromwich host the main Congress, followed by the evening dinner at The Grand Hotel in Birmingham.

Stephen went on to add: "Our visits are always a highlight of proceedings as delegates love getting out on the shopfloor and seeing how different companies operate."

ICOSPA

International Council of Sheet Metal Presswork Associations



ICOSPA Congress Sponsors



Congress Diamond Sponsors



DAYTON PROGRESS

Congress Platinum Sponsors



Congress Gold Sponsors



"In Brandauer, we have one of the region's most progressive and exciting SMEs and a firm that is leading the way in the manufacture of thin gauge laminations for electrification."

"Gestamp is a major tier 1 automotive supplier, and it will be great to see how its landmark new factory has come together to create a truly world class manufacturing environment."

The presidency of ICOSPA will be passed to the Japan Metal Stamping Association during the two-day celebrations.

Other organisations present include the Precision Metalforming Association, The Confederation of Chinese Metalforming Industry, FIM Metaux en Feuilles and Industrieverband Blechumformung.

For further information visit www.theicospa.com or to book your space, please email ICOSPACongress@theicbm.co.uk

CBM would like to welcome Plus Automation as new members

PLUS Automation is the UK importer for the Swiss sensor company Contrinex, which manufactures Inductive, Photoelectric, Ultrasonic, RFID and Machine Safety sensors. The high-performance and reliability of these sensors is trusted by several CBM members and their customers

We aim to help #MakeSenseofSensors to improve your machines' performance and availability and to offer cost and price savings. CBM members receive a special 15% discount to help introduce the benefits of Contrinex sensors and PLUS Automation's service.

Call us on 0121 58 222 58 or email CBM@PLUSAx.co.uk to see if we can help improve your processes, save money, or to find out what we can supply from our extensive UK and European held stock.

Typical applications in metal forming, stamping, processing and assembly industries include Contrinex's uniquely robust inductive sensors in press and metal stamping operations; low-cost and reliable counting of parts; machine safety guarding of machines and areas; tracking and routing using unique metal-friendly RFID systems, with RFID tags embedded into metal tooling and stillages; low-cost double-sheet detection; swarf-immune inductive sensors; high-temperature and high-pressure rated inductive sensors; precision measurement of seal wear, and much more.



A leading, customer focused, occupational health provider. Since 2004 Soma Health has been providing tailored, comprehensive, focused and integrated occupational health business solutions for a wide variety of clients across the UK.

Health Surveillance

Sickness and Absence Management

Counselling and EAP

Health and Wellbeing

Musculo-skeletal services

Private face-to-face and video GP appointments

Rapid referrals to secondary care services



PART OF Maitland Medical & The Doctors Clinic Group

Now part of The Doctors Clinic Group and Maitland Medical, Soma Health is ideally positioned to provide all your healthcare requirements.

Call or email us now to discover how we can help you.
01905 422808 admin@somahealth.co.uk



METALLURGY FOR

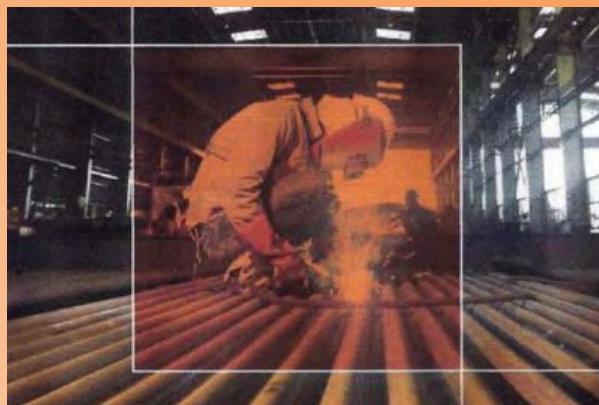
NON-METALLURGISTS

TUESDAY 15th & WEDNESDAY 16th NOVEMBER 2022

THE METALLURGY FOR NON-METALLURGISTS PROGRAMME IS A TWO HALF DAY ONLINE COURSE DESIGNED FOR ANYONE WHO NEEDS TO KNOW MORE ABOUT METALS AND PROCESSES USED IN THEIR COMPANY.

OUTLINE OF COURSE CONTENTS

- Metal properties
- Metals structure
- Ore smelting
- Metals making & casting
- Rolling and metal forming
- Mechanical Testing and NDT
- Hot & cold working/shaping/forming
- Heat treatment
- Metal alloy classification
- Corrosion



BUSINESS BENEFITS

The Metallurgy for Non-Metallurgists programme will enable participants to:

- communicate more effectively with technical colleagues
- be better informed and more efficient when dealing with customer enquiries
- avoid mistakes caused by lack of understanding
- understand the production, processing and testing of relevant metals and alloys
- appreciate the properties and applications of relevant industrial alloys

PROGRAMME CONTENT

Courses commence with delivery of core knowledge components and progress onto a series of extended knowledge modules.

PROGRAMME DELIVERY

Courses take the form of participative workshops, led by an expert metallurgist with extensive metals industry experience.

The content, length and structure of the course can vary according to individual company needs.

A folder of course materials is supplied and all attendees will receive a certificate after completing the two day course.

COST

CBM members £325 + vat per person,
Non Members £445 + vat per person

**Places are limited, so to avoid
disappointment reserve your place(s) now
contact:**

**Melinda Jean at the CBM on 0121 601 6350 or
email: melinda.jean@thecbm.co.uk**

Specialised Forged Traction Rods Keep Locomotive Refurbishment Project on Track

Brooks Forgings' diverse range of manufacturing capabilities continues to assist many restoration projects requiring the strength, resilience, and aligned grain flow that is only achieved with forging processes.

The latest addition to our portfolio is the production of bespoke forged locomotive traction rods for a fleet refurbishment project.

6 Traction Rods are required for each locomotive, a critical component connecting each bogie assembly to the carriage to aid with stabilisation and alignment.

The head measures 100mm thick with an outer diameter of 189mm, a bored inner eye of 127mm diameter, and is angled at 4 degrees in relation to the main rod with extremely tight tolerances. The rod, 1965mm in length, features several reductions in diameter to accommodate two thread forms, starting at 53mm diameter and dropping down to 48mm for an M48 midpoint thread. This reduces further to an M36 thread at the end.

If we can assist you with a current or future project, please do visit our website www.brooksforgeings.co.uk, email us at sales@brooksforgeings.co.uk or call us on 01384 563356.



Supplying lubricant technologies to the forging industry for over 30 years

Open & closed die forging

Hot forging

Hammer forging

Heavy duty forging

Extrusion

Precision forging

Billet coating

Complex pieces

Aluminium, titanium, cobalt, copper & brass

Aerospace, medical & automotive industries



Our Durcol forging lubricants...

- ➔ Are developed using our exceptional **research and development facilities**
- ➔ Improve **metal flow**
- ➔ Provide optimal **surface finish**
- ➔ Extend **die life**
- ➔ Provide excellent **cooling effects**
- ➔ Benefit from our **150+ years experience in graphite processing**
- ➔ Are **bespoke** to suit your forging needs



Oil & Water Management Ltd

UK Agents for James Durrans & Sons Ltd
enq@oilandwatermanagement.com

www.durransgroup.com

Somers Forge the UK's leading open die forge has acquired A&B Richardson Engineering, based in Oldbury.

The company which is best known for being a tool and die manufacturer, has continually invested in a variety of CNC machines and CAD design capabilities.

The acquisition of the machine shop is part of the Somers Forge long term strategy to expand machining capacity and capabilities after seeing increased demand for finished components. The established machining facility and long serving experienced machinists provides immediate capacity for fulfilling the recent order book growth. A&B Richardson has been a trusted sub-contract machining facility, used by Somers Forge for many years.

Alex Cross, Production Director - "Last year we made a million-pound investment on a new CNC vertical boring machine which will help us to manage capacity for that range of product. We also recognised the need for greater capacity with CNC milling so the acquisition of A&B Richardson was the perfect solution. The purchase has tripled our CNC machining capacity and further enhanced our capabilities, allowing us to continue to offer competitive lead times and products of the highest quality".

A&B Richardson Engineering will continue to operate under the same name. <https://www.abrichardsonengineering.co.uk/>



14 - 15 September 2022 ■ NEC

The **ONLY** event that brings together
the entire metals supply chain



100+ Exhibitors - 60+ Seminars across 4 theatres
Skills & Training • Circular Economy • Innovation • Supply chain

Register for **FREE** at www.ukmetalsexpo.com



Summer fun - saving and maintaining a classic kit car

In search of some carefree summer fun, I recently bought a used British kit car: a Marlin Berlinetta. It's a classic open-top four-seater sports car that was first launched in the early 1980's.

Based on a solid, dependable Ford Sierra chassis and running gear, power is provided by a feisty, characterful Fiat 4-cylinder twin cam, 2.0 litre engine.

Reliable and functional

The marriage of easily sourced, reliable Ford mechanicals and a classic, sporty Fiat engine combine to create the perfect kit car - providing that is, that all the other auxiliary, hydraulic, cooling, fuelling and electrical systems, fixtures and fittings are also up to the job in hand.

Topping up

A trip to a local petrol station was the first indicator that something was not quite right - a strong smell of petrol was very evident after filling up.

Further investigation revealed a relatively simple problem, requiring a simple but effective fix. The rubber hose connecting the filler cap to the petrol tank was loose and leaking slightly. The hose clips securing the rubber hose were of poor quality, degraded and in need of replacement.

Reliable, high quality

The reinforced fuel hose demanded that a reliable, high quality hose clip should be used to ensure the hose was completely secure and leak free.

Quite naturally, in this instance I used JCS Hi-Torque clamps. For good measure I also changed the hose clamp on the rubber breather hose with a JCS Hi-Grip hose clip.



Mundane but essential

The humble hose clip can be found actively employed in many mundane, but essential walks of life. Its usefulness and function belies its simple form.

When the original hose clamps were fitted to the car, a few pence were probably saved by using a cheaper solution, but ultimately, at the detriment of quality and dependable reliability. If the fuel leak had gone unnoticed and unrepaired the cost in the long-term could have been much greater and more serious.



HIGH PERFORMANCE HOSE CLIPS



Preventative maintenance

It is my intention to work my way through the car, and change all hose clamps with JCS stainless steel replacements.



Although a simple and straightforward job, this preventative maintenance should help lead to reliable, guaranteed summer fun for many years to come - all aided by the modest, unassuming JCS hose clip.

If you would like to know more about the JCS range, please call us on **+44 (0)1787 376212** or email us

sales@jcs-torque.co.uk.



Bolt Self-Loosening and the Critical Slip Distance

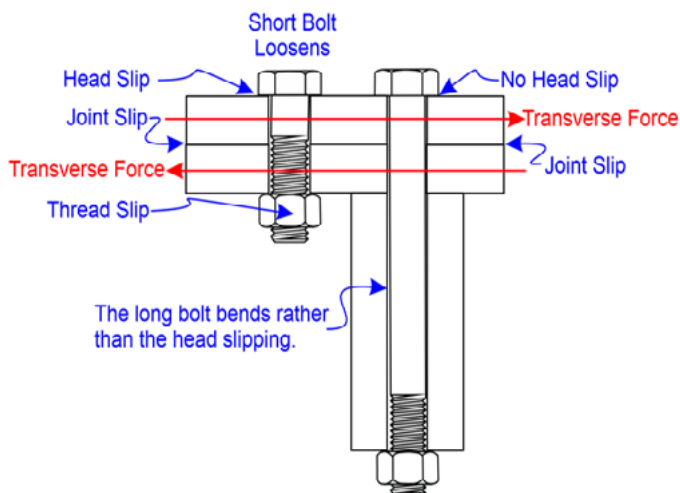
Author Dr Bill Eccles from www.boltscience.com

It's been known for over 50 years that if movement of joint plates occurs, the securing bolts can self-loosen.

The research completed first by Gerald Junker followed by many subsequent researchers found that if transverse joint slip occurs, simultaneous slippage of the bolt head, or nut face, and the thread interface, momentarily frees the fastener from friction. Free from the restraints of friction, the load present in the bolt, acting on the inclined plane of the thread, allows the bolt to rotate by a small increment. Recurring joint movement repeats this self-loosening process until the bolt is completely relieved of its load.

The speed in which the bolt can loosen depends upon the magnitude of the joint movement, the fastener friction, and the grip length of the bolt. If you prevent the threads from slipping, by use perhaps of an adhesive, or the head from rotating by for instance a wedge-lock washer, self-loosening will not occur.

With a non-locked fastener, when a transverse load is applied to a joint that is too high to be resisted by the friction grip provided by the bolts, the joint interface will slip. The thread interface and the bolt head need not immediately slip since it will be resisted by the friction grip from the bolt load. The bolt will bend slightly to resist the forces. If the force continues to increase, joint movement will continue. As the joint displaces further, the force being applied to the bolt because of its bending resistance increases. A critical point is reached that is above the friction grip capacity from the bolt load, at this point, thread and head slip is initiated. Loosening then occurs when the bolt head, or nut, slips on the joint surface.



Long grip length bolts are inherently more resistant to loosening than short bolts. This is illustrated in the image. Under small transverse joint movements, the bolt will bend rather than suffering slip of the head or thread bearing surfaces. The amount of joint movement needed to initiate slip of the bolt bearing surface is referred to as the 'critical slip distance'. Hence a short grip length bolt may have a critical slip distance of less than 0.1 mm whereas a long grip length bolt it may be 0.5 mm or more. Hence if the joint movement is limited in this case to 0.2 mm, the short



**BOLT
SCIENCE**

**PROVIDING SOLUTIONS TO
BOLTING PROBLEMS**



grip length bolt would loosen whereas the long bolt wouldn't. The side of the hole would touch the bolt shank and transmit shear load by direct contact.

Close fit clearance holes can be used so that the amount of joint movement is restricted so that the wall of the hole hits the shank before head or thread slip occurs.

If loosening is prevented by use of a locking method, or a long grip length is used, the bolt sustains bending stresses due to the friction grip from the bolt load acting on the head/nut. If the joint movement is frequently repeated, then fatigue failure of the bolt becomes likely. A standard test for assessing the loosening resistance of a fastener is a Junker test. This measures the bolt load as the joint that the bolt clamps is repeatably subjected to transverse movement. If a locking method, such as a wedge-lock washer, is tested on such a machine, self-loosening does not occur. Typically, the fastener is tested for 1000 cycles or so and if no significant loosening occurs then it is assessed as being resistant to self-loosening. If the machine continues to operate, what is typically found is that after 3000 cycles or so, the bolt load starts to reduce as a fatigue crack propagates through the bolt until it fractures completely. Bolt loosening is a short-term consequence of transverse joint movement and fatigue, a longer-term consequence.

Due to its lower bending stiffness, a long bolt will sustain less bending stress than a short bolt with a locking method applied. Consequently, in applications where repeated joint movement cannot be prevented, long grip length bolts can offer some design advantage.

For more bolting solutions please visit

<https://www.boltscience.com/>

We are not out of the woods yet.... Update

An update from the original article that appeared in Metal Matters issue 60 from Steve Hardeman, Managing Director of Clevedon Fasteners Ltd.

I wrote the “we are not out of the woods yet” article outlining my fears regarding inflation in June 2021.

At the time the Bank of England and the mainstream media were reporting:

“Throughout our sample period, this longer-term measure of inflation expectations is well-anchored at around 2.5%, only rising modestly from 2.3% in the beginning of 2021 to 2.65% on June 17, 2022” (Source BofE)



Clearly that didn't age well.

All joking apart, it points to the massive disconnect between the “ivory tower”, predominantly academically based economic modelling used by the Treasury and more importantly the Bank of England (which has responsibility for the control of inflation) and reality.

If a humble rivet manufacturer could see the impending storm that was about to engulf businesses already weakened by lockdowns due to the Pandemic and whose balance sheets were hobbled by the need to pay back CBILS, bounce back loans etc, then why couldn't the clever folk in charge of monetary policy and inflation control?

The answer is relatively simple, this is the “wrong” kind of inflation.

Much is spoken in the media about the similarities between the present cost of living crisis and that experienced in the 1970s.

As someone who had to navigate those times, this inflation spike is nothing like that experienced 50 years ago.

The inflation growth in the '70s was caused by a wage spiral due mainly to the power of very large unions (53% of all employees were union members in 1975). The march towards Globalisation had hardly started and there were many large industries that have since disappeared.



6.5m people were employed in manufacturing in 1975 (it is now 2.7m). Railways, Telephones, gas electricity and water were in public ownership and secondary picketing was legal. This led to a stranglehold on UKPlc, resulting in the “Winter of Discontent” in 1978-1979. Some suggest the genesis of this was the decision by the Ford Motor Company in the UK agreeing a 17% pay increase, 5% over the government's 12% limit. This caused a tsunami of similar wage claims, resulting in 25% inflation rates.

The classical reaction by the Bank of England was to raise interest rates which topped out at 17%!

Few people remember that at the same time the world was hit by the oil price shock due to the West's backing of the Yom Kippur War, which hit the global economy hard. This is the only similarity between the issues we face today and those of the past.

Also, more worryingly for us all in business is, the way inflation was brought under control. The purpose of very high interest rates is to “stamp out inflation”. This is political speak for recession of Darwinian proportions. Whilst it cured the problem, in the case of many businesses and even industries it killed the patient in the process.

This time inflation is “different”. Unlike the '70s it is not wage led; it is input led. A combination of lockdown re-starts, broken supply chains and latterly the war in Ukraine, severely restricted the supply of raw material and goods resulting in shortages. These were further fuelled by speculators shorting commodities, resulting in increases across the board.

The current surge in pay demands is the result, not the cause, of the present inflation rate - though they will obviously add to it.

Continues on page 13



The headline inflation rate in June 2022 was 9.4% - this is the CPI (Consumer price index). The other measure usually referred to is the RPI (Retail price index) which was 11.8% - this information is mainly for use in consumer markets. It is of little value to manufactures who look incredulously at these figures, knowing their lived experience indicates much higher inflation figures. CBM members are regularly updated with more meaningful information from their Policy Advisor Phil Matten.

Of more use to manufactures are the producer output (factory gate) prices, which are currently 16.5%. More importantly in terms of our businesses is the Producer Input prices which in June were 22.4%!!

Hopes of an early amelioration to this crisis are simply wrong.

The BoE increasing interest rates to "stamp out" this type of inflation is simply an act of self-harm to UKPlc. It is akin to the UK adopting net zero when their major industrial competitors are blithely carrying on as before. This is not a "sick man of Europe" issue (what the UK used to be called in the 1970's for younger readers) i.e. a UK issue, it is a global issue.



There is a better way.

Out of adversity comes opportunity. In my business, when we hit a downturn, we have a choice: cut costs, a euphemism for cutting people, which in any well-run business is difficult or to trade your way out of the problem.

In Government terms this would equate to possibly even reducing interest rates; reversing the National Insurance hike; reducing capital gains tax; implementing tax

incentives for plant and machinery; allowing companies with CBILS and other corona virus loans to pay them by means of investments in their businesses; ensuring big infrastructure investment (HS2, Wind farms, Pennine rail route etc) has a minimum 50% UK content' providing energy support to high energy intensive UK industries.....

But where's the money going to come from?

Already the treasury is reporting "excess" VAT income, but my argument would be that, even if borrowing is involved, this would be worthwhile. As the old adage goes, "you have to speculate to accumulate".

The driver for this should be recognition of the effect that the orthodox view would have - increase interest rates; create a recession; mass unemployment increasing calls on the public purse for Universal Credit; high interest rates leading to home repossessions and therefore greater demand on councils, which would be hobbled by the reduction in business rates due to the wave of insolvencies; the insurance rate hike blown out of the water due to the fact public services would have to be curtailed significantly due to the demands of unemployment costs; a reduced NHS, Police, Fire, Education Service.



The only way to balance the books, years of austerity.

The Treasury and BoE were wrong about inflation. If they follow the orthodox solution, they will present an existential threat to companies large and small throughout the UK.

The above views and thoughts are those of the author and do not necessarily reflect the views of the CBM.

Original first appeared on the **Clevedon Fasteners Ltd** website <https://www.clevedon-fasteners.co.uk/>





DAYTON PROGRESS

a MISUMI Group Company

YOUR SPECIALIST FOR PRESS DIE COMPONENTS

As part of the MISUMI Group, Dayton Progress are one of the world's largest manufacturers and distributors of high precision Punches, Dies and Die Components for the Press & Mould Tool Industries. In addition, we also have a comprehensive capability in manufacturing high precision 'special tooling' to customer drawings.

Our focus is on Quality & Delivery. Our products are made to a high standard to ensure the longest tool life possible and we pride ourselves in consistent and reliable delivery times.

We offer standard and special products in many materials such as A2, D2, M2, Powdered Steels & Carbide. In addition we have our own in-house coating plant where we can offer many coatings to further enhance your tooling life.

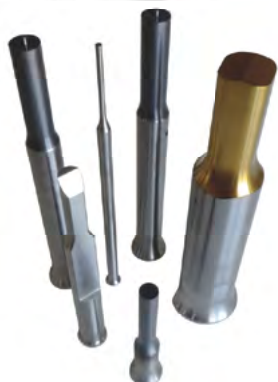
With over 90 years' experience in the stamping industry we are able to offer strong technical support and advice on engineered clearances, coatings & part materials, all of which will substantially increase production runs and reduce expensive down time. In particular when stamping today's structural aluminium and high tensile steels.

We have a very large global presence and are able to support you wherever your Press Tooling is being manufactured or run in production worldwide.

NEW!



Die Storage Blocks



- Many years of experience
- Technical support
- Individual solutions
- Production in Europe
- Fast offers
- High quality standards
- Coating centre

www.daytonprogress.co.uk

www.thecbm.co.uk

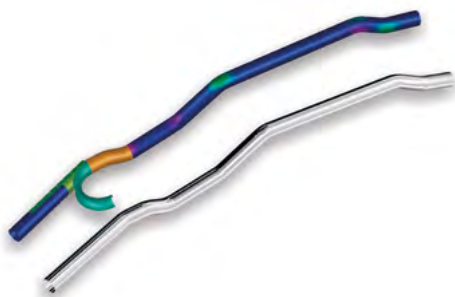
AutoForm Tube – Software Solution for Successful Design and Simulation of Tubular Parts

AutoForm Engineering GmbH, the leading supplier of software solutions for stamping and Body-in-White assembly processes, presents its enhanced software solution for tubular parts. In addition to new functionalities developed in AutoForm TubeXpert, users can now further improve their tube bending processes through the application of the newly developed AutoForm-TubeBend software product.

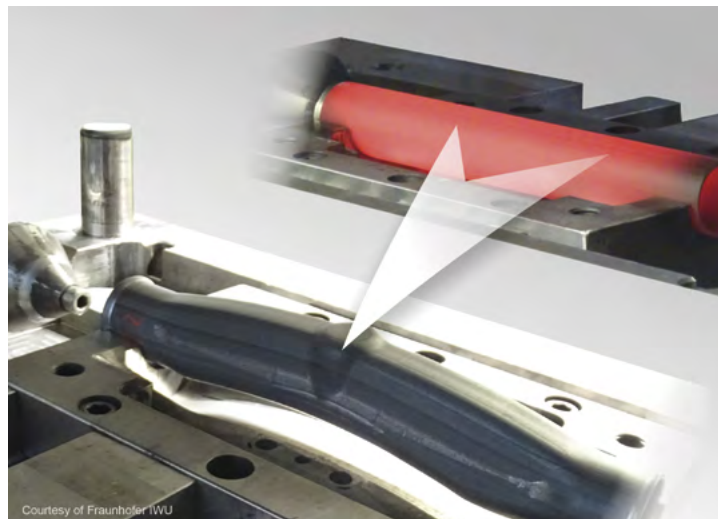
The enhancements included in the latest AutoForm TubeXpert version are particularly beneficial for users when carrying out tube bending, forming and hydroforming processes. This version has a completely new solver, which includes new material laws, enhanced contact between tube and tools as well as improved meshing capability. With AutoForm TubeXpert users can reach a new level of accuracy.

The software now supports hot tube forming processes including hot metal gas forming. This rather new technology now also available in the software allows the support of both direct and indirect hot tube forming processes. The enriched material library includes aluminum, stainless steel, manganese-boron steels as well as titanium alloys applicable for hot forming processes. The software supports advanced friction modeling with TriboForm.

In addition, AutoForm TubeXpert allows for flexible process designs, which are essential for expansion joints, bellows and tube end forming. With AutoForm TubeXpert, users can quickly set up all relevant parameters necessary for such process design.



AutoForm-TubeBend is specially designed for the needs of tube bending companies and supports their standard processes, such as CNC rotary draw bending, press bending and tube end forming. The software allows for the rapid design and simulation of these processes. In addition, it enables users to simulate the springback which may arise in the actual production process. Through the automatic springback compensation feature, the necessary adjustments can be made to the tool geometry, bending line, and process parameters. With this software, users can carry out comprehensive virtual tryout analyses in order to efficiently reduce the number of tryout loops. With AutoForm-TubeBend, users can successfully tackle all of the typical challenges they face during the tube bending and forming processes.



Dr. Markus Thomma, CMO of the AutoForm Group, stated: "With our enhanced AutoForm Tube software solution, users are best-equipped to meet the increasing demands regarding tubular parts complexity, ever higher part quality requirements, implementation of new materials as well as increased process complexity. By applying AutoForm Tube solution, our users gain a comprehensive in-depth understanding of tube bending, forming, and hydroforming processes. AutoForm Tube is our software solution for the successful design and simulation of tubular parts.

Following our [published press release](#):

- ♦ AutoForm TubeXpert enables users to simulate hot tube forming processes, including die face design, temperature and pressure control, applying advanced friction, systematic process improvement, and process robustness.
- ♦ AutoForm-TubeBend is a software for the rapid design and simulation of tube bending, forming and tube end forming processes.

Contact:

Dr. Jasmine Joyce
Head of Corporate PR & Communications
AutoForm Development GmbH
Zurich, Switzerland
Phone: +41 43 444 61 61
Email: jasmine.joyce@autoform.ch
www.autoform.com

AUTOFORM
Forming Reality

The saga of steel safeguarding

Towards the end of 2020 the CBM registered as an interested party in the UK's transition review of steel safeguard measures – a routine exercise, we thought, to ensure we could monitor the process. By mid-February 2021, as quotas began to exhaust and members were hit, out of the blue, with tariffs it became clear safeguarding was going to be anything but routine.

Instead, an extraordinary, often excruciating, saga began, which persists today. Marked by setbacks and frustrating partial successes, safeguarding has nevertheless played a major role in honing the CBM's capabilities to lobby and campaign effectively - demonstrating its capability to punch well above its weight while other major trade bodies ducked the issues.

Most CBM members will recognise the energy and dogged persistence CBM President, Steve Morley has dedicated to campaigning on behalf of members impacted. Less obvious, perhaps is the 'backroom' work that has gone into ensuring CBM 'punches' land effectively with ministers, their officials, and with the media. Most valuable, though, was the direct testimony from CBM members of the business-threatening impact of safeguarding tariffs.



Why has steel safeguarding been so corrosive?

Under WTO rules safeguard measures should be temporary and may not be targeted at specific source countries. The WTO states: "A WTO member may restrict imports of a product temporarily (take "safeguard" actions) if its domestic industry is injured or threatened with injury caused by a surge in imports." The WTO also states that, "In principle, safeguard measures cannot be targeted at imports from a particular country."

UK safeguard measures stem from European Union provisional tariffs and quotas applied in 2018 to twenty-eight steel categories, in response to US Section 232 tariffs. The understandable concern was that the imposition of these protectionist measures would distort the global steel market, leading to an influx of low-cost steel to Europe. EU measures were designed to protect against steel producing nations outside the EU.

When the UK exited the EU the measures transitioned into UK law. The UK became subjected to EU safeguard quotas and tariffs, in turn and for the first time applying its own quotas and tariffs on imports from EU steel producers.



There were suggestions the EU acted 'belligerently' in applying safeguard measures against UK steel products, forcing the UK to retaliate. However, it should be recognised that, in leaving the EU, the UK was adamant it would control its own trade remedies. Under WTO rules the EU had little option but to apply the measures against the UK as a 'third country'.

President Trump's imposition of Section 232 tariffs, flouting WTO Rules, clearly did distort the global steel market, diverting steel products from low-cost sources to European markets.

The complete shock for CBM members was suddenly being faced with tariffs on imports from EU mills, previously entirely duty free. UK safeguard measures affected many steel materials but the most serious impact was on CBM members importing alloy-steel engineering bar and sections under Category 12. Many had imported specifications unavailable from UK mills for years. Others, from the end of 2020 onwards, found it increasingly and, then as Covid-19 gripped the nation, completely impossible to obtain the required specifications in the UK.

From the very beginning CBM has been clear that UK steelmakers should be protected from surges of low-cost imports. However, this cannot be the detriment of British downstream manufacturers, particularly where there was no viable domestic supply chain.

For Category 12 imports, the Trade Remedies Authority concurred, recommending in June 2021, that safeguard measures should not be further extended on nine steel categories, including 12.

A victory for common sense? For a matter of days only. Under extreme pressure from British steelmakers, from right- and left-wing media, and from both labour and 'red wall' conservative MPs, Liz Truss ignored the TRA recommendation, extended the safeguard measures, and condemned CBM members to pay £'000s in quota exhaustion duties for the rest of 2021. The Secretary of State cited 'new evidence' as the basis for her actions.

Perhaps that was so. However, and contrary to WTO principles, that evidence was never disclosed to interested parties who were never given the opportunity to comment on it.

The harsh reality was that neither Ministers nor media had any real comprehension of the economic or employment contributions from downstream SME manufacturers. Not for the last time, loud and influential voices counted far more than facts.

The quota system should have worked. It patently did not for Category 12, for two reasons. Firstly, quotas were based on import data from 2017-2019, when domestic steel makers were supplying more of the alloy engineering steels in the category. By 2021, that simply was not the case – importing was the only option to sustain production to support domestic and export demand.



The other factor was the surge in high-volume imports of non-alloy merchant bar and sections from European mills, which rapidly absorbed the available quota, so it barely lasted to the mid-point of each quarter.

CBM lobbied DIT and BEIS intensively to rectify the issue, initially arguing for increased quota to reflect the market reality. Both Departments listened, not least because Steve Morley was persistent and well-armed with solid evidence, particularly the testimony of CBM members impacted by tariffs. So hard hit that some were fearful for their financial survival as it became increasingly difficult to hold onto major export contracts, where customers had no interest in considering UK tariffs in price negotiations. For others, pressure escalated from non-UK holding boards, deeply questioning continuation of manufacturing operations in the UK, as safeguarding exacerbated border delays and increased costs in exporting.

Frequent meetings and hearings, however, gained no traction until U.K. Steel engaged with CBM to seek a solution that alleviated the impact on downstream manufacturers while maintaining protection for the steel makers.

The partnership of seemingly opposite interests was remarkably positive, rapidly formulating a plan to separate Category 12 into two sub-categories – one for the high-volume non-alloy merchant bar and sections, the other for the alloy engineering steels CBM members required. Under tight pressure the plan was finessed, a joint submission made to DIT, with the expectation it would be implemented for calendar quarter 3 2021.



It wasn't to be. A cabinet reshuffle brought a new Secretary of State, Anne-Marie Trevelyan, and the safeguarding plan slid down the priority list. To UK Steel and CBM's complete bafflement, it was not until the end of 2022 the plan was brought into effect for 1st January 2022.

And that really should have been where the saga ended, not with a perfect solution but, at least, ameliorating the impact on CBM members and other downstream steel users. Sadly, it took only days for it to become clear things were not working as they should – the new 12A alloy steel quota was eroding at an eye-watering pace.

More research and meetings with DIT and HMRC 'smoked out' the reason. Tasked with differentiating between alloy and non-alloy steels, HMRC applied guidance from the World Trade Organisation Harmonised System. Reasonable – except there was a fatal flaw in the threshold for copper, which meant importers were required to re-code product previously imported as non-alloy steel to alloy steel codes, biting huge chunks out of the Category 12A quota.

The WCO HS threshold for copper fails to recognise it is a normal residual from electric arc furnace steelmaking process, so mills accept up to 50% higher levels than those permitted in the WCO guidance.

For CBM, UK Steel and every steel maker and expert consulted, the solution appeared simple – accept market knowledge, ignore the copper threshold and continue to code the products as they had for years. Not for HMRC – it red-lined its position as non-negotiable, adhering rigidly to the WCO guidance, regardless of the damage inflicted on British businesses.

Meanwhile the June 2022 deadline loomed for Anne-Marie Trevelyan to determine the future of safeguarding on the nine categories. The TRA's reconsideration research was 'called in' under legislation, instituted by Liz Truss, so the final decision rested exclusively with the Secretary of State. Amidst the furore surrounding a, by now, scandal-riddled prime minister, doubt was again thrown on the legality of the process under WTO rules.

Nevertheless, it went ahead, and safeguarding was extended again, until at least June 2024.

CBM's intensive lobbying efforts and media campaign, however, proved effective. Anne-Marie Trevelyan stated "...throughout the reconsideration, evidence has been received from importers and downstream users of Category 12 steel products highlighting severe problems with supply of these products and associated increased costs to those businesses." As a result, the quota for imports from the EU of Category 12A was slightly more than doubled.

So, are CBM members out of the woods now? HMRC continues to require recoding of non-alloy steel to Category 12A codes. The quota for EU imports continues to erode uncomfortably rapidly. As this is written in early August the balance for Quota 058100 is now well below 40%, boding ill for its survival to the end of September.

CBM is now working with the BSI working group responsible for the review of EN10020, on which the WCO guidance is based. It appears that group is already aware of the copper anomaly. However, the standards process is a slow one and the ultimate decision on the revision of EN10020 will be made by a CEN committee. Even assuming a correction to the Copper threshold, the World Customs Organisation is not scheduled to issue a revised Harmonised System until 2027. Hopefully that process may be accelerated or HMRC

convinced to change its mind in the face of expert opinion from the BSI committee.

These, though, are longshots. So, the saga continues, as will CBM's lobbying and campaigning to protect the interests of its members. We have learnt a great deal and unquestionably established ourselves with Government as a cogent voice for our sector. We have also, through an intensive and well-timed media campaign, clearly established that there are two sides to the steel safeguarding story, with recognition the UK has a crucially important downstream manufacturing sector, that deserves to be heard and valued.

For more on the differences between safeguards and other trade remedy measures see the WTO website: https://www.wto.org/english/tratop_e/safeg_e/safeg_e.htm



HOME OF



SPECIAL DISCOUNTS FOR CBM MEMBERS ON MEETING ROOM HIRE

Why Choose NMC Venue For Your Meeting Rooms?

NMC Venue offers you an easy, flexible and affordable way to hold productive meetings

NMC VENUE - Benefits

- ✓ Convenient West Midlands location just 200 yards from Junction 1 of the M5
- ✓ Free and secure onsite parking
- ✓ Spaces that work well for quick meetings through to 100+ person conferences
- ✓ Free Wi-Fi for all attendees
- ✓ Free unlimited tea and coffee
- ✓ Out-of-hours availability – so you can hold meetings early in the morning, into the evening and at weekends
- ✓ Catering from renowned providers, with a range of options to meet your needs
- ✓ NEW virtual conferencing where both face to face and from far afield.
- ✓ Home of CBM



The next time you're planning a meeting, training session or seminar, take the pressure off your own office space and give attendees something special with our discounted room hire.

To learn more visit our website www.nmcvenue.com or enquire about dates, call Marie Williams on 0121 601 6350 or email reception@nmcvenue.com. Just mention you're a member of the CBM to claim your discount.



National Metalforming Centre, 47 Birmingham Road, West Bromwich, West Midlands, B70 6PY
0121 601 6350 or email reception@nmcvenue.com
Website www.nmcvenue.com

Running successful meetings just got easier thanks to updates at 'warm and welcoming' NMC Venue

As a CBM member, you benefit from heavily discounted meeting room and event hire at NMC Venue, which is CBM-owned. NMC has just had an update, as well – and is ready to make your meeting, conference, training course or exhibition a success.

Here are reasons why CBM members – and the wider business community – like using NMC:

Flexible. We can accommodate every requirement, from early morning breakfast meetings to evening and weekend events. With 8 rooms to choose from, we cater to every size of event up to 100+-person conferences. Our fully equipped video conferencing suite means you can offer online, in-person and hybrid.

Cost-effective. Our competitive rates include state-of-the-art AV facilities in every room. Not only do CBM members get discounts, but all profits go back into the CBM – funding additional services and activities for members.

Convenient. Our location – less than a mile from J1 of the M5 – couldn't be more convenient (especially as the M5 roadworks are done!). As a bonus, there's free secure parking on-site.

Accessible. Our revamped facilities are designed to meet every guest's needs. Our building provides disability access to all areas, and we're accredited as Covid-secure. We also offer soundproof rooms for confidential meetings, making NMC a great place for off-site negotiations, strategic planning sessions and HR discussions.

Efficient and supportive. We'll act as a seamless extension to your team, working with you to give your event the 'wow' factor. From our efficient booking process through to excellent delegate feedback, you won't regret choosing NMC Venue.



As one engineering company said:

"Team NMC is friendly, helpful and supportive. After 2 years of Covid restrictions, it was good to get back to meeting people at a venue, but equally we were able to simultaneously 'live stream' our event online so we really did have the best of both worlds. The food and refreshments provided were delicious, too, so all in all, it's a great venue!"

Contact Marie at reception@nmcvenue.com to discuss your next meeting – and the discount you get as a CBM member.

Thank you Hawk-Eye Vision for helping show off the NMC new look

Hawk-Eye-Vision: The professional media content provider offering all types of media including Professional Photography, Video, 360° Imagery/Tours and Commercial Drone Operations to ensure your Product, People, Business, Location, Property or that all-important chapter in life is perfectly captured

Hawk-Eye-Vision prides itself on working far and wide with Service Business's, Manufacturing, Tourist boards, accommodation suppliers, Agriculture, Estate Agents, Property developers, Auction houses, Events, Local, National & International Businesses, Education from Nursery to post 16 & Local councils. On a social and leisure level, working with Sporting Events, Weddings and even animals including doggy day care, just to name a few!

Hawk-Eye-Vision will offer advice and assist in building your story with you to get the very best results using one or a combination of services.

Professional media is proven to enhance a business's profile and increase traffic to websites and social media. In today's world you can't afford not to have professional content.

Let us make you Stand out out for all the right reasons.

Scan the QR Code to Either contact us, look through our Social media and see our new website.

www.thecbm.co.uk



CBM has a new health & safety roadmap – and we need your input

David Mitchell is Health & Safety Manager at Mettis Group Limited and took over as the Chair of CBM's Health, Safety & Environment Group in 2020. Over the last 18 months, a roadmap for the group has been developed. This article explains how the roadmap benefits CBM members – and why they should get involved in the group.

Having enjoyed the benefits of active CBM membership over two decades, I decided to step up and give something back. As the Chair of the Health, Safety and Environment Group, I've drawn up a roadmap to shape our future direction. There's a clear aim – to deliver more value to members.

The time is right for some fresh thinking. Together, we've battled through the challenges of Covid-19, relying on each other to grapple with its seismic impact. How can we build on those closer ties to give members even more value?

In putting together the roadmap, I asked myself: 'What would make the group more valuable.' After all, what helps us is likely to help other metalforming businesses as well.

The roadmap is underpinned by the idea of inputs and outputs. By this, I mean the information CBM delivers and what it asks members to provide in return, so everyone gets broader benefits.

So how will this work?

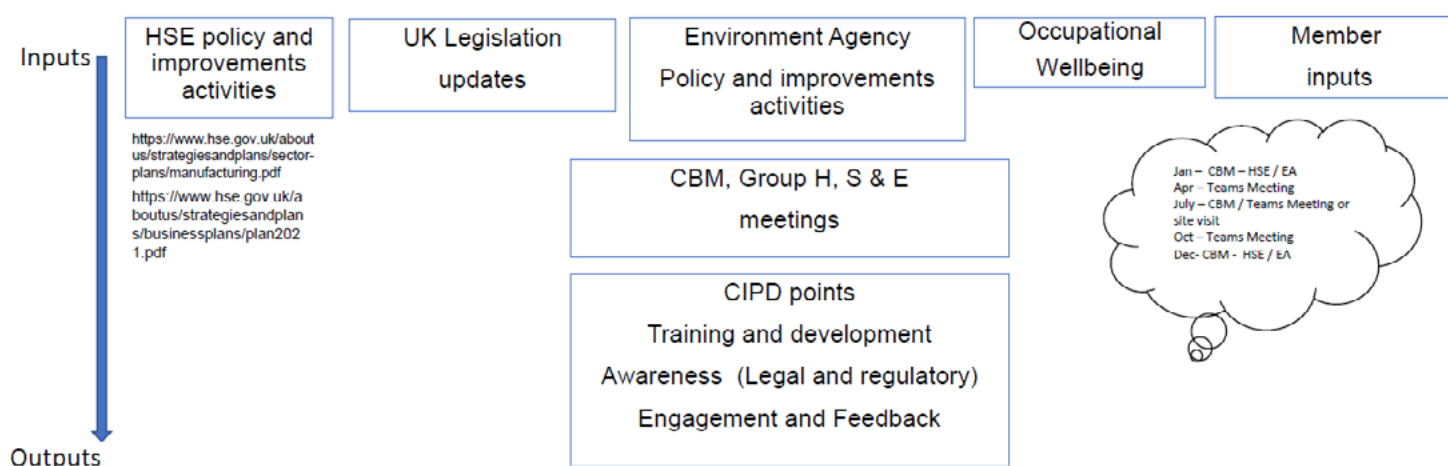
- Make it easy for you to request the topics you want us to cover in meetings – so you're driving our agenda and it's as relevant as possible)
- Strengthen our relationships with bodies such as the HSE and Environment agency – so you can stay one step ahead with policy and regulatory intelligence
- Provide CPD points for meeting attendance where possible
- Allow plenty of time for networking
- Place more emphasis on wellbeing, including mental health – in line with industry and workforce trends

What we need from you – and how you will benefit

Knowledge exchange is vital. With full confidentiality in place at every meeting, we want members to see the group as a safe space for sharing experiences and practices.

What have you done differently? How did that work? Learning about experiences in other companies will help you fine-tune what you do.

Meeting Format



What the Health, Safety & Environment Group will deliver to members

We're asking members to attend meetings and share their knowledge and experience. To make it worth your while, we will:



Specifically, we need more organisations to contribute their monthly accident data. We compile this into industry-wide trends data which you can use to benchmark your organisation and align with best practices. The data also helps us target future speakers and presentations.

Our members constantly tell us how valuable the data is – but we need more of it! With a greater number of contributions, the statistics will become even more useful in identifying trends and preventing repeat incidents.

Recognition

We also welcome back our annual awards and recognition for health, safety and environment excellence. These are excellent ways to showcase your organisation's progress to customers and the wider industry.

Get involved and tell us what you want

Overall, we see the roadmap as a leap forward in eliminating injuries while reducing health and safety costs.

We can achieve this by working with each other and with regulatory bodies.



So get involved today. Tell us what you want to discuss, and we'll arrange the speakers. And don't forget your monthly accident data!

Every contribution makes a difference.

I look forward to welcoming you to the next meetings on **27/09/2022** and **22/11/2022**

Contact Melinda Jean at melinda.jean@thecbm.co.uk on 0121 601 6350, to sign up.

Drive Health & Safety Improvements With Your CBM Membership

CBM is at the forefront of promoting health and safety and helping metalforming companies benefit from best practices. For example, we're in continual dialogue with the Health & Safety Executive to ensure standards work well for metalforming. There are several ways you can get involved and use your CBM membership to support continuous health and safety improvement.

Learn about trends and supercharge prevention with CBM's aggregated metalforming accident statistics

Every month, we ask CBM members to submit data about health and safety incidents. We then track the aggregated data so you can compare your organisation to peers within fastening, forging and sheet metal, as well as metalforming generally.

Members constantly tell us how useful it is to have this industry-specific data for comparing their performance and guiding prevention initiatives. In Q3 2021 alone, 23 companies reported their data – covering over 3,000 employees and over 4 million working hours.

The more members that contribute, the more useful the statistics are, so please get involved!



And the winner is...

Every year, we recognise one member with our Most Improved Health & Safety Award. This award recognises the member with the biggest reduction in health and safety incidents and celebrates their commitment to reducing harm.

The 2021 winner is Padley & Venables Ltd – congratulations to everyone at Padley & Venables Ltd, and thank you for contributing to CBM accident reporting.

Keep on top of best practices at our Health & Safety Group meetings

Our popular Health & Safety Group meetings are a lively forum for sharing successes and getting peer-to-peer advice on metalforming-specific challenges. For example, throughout the changing pandemic restrictions, meetings became a way to share policies and handbooks as everyone grappled with the rapidly changing (and unusual) situation.

Over the last year, we've also had a variety of expert speakers, covering topics such as mental health, homeworking set-ups, Brexit impacts, coolant management, water stewardship and alcohol and drug policies. So whatever health and safety questions you have, you can guarantee our members and speakers have wisdom to share.

Want to be part of the conversation and best practice sharing?

Contact Melinda Jean on melinda.jean@thecbm.co.uk to learn about getting involved in accident reporting and Health & Safety Group meetings.

Flexible energy enables you to spread risk when the markets are high

With the rapid spike in energy prices across the globe, now more than ever is the time to be conscious of how much you are spending on your energy.

Having a strategic long-term energy procurement plan can help you manage your energy requirements in a more cost-effective manner. That's why flexible contracts are worth considering.

What is flexible purchasing?

Enabling you to purchase energy for up to five years in advance and build a price made up of multiple purchasing decisions, flexible purchasing allows you to take advantage of wholesale market fluctuations and move quickly when the market is favourable.

With the current energy crisis, the market can be volatile and difficult to navigate. The longer the purchasing framework, the greater the prospect of minimising risk and exposure to volatility.

Small businesses and large corporates can benefit from flexible purchasing.

How does it work?

Using historical consumption data, we work with an energy supplier to agree your unique energy shape and tradeable blocks of energy that can be purchased over time.

Your monthly unit rate is made up from the weighted average of the individual energy blocks, plus an agreed shape fee.

What is the difference between fixed and flexible purchasing?

Fixed purchasing enables organisations to secure a price for the duration of their agreed contract, irrespective of any changing market conditions. This appeals to businesses who want the security of known costs for an agreed period.

However, you also bear the risk of overpaying if you decide to fix your entire requirement on the wrong day.

Flexible energy contracts provide you with the opportunity to spread risk when the markets are high and grab the best deal when the market is looking positive.

Why choose Control Energy Costs?

Finding the right business energy contract, at the right price, can be a minefield.

We help you compare the different options, so you can choose the best fit for your business. Transparency is a fundamental part of the way we work - we are open about every aspect of what we do for you, including what and how we are paid.

Our focus is on building long-term relationships founded on trust and mutual confidence, keeping promises, taking ownership of problems and giving good advice and long-term energy cost management solutions.

With an eye always on the future, we are progressive in developing new services and helping your business prepare for changes to technology and legislation, especially during uncertainty.

Flexible energy eBook

To explore flexible purchasing as an option for your business, we have created a simple eBook to help you understand how flexible energy contracts work and the benefits they can provide.

The eBook is free to download. Sign up for your copy by visiting www.cec.uk.com/flex.



Never pay more than you should for your energy

We help CBM members navigate renewable energy options and take control of energy costs. Why not get in touch to find out how we can help save your business money?



cec.uk.com
01737 556631

ENERGY SAVINGS OPPORTUNITY SCHEME (ESOS) PHASE 3 COMPLIANCE HAS STARTED

Confederation of British Metalforming is here to guide your company through the audit process with our expert knowledge of your sector

The legislation means all qualifying organisations have to prepare **mandatory energy audits** and if you know you will qualify for Phase 3 there is no reason why you shouldn't start doing your energy assessments now, if fact, starting early may exclude you from some of the upcoming changes that may include some level of compulsion to complete identified projects.

The audits identify cost-effective measures to cut energy spending, and phase 3 of the audits must be signed off by a registered assessor and submitted to the Environment Agency by December 5th 2023.

All companies with at least one of their UK group members with 250 employees or more, turnover above 50m euros, or a balance sheet value above 43m euros will be affected, which is likely to be more than 9,000 enterprises across the UK, and will affect 40+ CBM members. Please remember this is based on your organisation group structure. The scheme covers all power and fuel used by a company for industrial processes, building and transport.

Phase 1 has taught us that detailing all energy uses throughout a large business, and calculating means of reducing costs can be complex and time consuming, particularly for those already dealing with Climate Change Levy (CCL), the Carbon Reduction Commitment and the Mandatory Carbon Reporting Systems.



We are now taking bookings to carry out ESOS assessments and the following packages are available:-

ESOS AUDIT - CBM MEMBER PACKAGE

- ✓ £2000 plus VAT for ESOS assessment meeting and audit report sign off +
- ✓ £495 plus VAT per day, per site
- ✓ Reasonable travel and accommodation costs will be charged in addition to the costs above if required

ESOS AUDIT - CBM NON MEMBER PACKAGE

- ✓ £3000 plus VAT for ESOS assessment meeting and audit report sign off +
- ✓ £795 plus VAT per day, per site
- ✓ Reasonable travel and accommodation costs will be charged in addition to the costs above if required

The member and non-member packages include the following:

- ☐ An initial kick off meeting with the company, involving CBM and the lead assessor;
- ☐ A mid-term review of the audit report by the lead assessor
- ☐ Energy measuring and audit work
- ☐ Final sign off of the audit by the lead assessor.

At this meeting the audit process and timetable will be discussed and actions identified and agreed as who will carry the actions out. CBM members who are not required by the legislation to have a formal ESOS audit can also benefit from voluntarily opting to carry out an audit to identify practical energy saving projects for themselves. The cost of this service is £2,500 plus reasonable travel and overnight accommodation costs if this is required and will include energy measuring and audit work plus a final report prepared by our internal energy consultant.

If you would like to book your ESOS package and diary date or require further information please contact

Louise Campbell at CBM - louise.campbell@thecbm.co.uk

Innovate UK SMART project - SECA

Project Background

The project 'Scale-up and commercialization of an innovative forming technology for low-cost production of super-light automotive structural parts (SECA)' is funded by the Innovate UK SMART Grant, which is a highly competitive funding for game-changing and commercially viable R&D innovation that can significantly impact the UK economy. The consortium comprises three SMEs, CurvEx Technology Ltd, PAB Coventry Ltd, Confederation of British Metalforming, and one research organisation, Imperial College London. Our vision of this project is to disrupt status quo in the UK transportation high value manufacture sector to create new demands for lightweight streamlined extruded aluminium profiles in the transportation supply chain.

The Challenge

Transport is the largest greenhouse emitting sector in the UK. It accounted for 27% of total emissions in 2019. Of this, the majority (91%) was produced by road vehicles. Vehicle weight is a main factor responsible for the large emissions. Emissions of new cars in the UK fell by only 1% between 2011 and 2019 due to the rising popularity of heavy weight SUVs which consume 25% more energy on average than medium-sized passenger cars. The growth of UK electric vehicle (EV) market also faces a challenge in the need to increase driving range, which is closely linked to vehicle weight. Thus, the impetus to save vehicle weight is now a key focus of the UK carmakers to meet the country's net zero target by 2050.

Our Solution

Use of lightweight aluminium extrusion profiles is a promising solution to reduce vehicle body weight. Aluminium extrusion-intensive body structures enable 30% weight loss and 54% stiffness enhancement compared with steel counterparts. The

reduced weight contributes to 5% drop in greenhouse emissions throughout a vehicle's full life cycle. However, aluminium extrusion profiles have yet to be fully exploited for passenger vehicles due to the high product and assembly costs.

Integrating streamlined aluminium extrusion profiles in vehicle body structures makes it possible to reduce part numbers and assembly costs while improving profile dimensional precision and aerodynamic performance. However, streamlined aluminium extrusion profiles are still difficult to produce cheaply by conventional extrusion processes. Currently, streamlined aluminium extrusions are made from straight lengths of extruded profile which are then bent or cut and welded. Bending distorts the extruded cross-section and cutting/welding reduces the mechanical properties of an alloy, so both operations reduce stiffness and load bearing capacity of a designed structure. Additionally, the multi-step operation increases energy consumption, reduces productivity and adds cost to the manufacturing process.

This project consortium is exploiting a UK-invented novel extrusion technology (Flextrude®) to enable affordable manufacture of lightweight streamlined aluminium extrusion profiles in one single operation, thus eliminating costly secondary bending and joining processes.

Target Components

Typical extrusion components are front/rear bumper, engine mount, battery box, roof rail, cross rail etc in premium vehicle, passenger vehicle, electric vehicle, truck, racing cars.

Other extrusion components in railway and aviation are also of interest for this project.

Clamp down on tax relief abuse

A tax relief expert is warning manufacturing and engineering firms to be on their guard against 'cowboy firms' amid a Government clamp-down on false R&D claims

Here, R&D Tax Claims' Mark Evans FCA explains what this increased scrutiny means for businesses.

The tax relief schemes which enable innovative businesses to claim back some of the costs of their research and development efforts (R&D) have seen a huge uplift in popularity in recent years – but concerns have now been raised by the Government that a significant proportion of claims are actually unjustified, and some firms have already been ordered to pay back the money awarded to them by HMRC.

A recent review highlighted abuse of the schemes – estimating 3.6% were incorrect or fraudulent and blaming unqualified and/or unscrupulous agents submitting claims for activities which aren't classified as R&D.

The sums involved are significant, with a £21.6 billion gap between the amount of privately-financed R&D undertaken and the amount claimed in 2019 (the last year for which data is currently available). Overseas innovation overseen by UK companies accounts for some of this figure, but certainly not all of it.

From April 2023, R&D claims must be submitted digitally, and will have to include much more information as well as the signature of a named officer and the details of any agent who has advised

on the claim. Businesses will also have to forewarn HMRC that they intend to submit a claim.

This increased transparency may well deter agents without proper expertise in R&D within their client's industry from continuing to submit bad claims; but it's also a warning for businesses that they need to ask the right questions before taking on an adviser.

What constitutes R&D varies hugely from industry to industry – meaning advisers really need expert sector knowledge to be able to submit claims which stand up to HMRC investigation, and only include activities which can be legitimately counted as R&D.



Continue from page 24

That's why it's imperative that companies ask more questions before taking on an adviser, not only about their R&D expertise, but also about their specific industry experience.

Because many R&D advisers (even those who are genuine experts in this field) work on a commission basis – only receiving a fee if the claim is successful – this may give the company the illusion that there's no risk involved. But in actual fact, we're now seeing HMRC starting to go back and re-investigate claims after they've been paid out.

Many months down the line, it's likely the company will have paid their R&D adviser and invested the claim money back into the business – meaning a demand for repayment is going to put them in a tricky situation – and potentially damage their reputation too. Sadly, most of these “cowboy firms” are unlikely to be very helpful in defending a HMRC enquiry, assuming you can even track them down.

In the decade since R&D Tax Claims Ltd launched, we've also seen companies relying on their existing accountants to submit a claim. As their expertise often doesn't lie within this specific field, we often see them going the opposite way and being too conservative about how much the company can claim back.

It's a fine balancing act claiming everything you're entitled to, without including anything which isn't technically R&D – and that's



exactly why businesses need to be so cautious about their choice of adviser. Missing out on money because of an under-claim would be disappointing, but being ordered to pay back falsely-claimed money could have a devastating impact, especially for a smaller business.

It may be easy to over or under claim, but the schemes are intended to support businesses in their efforts to innovate. Those who are genuinely undertaking R&D activities shouldn't be deterred by the efforts to stamp out abuse of the system, they just need to ensure the right person prepares the claim.

For more information please contact Geraldine.bolton@thecbm.co.uk

Manufacturing Partner Firm Celebrates Major Milestone

A business that's helped manufacturing and engineering firms secure more than £26million in tax reclaims is celebrating its tenth year of operation.

R&D Tax Claims was launched in 2012 by accountant Mark Evans, with the aim of supporting businesses across both sectors reclaim money back from Research and Development activity.

Initially running the company solo and starting from scratch with no clients, Mark has seen the business grow exponentially over the past decade with his team now comprising five hugely experienced Account Managers and his client base spanning the length and breadth of the country, and across all disciplines.

All members of the R&D Tax Claims team have first-hand experience of the manufacturing and engineering industries with expertise covering everything from automotive, aerospace and electronics to process design, automation and lean consulting.

Mark Evans said: “I'm so proud to be marking ten years in business, a period which has seen us continue to grow year-on-year and which has resulted in millions of pounds of savings for our clients.

“The fact that every member of our team has extensive experience within manufacturing and engineering means that they absolutely understand the sectors inside and out, so they're able to work with clients to identify all R&D activity within their businesses – and ultimately maximise potential tax reclaims.”

One engineering firm that has worked with Mark and his team since day one is West Midlands-based A&M EDM. A supplier of high-specification precision-made parts to the automotive and aerospace sectors, they've successfully claimed almost £800,000 in tax savings to date. Melvin Wingfield, Director at A&M EDM said:



“Due to the very nature of our business, R&D activity – both product and process-based – forms a significant part of our operations, so being able to reclaim the tax back from it is hugely valuable. We've been working with Mark and the team for the past ten years, and they've helped us to reclaim hundreds of thousands of pounds back which we've subsequently been able to re-invest back into the company

“When we first heard about R&D Tax Claims and what they could do for us all those years ago we literally thought it was too good to be true. But it wasn't – the team does a fabulous amount of work on our behalf, and we reap all the benefits!”

Mark continued: “We'd like to thank all of the fantastic organisations that we work alongside, old and new, for their support and loyalty over the years – and here's to the next ten!”

To find out more about R&D Tax Claims or to speak to a member of the team, please visit www.rdtaxclaims.co.uk, email mark@rdtaxclaims.co.uk or call 0845 003 0140.



Helping manufacturing businesses get back on track

Many companies have not realised the full extent of the R&D tax credits available to them, scan the QR code below to see if your business is eligible.

Start the conversation

Stuart Weekes

Partner, Tax

stuart.weekes@crowe.co.uk

+44 (0)118 959 7222



  @CroweUK |  @Crowe_UK

Audit / Tax / Advisory / Risk

www.crowe.co.uk

Manufacturer & Supplier Membership Directory 2022



Fastener

A.M.C. UK Fasteners Ltd t: 01536 271 920
West Midlands NN17 5XZ www.amcukfasteners.co.uk

Atlas Copco IAS UK Ltd (Henrob) t: 01244 837 220
Flintshire CH5 2NX www.henrob.com

Barton Cold-Form, an Optimas Company t: 01905 772 021
Worcestershire WR9 0LP www.global.optimas.com

Brooks Forgings Ltd
West Midlands B64 5QJ



Established in 1960, one of the UK's leading manufacturers of forged and machined components. With our extensive in house manufacturing capabilities we are able to produce standards and specials to suit customer specific requirements.

t: 01384 563 356

f: 01384 563 357

e: enquiries@brooksforgings.co.uk

www.brooksforgings.co.uk

Cirteq Ltd t: 01535 633 333
West Yorkshire BD20 8QP www.cirteq.com

Clevedon Fasteners Ltd
West Midlands B75 7DG



West Midlands based UK manufacturers of fasteners and customer specific. Specialists cold forgings. ISO9001 and ISO14001 approved, Covid Secure.

t: 0121 378 0619

f: 0121 378 3186

e: sales@clevedon-fasteners.co.uk

www.clevedon-fasteners.co.uk

Complex Cold Forming Ltd t: 0121 556 5700
West Midlands WS10 7SE www.complexcoldforming.com

Cooper & Turner Ltd t: 01142 560 057
Yorkshire S9 1RS www.cooperandturner.co.uk

Howmet Fastening Systems and Rings, Redditch Operations (Linread Ltd) t: 01527 525 719
Worcestershire B98 7TD www.howmet.com

Howmet Fastening Systems Telford t: 01952 290 911
Shropshire TF3 3BQ www.howmet.com

JCS Hi-Torque Ltd t: 01787 376 212
Suffolk CO10 2YH www.jcshi-torque.co.uk

Leggett & Platt Components Europe Ltd t: 01282 814 054
Lancashire BB18 6JA www.leggett.com

Leggett & Platt Components Europe Ltd t: 01226 707 500
South Yorkshire S72 7GH www.leggett.com

Smith Bullough t: 01942 520 250
Lancashire WN2 4HD www.smithbullough.com

SPS Technologies (T.J. Brooks Div.) t: 0116 274 4886
Leicestershire LE4 9HX www.spstech.com

Stanley Engineered Fastening (Avdel) t: 01925 811 243
Cheshire WA1 4RF www.stanleyengineeredfastening.com

TR Fastenings t: 0845 4811 800
East Sussex TN22 1QW www.trfastenings.com

Forging

Abbey Forged Products Ltd t: 0114 231 2271
Yorkshire S6 1ND www.abbeyforgedproducts.co.uk

AKS Precision Ball Europe Ltd t: 0191 587 0000
County Durham SR8 2PP www.aksball.com

Bedford Steels t: 01246 299 100
Yorkshire S4 7YS www.bedfordsteels.co.uk

Bifrangi UK Ltd t: 01522 585 800
Lincolnshire LN2 5DT www.bifrangi.co.uk

Blaenavon Forgings Ltd t: 01495 790 345
Gwent NP4 9XG www.forgedsolutionsgroup.com

Brockhouse Group Ltd t: 0121 556 1241
West Midlands B70 0SN www.brockhouse.co.uk

Brookes & Adams Ltd t: 0121 360 1588
West Midlands B44 9DX www.banda.co.uk

Brooks Forgings Ltd
West Midlands B64 5QJ



Established in 1960, one of the UK's leading manufacturers of forged and machined components. With our extensive in house manufacturing capabilities we are able to produce standards and specials to suit customer specific requirements.

t: 01384 563 356

f: 01384 563 357

e: enquiries@brooksforgings.co.uk

www.brooksforgings.co.uk

Cascade (UK) Ltd t: 0161 438 4010
Greater Manchester M11 2DD www.cascorp.com

Cerro EMS Ltd t: 0121 772 6515
West Midlands B9 4DS www.cerro-ems.com

Chapmans Agricultural Ltd t: 0114 285 6000
South Yorkshire S6 2FH www.chapmans-uk.com

Cramlington Precision Forge Ltd t: 01670 716 811
Northumberland NE23 1WA www.cpf-tvs.com

Footprint Sheffield Ltd t: 0114 232 7080
South Yorkshire S6 2AH www.footprint-tools.co.uk

Forged Solutions Group Limited t: 0144 219 3000
Derbyshire DE4 2JB www.forgedsolutionsgroup.com

Forged Solutions Group Limited t: 01325 462 722
South Yorkshire S9 1HD www.forgedsolutionsgroup.com

Henry Williams Ltd t: 01325 462 722
County Durham DL1 2NJ www.hwilliams.co.uk

International Safety Components : 01248 363 110
LLandegal LL57 4YH www.isc-wales.com

Independent Forgings & Alloys Ltd t: 0114 234 3000
South Yorkshire S6 2BL www.independentforgings.com

ISC Wales t: 01248 363 110
Gwynedd LL57 4YH www.isc-wales.com

Kimber t: 01384 414 500
West Midlands B64 5QY www.kimbermills.co.uk

Koyo Bearings (Europe) Ltd t: 01226 733 200
South Yorkshire S75 3TA www.koyo.eu

Mettis Group Ltd t: 01527 406 400
Worcestershire B97 6EF www.mettis-aerospace.com

Mills Forgings Ltd t: 024 7622 4985
Warwickshire CV1 2BJ www.millsforgings.co.uk

MSI-Forging Division t: 01302 366 961
South Yorkshire DN4 8DH www.msi-forge.com

Padley & Venables Ltd t: 01246 299 100
Yorkshire S18 2XT www.padley-venables.com

Pandrol UK Ltd t: 01909 476 101
Nottinghamshire S81 7AX www.pandrol.com

Smith Bullough t: 01942 520 250
Lancashire WN2 4HD www.smithbullough.com

Solid Swivel Ltd t: 01384 636 421
West Midlands B64 7BL www.solidswivel.co.uk

Somers Forge Ltd t: 0121 585 5959
West Midlands B62 8DZ www.somersforge.com

Special Quality Alloys Ltd t: 0114 243 4366
Yorkshire S9 3XN www.specialqualityalloys.com

Spromak Ltd t: 0151 480 0592
Merseyside L36 6AN www.spromak.co.uk

Tecomet t: 0114 285 5881
Yorkshire S6 2AN www.symmetrymedical.com

The Crosby Group UK Limited
West Midlands B64 6AJ



The Crosby Group is a global leader in innovating, developing, manufacturing and supplying products used in lifting, rigging, load monitoring, material handling and other related applications.

t: 01384 353 120
www.premierstampings.co.uk

Tinsley Bridge Group t: 0114 2211 111
Yorkshire S9 1TG www.tinsleybridge.co.uk

W.H. Tildesley Ltd t: 01902 366 440
West Midlands WV13 2AN www.whtildesley.com

Wyman Gordon Lincoln Ltd t: 01522 525 492
Lincolnshire LN2 5XY www.wyman-gordon.com

Wyman Gordon Ltd t: 01506 446 200
West Lothian EH54 5BZ www.wyman-gordon.com

Sheet Metal / Pressing

AGA Rangemaster Ltd t: 01926 457 400
Warwickshire CV31 2AD www.rangemaster.co.uk

Aisin Europe Manufacturing (UK) Ltd t: 0121 421 5688
West Midlands B32 3BZ www.aisin.com

APS Metal Pressings Ltd
West Midlands B19 3AR



- APS are a world leading manufacturer, with unrivalled metal forming and presswork capabilities.
- Our 57,000 square foot facility contains latest start-of-the-art manufacturing plant enabling us to provide, complex high specification components.
- Founded in 1970, this family run business, is based within the hub of British industry – Birmingham, the home of the Enviro-Cup.



t: 0121 523 0011
f: 0121 554 7244
e: info@apsmith.co.uk
www.apsmith.co.uk

Bisley (FC Brown) t: 01633 637 383
Gwent NP19 4PW www.bisley.com

Broadways Stampings Ltd t: 01908 279 200
Buckinghamshire MK1 1DT www.broadwaysstampings.co.uk

C.Brandauer & Company Ltd t: 0121 359 2822
West Midlands B19 2YU www.brandauer.co.uk

Carlton Laser Services Ltd t: 0116 233 9990
Leicestershire LE4 9LN www.carltonlaser.co.uk

Cirteq Ltd t: 01535 633 333
West Yorkshire BD20 8QP www.cirteq.com

Denso Marston Ltd t: 01274 702 404
Yorkshire BD17 7JR www.denso-europe.com

Eaton Group t: 01795 889 146
Kent ME12 1LP www.enclosures-crouse-hinds.uk.com

Eden - A trading division of The Marmon Group Limited t: 01933 401 555
Northamptonshire NN8 6GR www.eden-uk.com

Eu-Matic Div. of Multimatic Ltd t: 024 7667 3333
Warwickshire CV5 6UB www.multimatic.com

European Springs & Pressings (Beckenham) t: 0208 663 1800
Kent BR3 4DW www.europeansprings.com

Ex-pressed Steel Panels LTD t: 01535 632 721
North Yorkshire BD22 0DB www.steelpanels.com

Futaba-Tenneco UK Ltd t: 01282 433 171
Lancashire BB12 6HJ www.futaba-tenneco.co.uk

G John Power Limited t: 0121 550 3112
West Midlands B63 3PF www.gjohnpower.co.uk

G-TEKT Europe Manufacturing (Gloucester) t: 01452 610 022
Gloucestershire GL3 4AJ www.takao.co.uk

G-TEKT Europe Manufacturing Ltd (Gwent) t: 01495 307 190
Gwent NP23 5SD www.takao.co.uk

GDC Group Ltd (Newry) t: 02830 264 621
County Down BT34 2QU www.gdcgroup.co.uk

GDC Group Ltd (Portadown) t: 0283 8333 131
County Armagh BT63 5HU www.gdcgroup.co.uk

Gestamp Tallent Ltd (Aycliffe) t: 01325 313 232
County Durham DL5 6EP www.gestamp.com

Gestamp Tallent Ltd (Cannock) t: 01543 466 664
Staffordshire WS11 1LY www.gestamp.com

Gestamp Tallent Ltd (Llanelli) t: 01554 772 233
Carmarthenshire SA14 8EU www.gestamp.com

Glen Dimplex Home Appliances t: 0844 248 4466
Merseyside L35 2XW www.gdha.com

Guala Closures UK Ltd t: 0141 777 2000
Lanarkshire G66 1ST www.gualaclosures.com

Hadley Industries Plc t: 0121 555 1300
West Midlands B66 2PA www.hadleygroup.com

NEW Hager Engineering Ltd t: 01952 677 899
Telford TF1 7TF www.hager.com/uk

Imperial Machine Company t: 01978 661 155
Wrexham LL13 9RF www.imco.co.uk

JCS Hi-Torque Ltd t: 01787 376 212
Suffolk CO10 2YH www.jcshi-torque.co.uk

Kiyokuni Europe Ltd t: 01952 292 920
Shropshire TF2 9TY www.kiyokuni.co.uk

KMF (Precision Sheet Metal) Ltd t: 01782 569 060
Staffordshire ST5 7UF www.kmf.co.uk

Leonardt Limited t: 01746 861 203
Shropshire WV16 6NN www.leonardt.com

Liberty Pressing Solutions (Coventry) Ltd t: 02476 691 000
West Midlands CV5 6RT www.libertyhousegroup.com

Lincat t: 01522 875 500
Lincoln LN6 3QZ www.lincat.co.uk

Milton Keynes Pressings Ltd
Buckinghamshire MK2 3EF



The MKP Group consists of Milton Keynes Pressings, Ryeland Toolmakers and Maine office, all established Engineering Companies. As a tier one supplier of Metal pressings and sub assemblies in to the automotive and other industries we pride ourselves on our quality and delivery performance to our customers of which we have received various awards.

Our Accreditations include:



t: +44 (0) 1908 271 940
www.mkp.co.uk

Northern Automotive Systems Ltd t: 01873 832 263
Monmouthshire NP7 0EB www.nasuk.com

Presspart Manufacturing Ltd t: 01254 584 126
Lancashire BB1 5RF www.presspart.com

Radius Aerospace Inc t: 01743 454 300
Sheffield S20 3GB radiusaerospace.com

Rical Limited t: 0121 558 2694
West Midlands B66 1NY www.ricalgroup.com

Rittal-CSM Ltd t: 01752 207 600
Devon PL6 7EZ www.rittal-csm.co.uk

NEW SAS International Ltd t: 0118 929 0900
Bridgend CF31 3XU <https://sasint.co.uk>

SDE Technology
Shropshire SY1 3LB



- SDE Technology is a long standing metal presswork and assemblies provider based in Shrewsbury.
- With mechanical, progression, hydraulic and transfer options up to 1000T, and incorporating 2 state of the art Powder coating lines on site.
- We are here for all your pressing and coating needs.

t: 01743 450 501
www.sde.technology.co.uk

Sertec Aluminium Structures t: 0121 706 0330
West Midlands B11 2BF www.sertec.co.uk

Sertec Auto Structures Heavy Stamping t: 01675 463 361
West Midlands B46 1JX www.sertec.co.uk

Sertec Light Stampings t: 0121 327 1428/ 01675 436 000
West Midlands B6 7QT www.sertec.co.uk

SPS Aerostructures Ltd t: 0115 988 0000
Nottinghamshire NE15 0DP www.spstech.com

Steel & Alloy Processing Ltd t: 0121 553 5292
West Midlands B70 6BZ www.steelalloy.co.uk

Stockfield Metal Spinners Ltd t: 0121 440 1333
West Midlands B12 9DJ www.stockfield.com

Swann-Morton Ltd t: 0114 234 4231
Yorkshire S6 2BJ www.swann-morton.com

The Regent Engineering Co (Walsall) Ltd t: 0121 526 6060
West Midlands WS10 8XB www.regenteng.com

Titan Steel Wheels t: 01562 850 561
West Midlands DY10 3SD www.titansteelwheels.com

Voestalpine Metsec plc t: 0121 601 6000
West Midlands B69 4HF www.metsec.com

Voestalpine Rotec Ltd t: 01455 620 300
Leicestershire LE10 3BS www.voestalpine.com/rotec

Walsall Pressings Co Ltd t: 01922 721 152
West Midlands WS1 4JW www.walpres.co.uk

Whittan Storage t: 0800 169 5151
Shropshire TF7 4LN www.link51.co.uk

William King Ltd t: 0121 500 4100
West Midlands B70 9DR www.williamking.co.uk

Cold Rolled

Aisin Europe Manufacturing (UK) Ltd t: 0121 421 5688
West Midlands B32 3BZ www.aisin.com

Grove Metal Sections Ltd t: 01902 601 697
West Midlands WV13 3RN www.grovems.com

Hadley Industries Plc t: 0121 555 1300
West Midlands B66 2PA www.hadleygroup.com

Voestalpine Metsec plc t: 0121 601 6000
West Midlands B69 4HF www.metsec.com

Fastener

Ajax Tocco International Ltd West Midlands B8 1BG	t: 0121 322 8000 www.ajaxtocco.co.uk
Carlo Salvi UK Ltd - Hatebur Shropshire TF7 4PF	t: 01952 587 730 www.carlosalvi.com
Doerken MKS Systeme Gmbh and Co Germany	t: 00 49 233 0630 www.doerken.com
Heat Treatment 2000 Ltd West Midlands B70 9PQ	t: 0121 526 2000 www.heatreat2000.co.uk
National Machinery UK Ltd West Midlands B31 2TS	t: 0121 222 5352 www.nationalmachinery.eu
Phillips Screw Company Leicestershire LE3 2YB	t: 0754 081 1962 www.phillips-screw.com
RLS Tooling Staffordshire WS11 9PU	t: 01543 271 808 www.rlstooling.co.uk

Forging

Ajax Tocco International Ltd West Midlands B8 1BG	t: 0121 322 8000 www.ajaxtocco.co.uk
Bharat Forge Middlesex TW8 9JJ	t: 01562 720 396 www.bharatforge.com
Carlo Salvi UK Ltd - Hatebur Shropshire TF7 4PF	t: 01952 587 730 www.carlosalvi.com
Condat Ltd Doncaster, DN 10 6EZ	t: 01302 770 088 www.condat-lubricants.com
Dreher Automation Germany D- 72172	t: 0049 7454 881 640 www.dreher.de
Forge Tech Services (UK) Ltd West Midlands B71 3QW	

- Spares, Service and Process engineering for all makes of metalforming equipment
- Forge Tech offer a full Turnkey service for all your metalforming equipment projects from small spares to complete press installations.

	t: 07789 502 850 www.forgetechservices.com
Henkel Ltd Hertfordshire HP2 4RQ	t: 01442 278 000 www.henkel.com
Interpower Induction Ltd West Midlands WS8 6LH	t: 01675 477 700 www.interpowereurope.com

James Durrans and Sons
Yorkshire S36 9QU



- Suppliers of all types of forging lubricants
- UK based manufacturing facilities and technical support
- 10 day delivery time on most lubricants

Contact: Steven Sherry, Sales Manager	t: 01226 370 000 www.durrans.co.uk
LASCO Umformtechnik GmbH Germany	t: 00 49 9561 6420 www.lasco.com
Micas Simulations Ltd Oxfordshire OX4 2ER	t: 01865 775 412 www.micassimulations.co.uk

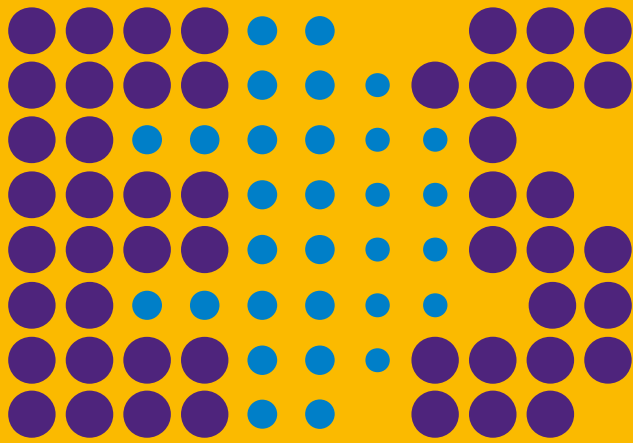
Sheet Metal / Pressing

Aalberts Surface Technologies Ltd West Midlands B6 7EE	t: 0121 327 2020 www.hauckht.co.uk
AP&T UK Denmark	t: 00 45 762 53201 www.apgroup.com
Dayton Progress Ltd Warwickshire CV8 1NP	t: 01926 484 192 www.daytonprogress.co.uk
Dreher Automation Germany D-72172	t: 00 49 7454 881 640 www.dreher.de
EcoCooling Limited Suffolk IP28 6RE	t: 07973 287 385 www.ecocooling.org
Highley Steel Ltd West Midlands DY8 1JN	t: 01384 396 660 www.highleysteel.com
Institute of Sheet Metal Engineering West Midlands WV6 7UQ	t: 0789 149 9146 www.isme.btck.co.uk
MISATI S.L. Spain	t: +34934 404 727 www.misati.com
Ryeland Toolmakers Buckinghamshire MK2 3JJ	t: 01908 647 746 www.ryelandtoolmakers.co.uk
The Bifurcated & Tubular Rivet Company Buckinghamshire HP20 1DQ	t: 01296 314 300 www.bifandtub.co.uk

Commercial

Advanced Forming Research Centre Renfrew PA4 9LJ	t: 0141 534 5200 www.strath.ac.uk/afrcc
Altair Engineering Warwickshire CV32 4JG	t: 01926 468 600 www.altaireengineering.co.uk
Control Energy Costs Ltd Surrey CR5 1BN	t: 07501 221 728 www.cec.uk.com
Crowe U.K. LLP West Midlands B69 2DG	t: 0121 543 1900 www.crowe.co.uk
FBC Manby Bowdler Solicitors LLP West Midlands WV2 4DN	t: 01902 578 000 www.fbcmb.co.uk
Fortress Interlocks West Midlands, WV4 8FB	t: 01902 349 000 www.fortressinterlocks.com
Fuchs Lubricants (UK) Ltd Staffordshire ST1 5HU	t: 01782 203 700 www.fuchs.com/uk
Gravity Risk Services Leicestershire LE7 1GP	t: 07510 695 335 www.gravityriskservices.co.uk
Hillfoot Steel Ltd Sheffield S6 1HP	t: 0114 250 3643 www.hillfoot.com
Imperial College London London SW7 2A8	t: 020 7589 5111 www.imperial.ac.uk
In-comm Training and Business Services Ltd West Midlands WS9 8UG	t: 01922 457 686 www.in-comm.co.uk
Inspired Energy Plc Lancashire PR4 2TZ	t: 01772 689 250 www.inspiredenergy.co.uk
Kumi Solutions Warwickshire CV8 9FF	t: 02746 350 360 www.kumi-solutions.com

Lake Engineering Solutions Worcestershire B98 8QJ	t: 07948 352 008 www.lakecm.co.uk
Petrofer UK PLC Shropshire TF7 4PW	t: 01952 580 100 www.petrofer.co.uk
NEW Plus Automation Ltd Worcestershire WR9 0LG	t: 0121 582 2258 www.PLUSAutomation.co.uk
Powerstar South Yorkshire S35 1QP	t: 0333 230 1327 www.powerstar.com
Process Parameters Ltd Berkshire SL6 3UA	t: 01628 778688 www.processparameters.co.uk
R & D Tax Claims Ltd Shrewsbury SY4 4FA	t: 0845 003 0140 www.rdtaxclaims.co.uk
Regenerco Limited Burton Upon Trent DE13 9PD	t: 07973 298 832 www.regenercoenergy.com
ReTell Middlesex TW16 5QH	t: 01932 730 890 www.retell.co.uk
Sammet Consulting Birmingham	t: 07885 489 176 www.linkedin.com/stuart-mellor-sammet
NEW Soma Health LTD Worcester, WR2 4BN	t: 01905 422808 www.somahealth.co.uk
Total UK Ltd West Yorkshire WF11 8JY	t: 01977 636 303 www.total.co.uk



ENGINEERING DESIGN SHOW

Celebrating 10 years

**THE UK'S PREMIER EVENT
FOR DESIGN ENGINEERS**

12-13 October 2022

Coventry Building Society Arena

REGISTER NOW!

www.engineeringdesignshow.co.uk

  @EngDesignShow #EngDesignShow

HEADLINE SPONSORS



**WURTH
ELEKTRONIK**
MORE THAN
YOU EXPECT

**SOLID STATE
SUPPLIES**

SPONSORS



**MOUSER
ELECTRONICS**



ADVANCED ENGINEERING

Scan here to
register FREE
online today



2 & 3 November 2022 | NEC Birmingham

The UK's LEADING annual gathering
of OEMs and engineering and manufacturing
supply chain professionals

Your chance to hear first-hand from leading industry professionals and innovators



Stephen Phipson
CEO
Make UK



Alan Banks
Lightweighting Innovations
Manager
Ford Motor Company



Sergey Kiselev
Vice President
ZeroAvia

VIEW THE FULL SPEAKER LINE UP AT
advancedengineeringuk.com
Register free online using this code: 5076

Co-located with

LAB
Innovations

by **EASYFAIRS**