

Oracle

Die Tool Development
Page 7

Digital Manufacturing
Page 16

**MPPS Installs First Simpac
Press Line in the UK**
Page 25

**Journal of the Institute
of Sheet Metal Engineering**

Issue: Autumn 2020
£10.00 (FREE to members)
ISSN 0969-9931

Principle Officers

President

Mr Alan Shaw

Chairman of Council

Mr Barry Smith

Honorary Treasurer

Mrs Josie Stevenson

Honorary Secretary

Mr Bill Pinfold

t. 07981 499 146
e. ismesec@gmail.com

Social Events

Mr Adrian Nicklin

t. 07774 260 126
e. adriannicklin@btinternet.com

Advertising & Editor

Steve Watson

t. 01384 505 656
e. post@eleven10creative.co.uk

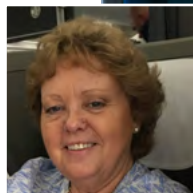


Image Ref - AP&T
Press Release

The Covid 19 crisis has highlighted manufacturing's vulnerability when exposed to global supply chains. It is vital that we maintain United Kingdom's skills and build our internal capability in order to face these global challenges.

CBM on the importance of Apprenticeships



Contents

| | |
|---|----|
| Principle Officers..... | 02 |
| President and Chairman Comments..... | 05 |
| Secretary's Notes | 06 |
| Die Tool Development..... | 07 |
| European Springs Press Release | 11 |
| Glen Callum/Bruderer Press Release.... | 14 |
| Metal Bashers Ball | 15 |
| Digital Manufacturing | 16 |
| CBM on Tool Process Design Engineer Apprenticeship | 21 |
| MMMA..... | 22 |
| Nidec Press Release | 27 |
| Skills Competition | 28 |
| Previous ISME Skills Competition..... | 29 |
| AP&T Press Release | 30 |
| Bruderer/Xander Press Release | 34 |

Are you following us on Twitter?
Join the conversation



Cover and contents feature photo courtesy of Lesjofors/ European Springs

The Oracle published in association with the Metalforming Machinery Makers Association Ltd. ISME & MMMA working together for the benefit of the Sheet Metalforming Industry.

The Oracle, mouthpiece of the Institute, speaks for and to the world of Sheet Metal Forming & Pressworking by way of featuring News, Views and Topics around the Industry.

www.isme.org.uk



Worchester Presses Limited

Mechanical & Hydraulic Presses, Coil Handling



Mechanical Presses



Hydraulic Presses



Coil Handling Equipment



Contact us for further information, detailed specification & quotations

+44 (0)1384 392266

Email us
sales@worchesterpresses.co.uk

President Comments

Alan Shaw, President

Hi everybody – I hope you are all managing to navigate successfully through the Covid-19 pandemic. Whether you are at work, locked down, or working from home, you will find something of interest I'm sure in this edition of Oracle.

Amongst other things, we have very interesting and informative input from John Yarnall on Surface Treatment, and the WMG on Digital Manufacturing – both very much in the spotlight at the moment.

Digital manufacturing has been in the news quite a bit as a result of Coronavirus, not least as people have found innovative ways of making Face Visors and other PPE using 3D printing and other techniques, often on machines installed in their homes. But of course, it has immense long-

term significance as businesses continue to pursue their Industry 4.0 programmes and IOT strategies.

What will also be fascinating is the extent to which "working from home" and communicating via online platforms becomes part of our accepted way of life. I'm sure that I am not the only member for whom learning to use "Zoom" and "Microsoft Teams" has become essential. Please be assured that your ISME council is actively investigating the best ways we can keep in touch with our membership until such time as more conventional meetings and events can resume.

Best wishes and stay safe

Alan

Chairman's Notes

Barry Smith, Chairman

The impact of COVID 19

This epidemic has dramatically changed the outlook of our UK manufacturing companies, and the degree of change largely depends upon the manufacturing sector you are working in.

We have had to face a totally different working environment and we have had no choice but to implement strategic changes to how we now run our business.

Despite the majority of firms continuing to trade during incredibly arduous times, most manufacturing companies have experienced significant declines in orders. Obviously, these reduced sales have major implications to the cash-flow as the sales evaporate, we have seen a drop in levels of as much as 79%.

Six months into this crisis and we are now very slowly starting to see schedules coming back on, all be it at much lower volumes with reduced lead times.

The difficulty has been manufacturing the components enough in advance to give sufficient time for these sub-contracted services to be completed that allows us to supply our customer as their required parts in full and on time. Getting the balance of this advanced manufacturing has been key to successfully satisfying customers' demands without over stocking.

Every business from hospitality through to manufacturing has been affected and as we hopefully slowly start to immerge from this epidemic, I believe that there will be opportunities for all companies that are creative and dynamic and who are able to respond to the changing conditions and demands. This of course assumes that your workforce does not have to self-isolate now that we face the second wave of the epidemic.

ISME Secretary's Notes Autumn 2020

Bill Pinfold - Honorary Secretary

The Coronavirus continues to affect all aspects of our way of life and ISME is no exception. Having had to cancel our two premier events this year I'm pleased to report that they have both been rearranged for 2021

The Metal Bashers Ball will now take place on Friday 14th May 2021 with the same venue, speaker (Eddie the Eagle) and band.

The Skills Competition will take place on Thursday 10th June hosted by Amada UK Ltd., Kidderminster

Entrants who have produced test pieces for 2020 will be able to roll them over to next year.

Let's all hope that the virus is under control by then to let these events take place so we can meet up again.

The 2020 AGM had to be postponed. This will now be held next year along with the 2021 meeting. The accounts have been signed by the President and Chairman and lodged with Companies House. They showed a positive income of £2443 in 2019.

The ISME Council managed to have a physical meeting at the end of September in a Covid secure environment at the CBM. The Chairman presented ideas to move the Institute forward



WMG will run a webinar for ISME Members presenting case studies on successful applications of Digital Manufacturing on January 14th 2021. The speakers will be Dr Paul Lansdell, Dr Liz McArdle and Dr Dan Peavoy. This will be a follow on from the article in this Oracle

and an improved use of social media was approved to raise the profile of ISME and attract new members. He also stressed the need to find members prepared to take on some or all of the work of the Secretary and Events Officer to allow for succession planning.

A member's questionnaire was circulated by email in late September to get member's views on the Institute and its activities. Early indications are that many members value the opportunity to meet likeminded people and the networking opportunities provided by ISME membership.

A full report on the survey's findings will be included in the Spring 2021 Oracle. Any member who has not received the survey and would like to complete one should contact me at ismesec@gmail.com.

This edition of the Oracle features an article on Digital Manufacturing by the WMG SME Team who provide help and support on the implementation of business development opportunities identified via the collection and interpretation of the digital data and information obtained by the use of sensor platforms or simply exploring the machine data available from modern equipment. Further information on the WMG SME Team can be found on www.warwick.ac.uk

New Apprentice Toolmaker Award

Our Events Officer, Adrian Nicklin is developing a new ISME Award aimed at apprentice toolmakers. The idea is that working with Apprentice Training Companies or Colleges we recognise, on completion of their level 3 training course, the best candidate.

This will be by The Company Trainers putting forward Candidates using an entry form to be completed by the Apprentice & Trainer.

Entry forms will be forwarded to an ISME selected member group to review followed by an Apprentice interview by ISME supported by their Trainer.

We are planning to run a pilot scheme in 2021. Full details will appear on the ISME website when available.

Advanced Surface Coatings & Treatments For Protecting Tools Against Wear In Service.

Eur Ing John Yarnall CEng, MISME, FIMMM | Surface Innovations Consultancy

Introduction:

This is the second article in a six part series of technical features on tool and die wear protection in which I will cover as an introduction to the stages of manufacturing and treating tools to provide optimal performance during high volume production of sheet metal parts. The scope is to provide insight into how the design and heat & surface treatment of tooling should be a key consideration of the production process, and not be a 'black box' to try it and see approach. This strategy at the design stage is of paramount importance in selecting not only the correct tool, but the heat treatment and metallurgical and surface characteristics of the tool finish, texture and surface coating which compliments the metal forming lubrication to be used. Modern approach to these tooling challenges are now being aided by the use of CAD and simulation software via a digital interface of forming parameters which can now predict 'best' economic performance tooling to achieve long press runs to meet JIT part supply requirements. Moreover, the high cost of raw materials (both work stock and tool steels) is now a prime focus of press shop managers to ensure each process is budgeted to provide maximum economic returns. Recently many other factors are presenting additional cost via percentage waste due to out of tolerance parts caused by premature wear of tooling and lost lubricant waste

and energy. Tooling efficiency has never been more important to metal press forming economics, and the tool surface and durability via protective anti-wear coating and lubrication make this all possible.

The next sections will provide some brief overview of the scope of each set of parameters to be considered, and I would recommend further reading to enable a more detailed understanding via ref to specific sections. I have also included a short case study of how one of the latest metal forming processes (HFQ) of heat treatable aluminium alloys sheet parts for automotive and aerospace is made possible by the unique tooling system supported by surface wear protecting technologies.



Tool & Die Design for Coatings and Treatments

Tool Design Decisions: Of course, coatings are not necessarily a cure for every tooling problem. Many good decisions need to be made about the tooling before the optimal coating can be chosen. Major decisions that will impact a coating's ability to perform are material, heat-treating procedures, and surface preparation. Only after these questions have been properly addressed should a coating be chosen. However, selection of the most appropriate coating can be decided at the design stage of the tool when knowledge of tool steel grade, heat

treatment and forming process parameters can be prescribed in advance of tooling manufacture. This methodology can be the most successful in achieving the best 'systems' approach for optimal tooling production runs. Moreover, tooling economics for high volume production can be more favourable with less risk of premature tool surface failure. Surface coating performance is also enhanced when the optimum tooling design and tool steel grade is selected as being crucial at the onset of tooling design.





Tool Coatings Decisions: Tribology is concerned with the behaviour of the tool/sheet interface. It includes friction, lubrication and wear topics of the sheet/tool interface. Tribological aspects can have a major influence on the forming characteristics of a part under high volume press forming conditions; For example the following parameters are critical to the sheet forming process, and should be carefully prescribed in the choice of coating via these parameter categories.

- Friction conditions
- Lubrication
- Galling and wear
- Tool and work stock sheet surface roughness

The choice of tool coating must take into account the interaction of these parameters, and help mitigate/reduce the synergic effects which can reduce forming forces and surface wear. Excessive surface wear manifesting itself in premature tool failure with the subsequent non-conformance to part quality standards. To provide a practical example of tool coating selection when deciding a coating type for light alloy sheet forming (e.g. aluminium alloy) vs low carbon steel Dos & Don'ts:

Do's

- Use tool coatings optimised for forming aluminium
- Consider the use of dry-film lubricant
- Use optimised surface roughness texture (in most cases parallel to direction of metal flow). e.g. EDT pre/post tool coating
- Take into account that aluminium generally shows a lower surface friction than steel
- Take into account all sheet-lubricant-tool coating-tool processing parameters when analysing frictional behaviour of the surface/tool interface.

Don'ts

- Use the same tooling, tool coatings and process lubricants used for steel panels regardless. These are very likely to be unsuitable to achieve the optimum friction conditions and can cause corrosion of work stock material in the case unsuitable lubrication. Dedicated tooling material and/or geometry are usually required.

One final ref. to how surface friction can fully influence formability:

Friction under sheet metal forming is mainly determined by the tool coating and lubricant regime. In case all the normal load on the tool surface is carried by the lubricant film (i.e. full film lubrication), then friction is relatively low (EHL= elasto-hydrodynamic lubrication). However, in case the entire load is carried via Metal-to-tool metal coating contact to sheet (i.e. Boundary lubrication conditions, BL), then friction can be higher. However, tool coatings with a very low surface friction < 0.1 to 0.4μ with a hardness in the range of 1200-5000 Hv 0.05kg) with a thickness of 1-10 ensure mixed boundary lubrication characteristics very similar to lower EHL conditions.

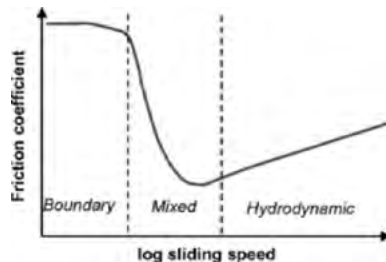


Fig 1 illustration of a 'Stribeck Curve' of how friction coefficient changes during the 3-stages of contact between work stock sheet and tool surface under tool lubrication and coated surface conditions.. NB the Log speed refers to sheet alloy moving across coated tool with lubrication...the characteristics of this curve can vary considerably depending of tool geometry and forming press speed.... NB This is an illustration only and does not relate to a specific example...

To manage the friction conditions also help mitigate surface wear which can be categorised as a mix of:

- Abrasive wear
- Three-body abrasive wear
- Adhesive wear
- Fatigue/ corrosion fatigue wear.

Tool and Die Steel Selection & Heat Treatment

Vacuum heat treating, performed in units such as the one shown here, is recommended for all tools regardless of the coating process. The oxidation and decarburisation caused by non-vacuum-heat-treating processes will inhibit coating adhesion. However, salt bath and fluidised bed H/T can be used with extreme care and suitable masking of holes to prevent salt contamination which would adversely affect subsequent tool coating and treatments. Moreover, vacuum H/T

is the much preferred heat treatment type for environmental reasons as well as technical.

Fig. 1 shows a typical vacuum furnace with latest CNC control program for a whole range of tool steel grades used for metal forming tools. It should be noted, however, that only furnaces with a quench rate circa 10 bar pressure in nitrogen or argon high purity gas is suitable to achieve the metallurgical properties needed for press forming tools and dies.



Fig2: Shows a typical vacuum furnace with integral pressure quench for hardening & tempering small and large section press tools. There may also be a cryogenic and separate tempering facility for large tools used for automotive and aerospace body panel tools...

Tool steel material types and grades:

Material. The full benefits of surface coatings can be realized only if the coatings are supported by a material with a microstructure that provides a good foundation. Therefore, tool material selection is the first step in the successful design of a forming tool.

In addition to tungsten carbides and conventional tool steels, powder steels are available with many different combinations of properties that are suitable for various applications. Powdered metals have a unique microstructural characteristic: small metal carbide particles that are uniformly distributed in the steel matrix.

These steels have a finer grain size and are tougher than most conventional steels. Tool steels such as cold work grades based on the generic standard grades AISI or SAE and ISO; A-2 or D-2 series are categorised as cold work steels with their equivalent powder metallurgical grades. These steels can retain their properties and support tool coatings up to a working temperature of between 180- 400 degC. For specialist sheet forming such as Isothermal processing, the grade steel should be capable of retaining its properties up to 650 degC. So a hot work series should be chosen such as H-10 to H-23... Selection of the most optimal grade of tool material should depend on 5- main factors:

1. Characteristics of available tool steel grades and/ or tungsten carbide/ceramic grades.
2. The specific sheet forming application
3. The history of failure in similar applications
4. Tool material cost
5. Environmental impact and recycling criteria





Tool Coatings & Treatment Types for Sheet Metal Forming:

There are an increasing number of tool coatings & treatments now readily available globally for sheet metal forming. The list seems to increase each year as tool coating development via coating suppliers and university groups focus on improving performance, reducing environmental impact and design multi-layer nanostructured super hard films. In addition to these coatings a range of plasma thermochemical case casehardening treatments such as plasma Nitriding, PACVD and Laser Deposition Cladding used for obtaining thicker durable multi-composite layers based on Tungsten carbide family for forming high strength Ni/Cr alloy sheet.

PVD coatings used for sheet metal forming are now a common technology because of their high hardness and minimal film thickness. Titanium nitride (TiN), titanium carbonitride (TiCN),

chromium nitride (CrN), and aluminium titanium nitride (AlTiN) work well for many applications. PVD forms a mechanical bond between the tool and coating and is suitable for tools that are closely tolerance, which are common in the stamping industry. The PVD family has now advanced to cater for more specific sheet materials and tool steel now being used.

The minimum coating thickness for metal stamping and forming applications should be no less than 4 to 5 micrometres. The coating parameters can be adjusted to create an average coating thickness in the range of 0.0002 to 0.0003 inch (0.006 to 0.007mm). These results must be verified before the coated die or punch can be passed as being fit for purpose. Thinner coating specifications down to 2µm might be required for very close to tolerance tools...



Fig 3: Selection of tool coating for tight tolerance

These deep draw extrusion punches are used to form AA battery casings. Because tight tolerances are specified, the TiCN PVD coating is a suitable choice for this application.

1. IonBond IHI Group, Consett, County Durham, Tel. 01207 500 823.
Email: infouk@ionbond.com
2. European Aluminium Association (EAA). The Aluminium Manual, 2015
3. Hauzer Techno Coatings, BV. IHI Group, The Netherlands
4. International Deep Drawing Research Group, 38th Annual Conference - Online Surface Engineering. Influence of varying material properties on deep drawing process. K Krachenfels et al, Inst manufacturing Technology, Alexandra University, GmbH.
5. New Trends in Thin Coatings for Sheet Metal Forming Tools. C. Escher et al. Dorrenberg Edelstal GmbH, Germany.
6. Lase Ltd, Laser Cladding for Tooling, Neath, Port Talbot, UK
7. Advanced PVD Coatings for Protection of Dies and Tools. National HIPIMS Technology Centre, Sheffield Hallam University, UK. P.Eh Hovsepian and AP Ehasarian.
8. Voestalpine, Uddeholm Cold Work Tool Steel Family Grades for Sheet Metal Forming. United Kingdom, Taylors Lane. B69 2BN. Tel 0121 552 5511. www.uddeholm.co.uk

Part 2 b of this article to be continued in Oracle Spring issue 2021



EUROPEAN
SPRINGS & PRESSINGS

European Springs & Pressings Small Medical Components Playing a Large Role in Today's Healthcare Climate

From springs that go into the mouthpieces for ventilators to catheter clips to syringe drivers, patient beds and trolley systems, instrumentation and numerous electrical components for medical technologies including defibrillators, European Springs & Pressings is proud to play a key part in the supply chain for a number of medical equipment manufacturers.

Stuart McSheehy, Managing Director of the Beckenham factory says: "We have developed tooling and manufactured medical components for the healthcare sector for decades but today's climate and subsequent increase in demand has highlighted the market share with which we and our customers operate in.

We manufacture springs, pressings and gas struts for engineering companies and subcontractors across a broad spectrum of the healthcare industry. Requests for rapid turnaround times has made us see the fuller picture and resulted in us operating new production schedules to meet demand."

With 1 million mouthpiece springs taking approximately 125 machine hours to manufacture and other product lines in the tens of thousands, the advanced design, engineering and manufacturing capabilities across European Springs & Pressings factories, from London to Cornwall, are working together to help combat today's public health emergency.

McSheehy concludes: "We manufacture the largest range of springs and pressings in the UK and have some of the most advanced high-volume machinery available. At peak, our machines can manufacture 5 million springs an hour and we have repurposed and upscaled specific production lines to manage orders.

Normally validation as a new supplier takes months of trials before volume production but in this very abnormal period we've been fast-tracking processes to suit our customers and are beyond proud to be able to play a supportive role in today's climate."

www.europeansprings.com

THE DIFFERENCE BETWEEN GOOD AND GREAT IN YOUR PRESS SHOP!

PRECISION | QUALITY | EXCELLENCE

This year the most prominent question from our new clients in the face of COVID-19 is how can we do more with less resource...

We at **BRUDERER** have been helping our new customers overcome this problem for decades and the answer is simpler than meets the eye...

Like the famous engineering saying "*you're only as good as your tools*" is the exact formula of how investing in **precision machinery** enables you to control more elements of the pressing process to **higher levels of accuracy and control**.

This harmony allows for much **greater productivity, longer tool life and more consistency of the pressed parts quality**.

Factoring in on average 5x HME / C Frame Presses produce the same output as 1x **High Precision BRUDERER** Stamping Press the answer is and always has been **BRUDERER!**



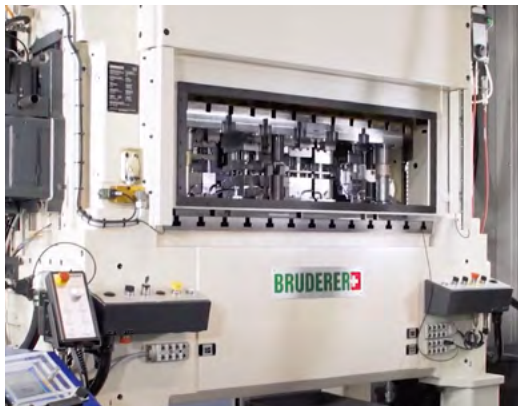
SCAN THE QR CODE TO SEE A NEW BRUDERER CUSTOMER SEEING A 400% PRODUCTIVITY INCREASE WITH THEIR SAME TOOL & SAME MATERIAL!



PERFORMANCE | ACCURACY

At BRUDERER our service is more than a product with our **extensively trained engineering team** we are able to set your tool in one of our demonstration presses and show you the results for yourselves!...

Our High Precision Stamping Presses range from **18 - 250 Ton in both New and Approved Used Conditions** so whether your a small pressing company needing more flexibility with reduced staffing or a high volume manufacturer needing all the output you can put your hands on BRUDERER is and has been for the last 50+ years your solution!



BRUDERER UK LTD

CRADOCK ROAD, LUTON, BEDFORDSHIRE, LU4 0JF, UNITED KINGDOM
TELEPHONE: 01582 560300 | EMAIL: MAIL@BRUDERER.COM
WEBSITE: WWW.BRUDERER.CO.UK

For more information about BRUDERER UK's larger portfolio of products including **Ancillary Equipment, Precision Tooling and Engineering Services** visit our website.

ENGINEERING EXCELLENCE FOR ALL PRESS SHOP APPLICATIONS

MACHINERY BY BRUDERER UK

- HIGH SPEED PRESSES UP TO 250 TON
- POWER PRESSES UP TO 3000 TON
- PREOWNED BRUDERER'S & CAPITAL EQUIPMENT
- MOULD TOOL SPOTTING PRESSES
- MULTI-SLIDE FORMING MACHINES



ANCILLARY PRESS SHOP EQUIPMENT BY BRUDERER UK

- SERVO FEEDERS
- COIL HANDLING EQUIPMENT
- OEE PRODUCTION MONITORING SYSTEMS
- PRESS & TOOL PROTECTION SYSTEMS
- ROLLER & SPRAY LUBRICATION SYSTEMS
- SCRAP AND PART HANDLING VIA TRANSPORTERS / CONVEYOR SOLUTIONS
- SMED DIE HANDLING EQUIPMENT



PRECISION TOOLING BY BRUDERER UK

- HIGH PRECISION TOOLING COMPONENTS FOR BOTH MOULD AND PRESS TOOLS.

SERVICE & ENGINEERING SUPPORT BY BRUDERER UK

- PRESS AND EQUIPMENT OVERHAULS / REFURBISHMENTS.
- BREAKDOWN FIELD ENGINEER SITE VISITS.
- ANNUAL SERVICING



ALL PROVIDED AND SUPPORTED BY OUR UK BASED TEAM OF TECHNICAL SALES, ENGINEERING AND AFTER-SALES PERSONNEL.

BRUDERER UK LTD

CRADOCK ROAD, LUTON, BEDFORDSHIRE, LU4 0JF, UNITED KINGDOM
TELEPHONE: 01582 560300 | EMAIL: MAIL@BRUDERER.COM
WEBSITE: WWW.BRUDERER.CO.UK

For more information about BRUDERER UK's larger portfolio of products including **Ancillary Equipment, Precision Tooling and Engineering Services** visit our website.

Glen Callum gain “top marks” recruiting for world leader in precision press technologies.

The **GLEN CALLUM** team have partnered up with world class, high performance, high precision press manufacturing experts **BRUDERER UK** to deliver a NEW and successful hiring and recruitment service. A service not only designed to source candidates,



but also to deliver engaging “bite sized” video interviews and accurate candidate testing. Resulting in hiring decisions being formed from factual based and informative process and not solely interview performance.

Combining professional video interviewing with independent factual based testing delivers results

Glen Callum Director Glen Shepherd said “Working with the Bruderer management team we have been able to utilise our powerful searching tools to identify excellent engineering talent. We have searched across several allied sectors to help combat the diminishing engineering talent pools within the press tool industry.” Shepherd goes on to explain “Our service didn’t stop there. Using our video interview platform we have supported Bruderer through the video interview stages, providing a full screening process visible to the management team. We were able to engage and interact with candidates in “bite

sized” interview sessions hosted by Glen Callum Associates. Once everyone was happy with the shortlist, we then used our external business psychologist and testing expert to confirm our screening thoughts & feelings by means of independent testing. Once the results were confirmed Bruderer also conducted a practical engineering test to ensure both mechanical and electrical qualities were up to the required standard”.



Glen Shepherd, Glen Callum Director



We have found our perfect recruitment partner for engineering

Adrian Haller MD of Bruderer UK commented “Glen and his team have really changed my view on recruitment, and they are a credit to their industry. I had become disillusioned with the whole recruiting world looking for low hanging fruit and minimum work for maximum return. Within our sector of highly skilled mechatronics and precision engineering, the talent pool is in high demand with very few available, it proved a very big challenge to close posts for our specific requirement, which saw most recruitment companies fail! Glen and his team conducted rigorous in-depth research for our requirements, prior to introducing any candidates. This approach ensured an efficient recruitment process maximising the best use of our time. Additionally, the video interviewing platform was an excellent tool, particularly with Glen’s vast experience in the whole interviewing process which enabled him to get the best out of the



Adrian Haller, Bruderer UK MD

candidates we met. We were also able to safely cater for the COVID situation. Once the interview process was complete the Glen Callum team evaluated further through extra testing by a professional independent body. This in turn drilled down into the characteristic of individuals, which can help with the final Job offer, and we have found invaluable to the process of recruitment”.

“I feel that Bruderer has found the perfect recruitment partner and through the Glen Callum team we have recently secured electro-mechanical service engineers, technical sales people and a Head Accountant”.

Glen Callum Associates Ltd possess a 21 year pedigree of serving the automotive and engineering sectors totally focussed in working with their clients to reach informed hiring decisions.



Institute of Sheet Metal Engineering



Metallforming Machinery Makers' Association

PROUDLY PRESENTS

METAL BASHERS Ball

FRIDAY 14TH MAY 2021
COPTHORNE HOTEL
BRIERLEY HILL

Black Tie Event

6.30pm Welcome drink on arrival

7.30pm Three course meal with coffee and mints

8.30pm After dinner speaker 'Eddie the Eagle Edwards'

9.30pm Fantastic band 'Solid Groove Foundation'

Midnight Finish

Tickets £65 each

Further information

ISME Members & Guests please contact: Adrian Nicklin T. 07774 260126
E. adriannicklin@btinternet.com

MMA Members & Guests please contact: Bill Neal T. 07725 277590
E. billneal@mma.org.uk

www.isme.org.uk
www.mma.org.uk



CHANGE OF DATE!

Improve Productivity, Invest in Digital

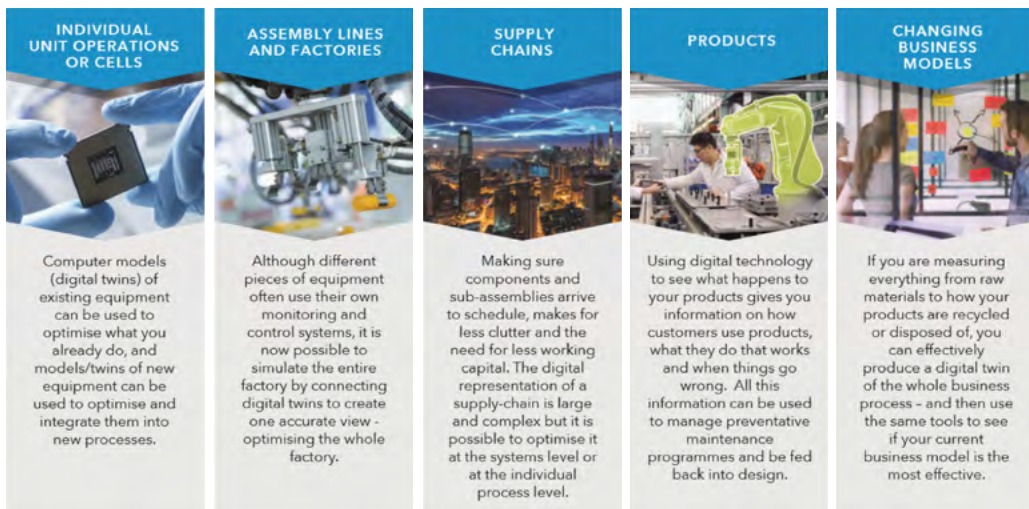
The UK Made Smarter Review estimated that digital technologies could improve industrial productivity by 25% over the next decade, with adoption in the manufacturing sector resulting in growth of 1.5% to 3% per annum. Some of this depends upon the UK's leading innovation in the digital sector, but also the adoption of standard software or automation tools, particularly in supply chain manufacturing businesses. It's often about saving time on routine tasks: "we had no idea where an order was unless they walked around and looked for it". This was before Genius Facades Ltd adopted a full traceability solution that tells them the status of each order in real time. In this article, WMG share similar success stories and discuss what digital manufacturing

means for SME manufacturers with some tips for taking the first step.

Digital manufacturing encompasses the application of computer-based systems to manufacturing services, processes, products and supply chains. Digital manufacturing technologies and approaches span the entire product or service lifecycle from design, through production and operational use to end of life, or more appropriately recycling, re-use or re-purposing.

Digital manufacturing offers transformational benefits to businesses including: the ability to simulate and test in the virtual environment ahead of investment in physical implementation; increased efficiency through joined-up manufacturing process; faster turnaround across all levels of the value and supply chain; real-time manufacturing visibility enabling critical business decisions and a faster pace of innovation.

Covering a broad church, it is often best to think of the development and implementation of a business' digital manufacturing capability as a journey, illustrated below.



It is also important to recognise the significant value from the data, provided by the range of digital tools implemented as part of any digital manufacturing capability. This data, enables stakeholders to make more informed and timely decisions at all levels in the business, from materials ordering, equipment operators and maintainers, to shop-floor managers, production schedulers, product delivery planners through to strategic planning at Director level.

Technology and innovation are key to competitiveness, however it's not always easy for companies to take the leap and start using digital manufacturing technologies. Barriers include cost and time of implementing new systems, a lack of computing skills and IT support and legacy kit that doesn't have the right technology to measure and collect data.

Manufacturers should not be put off by these challenges and should consider the following elements to introduce digital technology:

Robust Processes

Before bringing digital technologies on board look at your existing processes and evaluate how robust they are in terms of delivering products with minimum waste and appropriate quality. Often it is possible to introduce a number of "quick wins" to help release money, and sometimes more importantly people's time. Use sound manufacturing practices as the basis of your Digital Manufacturing strategy.

Planned Portfolio Approach

Using a portfolio approach allows investment in shorter term, operational projects which give measurable returns, while also looking towards longer term strategic projects. Longer term can mean more unknowns, more risk but potentially more reward, allowing the opportunity to lead your market place. The balance between the two sets of projects, and the delivery of day to day operations is critical for the business, so considering them on the same page is advisable.

Informed Decision Making

Businesses thrive on decision making and digital technologies help you make better informed decisions, especially if your business is growing and older ways of sharing information informally are no longer working. Another benefit is the information can get to you in a timelier manner. Spend time identifying what questions you need to answer and what information is actually required. It's easy to get swamped when so much data is readily available.

Focus on the Customer

Long term survival depends on servicing your customer needs both today and in the future. Look at how all of your processes support the customer, removing or refining those that do not. This will allow you to concentrate effort and resources where they are needed. You also need to be aware that customers' requirements evolve and that your processes need to be flexible.

People Matter

Digital technology does not exist in isolation from people, whether it is ensuring processes are robust with the aid of operators or maintenance plans are feasible for new automation systems. When developing your Digital Manufacturing strategy, it's the start of an opportunity for employees to become involved in building the future company. Employee engagement allows greater insights into existing processes and customer relationships.

Technology Changes

When planning what technology projects to undertake be cautious about planning too much detail too far ahead. Technology continues to develop and more refined solutions will become available. It is important to focus on a clear scope for the projects that need to be completed in the near term whilst also keeping an awareness of new technologies or applications. This can be daunting and time consuming for businesses focused on getting product to their customers. One solution is to look to organisations that have that as their focus such as WMG, one of the High Value Manufacturing Catapult centres.



Industry Case Studies:

1. Digital Roadmapping:

Samuel Heath & Sons Plc design and manufacture premium quality bathroom fittings and architectural hardware.



» Industry Case Studies:

Challenge: Bringing together disparate data and sources as part of a switch from traditional 'make to stock' production model to 'make to order' business model.

Solution: Map the entire business process end-to-end showing the flow of materials and information. Creation of a digital roadmap with operational and

strategic recommendations to enable greater data accessibility and faster business decisions.

Benefit: The company has initiated projects to implement machine monitoring using computer vision techniques and automated chemical dosing in the plating line to reduce materials usage.

2. Factory Simulation:

Ramfoam manufacture and supply foam products to a range of industry sectors including visors to the NHS.

Challenge: In reaching target volumes of 3 million units per week the lack of automation for the picking and packing of visors.

Solution: Identification of opportunities for automation and increasing productivity in the packing process. Virtual simulation of scaled up production equipment layout and processes prior to physical implementation in new facility.

Benefit: De-risking the transition to scale up production in a new facility through virtual simulation.



3. Data Analysis:

Servosteel is the UK's largest independent steel toll processor with the capacity to process up to 500,000 tonnes of steel annually.

Challenge: Analysis of the huge amounts of data from production processes in order to improve production and make efficiency gains, in particular around its slitting lines.

Solution: Analysis and mapping out the factory floor movements and the production flow from end to end,

indicating the value added at each stage and identifying the main process bottlenecks.

Benefit: By mapping the travel routes of slitting line operators the business was able to reduce their total travel distance. A new approach to changeovers identified meant there was a significant reduction in downtime on the slitting line machinery. Recommendations has resulted in an improvement in both productivity and efficiency plus reassurance that the business can run at a higher throughput.



4. Machine Instrumentation:

Pressmark specialises in high-quality metal pressings and welded assemblies for a range of industry sectors.

Challenge: Lack of real-time visibility on the productivity of each process meant issues could not be monitored and resolved early.

Solution: Installation of WMG's Manufacturing Information Platform (MIP) comprising robust sensors and industrial connectors to record the operational cycles of the press equipment, detect tool changes and diagnose problems.

Benefit: By integrating multiple sensors from different presses the overall performance of the

production shift can be monitored in real time. All data is returned to a control PC and processed to create the live graphical dashboard application shown in the figure right.

The MIP platform consists of multiple sensors to provide greater insights into equipment usage, condition and to diagnose problems. For example: a multi-channel thermocouple can take temperature readings from around press tooling to monitor hot spots; a current clamp to monitor machine power supply, and an ultrasonic displacement sensor to monitor movement. The platform easily integrates with other digital factory tools such as barcode scanning for traceability applications.



| | | | |
|--|--|--|---|
| 33 PM1836 Target: 150 Actual: 150 | 34 PM1802 Target: 125 Actual: 113 | 35 PM1955 Target: 120 Actual: 86 | 36 PPM1837 Target: 150 Actual: 111 |
| 58 PM1801 Target: 75 Actual: 65 | Rate Friday 21 August 14:19 | 60 PM1802 Target: 100 Actual: 142 | |
| 70 PM1982 Target: 100 Actual: 100 | 74 PM1982 Target: 100 Actual: 86 | 76 PM1926 Target: 100 Actual: 100 | 80 PM1795 Target: 275 Actual: 252 |

Conclusions

There is a deal of pressure from OEMs for suppliers to be digitally capable whether that is inherent in the provision of products and services in volume, to quality, cost and time, but also potentially requiring digital means of ordering, tracking and payment.

Digital manufacturing can provide significant benefits across an entire business' operation enhancing efficiency and productivity from enquiry to product delivery (and recycle, re-purpose). It can become a bedrock for informed planning and operations enabling decision making from tactical shop floor

operations to strategic business transformation.

Embarking on the implementation of a digital manufacturing system is a marathon not a sprint and as such should be undertaken having developed a digital strategy. There are many organisations providing a plethora of digital support systems and services hence seeking 3rd party advice and potentially partnering is a sensible choice to ensure the right digital tools and processes are selected relevant to the business needs.

WMG Authors:

Dr Daniel Peavoy
(Innovation Manager, Digital Manufacturing)

Dr Liz McArdle
(Innovation Manager, Business Transformation)

Dr Paul Lansdell
(Innovation Manager, Metallurgy)

Russ Noble
(Business Development Manager)

MORE THAN LOAD MONITORING...

SAFEAIR
UV

Kill Covid-19 in
your work space

www.safeairuv.co.uk

NEBULA
BESPOKE
ENGINEERING

Data collection

Analyse

Prevent

MARS
Production
Recording

Increase productivity

Reduce downtime

Tool Process Design Engineer Apprenticeship – Greater Flexibility Agreed

The Institute for Apprenticeships and Technical Education have agreed greater flexibility for the Tool Process Design Engineer Apprenticeship developed by the CBM.

The Institute for Apprenticeships and Technical Education have confirmed that in addition to a Degree an alternative HNC or HND qualifications can be studied by the Apprentice. Additionally, very experienced candidates who can meet all of the requirements of the standard and successfully complete the end point assessment do not have to complete a qualification.

The Apprenticeship remains at level 6 however we have more opportunity to accommodate both existing and new employees' specific needs. This greater flexibility is welcome news during difficult times and allows Apprenticeships to be offered that meet the needs of your business.

This encouraging news is the culmination of over 20 months detailed work by our trailblazer group who have created both the apprenticeship standard and the means of validating the ability of the apprentice with an industry specific end point assessment plan.

The CBM will continue to try and further improve the amount employers can access from their levy pot towards the total cost of the apprenticeship.

Fine tuning of the end point assessment is continuing. However, industry specialists will form part of the assessment panel to ensure the apprentice has achieved the required level of knowledge skills and behaviours necessary to meet the standard.

This degree level programme has been specifically created by the CBMs Trailblazer group and ensures the apprenticeship meets our sectors specialist technical requirements. The skills knowledge and behaviours are specific to our members needs and the employing organisation can choose which university/training provider they work with to achieve the standard. A key

component of this programme is the opportunity for the apprentice to work on industry standard training equipment. This equipment was obtained by the CBM on behalf of members and is sited at the In Comm training workshop in Aldridge.

We are now entering the recruitment phase and are asking members to become actively involved to ensure this apprenticeship standard adds real value to our sector.

There are three areas which members can support this initiative and in doing so will ensure both the sector and employers are gaining from this investment.



CBM CONFEDERATION
OF BRITISH
METALFORMING

We ask that you undertake both a demographic and skills analysis of the Tool Process Design capability in your organisation. Using the analysis consider whether to recruit new talent who can undertake this apprenticeship, or whether to up skill your existing workforce as a means of staff retention and to ensure business continuity.

The Covid 19 crisis has highlighted manufacturing's vulnerability when exposed to global supply chains. It is vital that we maintain United Kingdom's skills and build our internal capability in order to face these global challenges.

Therefore, consider how this apprenticeship can reduce dependency on overseas skills in these uncertain times.

Throughout the creation of both the standard and the end point assessment plan it has been evident that the sectors contribution to UK manufacturing is misunderstood. We ask that member companies continue to raise the profile of sheet metal process sector at every opportunity. This will ensure funding for our apprenticeships and any future government support for skills will achieve the highest monetary values available.

For further information please contact either **Geraldine Bolton, Steve Morley or Adrian Nicklin at the CBM.**



PELICAN CONTROL SYSTEMS LTD JOIN MMMA

Pelican Control Systems Ltd. specialise in the design and manufacture of bespoke industrial control systems for factory automation and process control.

We have continually invested in technology and a team of highly skilled engineers who have a wealth of industrial controls experience in the following fields of expertise to meet the precise requirements of your project:

- Machine Build
- Machine Refurbishment
- PLC Programming
- HMI/SCADA programming
- Conveying/Check Weighing
- Motion Control
- Pick & Place Systems
- Machine Service
- Energy Saving Systems
- Robotics
- Process Control/ Monitoring



FINANCE FOR INDUSTRY

Part of  Close Brothers Group

In brief, the CBIL offering is supported by an 80% government guarantee towards the loan/HP facility with no personal guarantee's required up-to the borrowing of £250k.

(Note the debt is owed by the business and is fully responsible to repay the debt until repaid in full).

SPONSOR UPDATE

If the business has been impacted by COVID-19 and are going to need assistance i.e. to support their cash-flow with asset purchases (i.e. limitation of deposit) where we could look to assist with funding 100% of the net purchase cost.

(Typically a deposit contribution is required which would affect the businesses cash-flow).

NEW BUILD ROBOT CELL COMMISSIONED BY PRESS TECHNIQUES

Alan Penn, MD

Fantastic news from Alan Penn of Press Techniques Ltd who have recently fully commissioned their latest new build robot cell, which was designed and built in the UK at Press Techniques.

The brief was to supply an automated press to produce heavy duty conveyance buckets to the mining industry. The line was also required to be versatile cell to allow for existing associated irregularities and production demands.

Press Techniques built this cell in Wakefield in conjunction with their local robot supplier. This demonstrates the scope of opportunities for sourcing on a local basis and allows local companies to Showcase their design / build and technology capabilities.

This versatile press cell which can be operated manually, via a robot, via a coil feed or pick and place manipulator. Clearly demonstrates that Automation of cells, which can be varied in operation, is important for the future of the manufacturing process. Consideration was given to the customers requirement and offered and protected a single line of equipment capable of running coil via a coil holder leveller and servo feed, a robot arm for general production option, a stack system with pick and place facility allowing continuous production even during



stack loading, also, to enable manual loading via operator via photo electric guard which fulfilled all production requirements of this and many existing products.

This latest installation allows Press Techniques to get involved in Total new build and design, upgrade and or modernisations of processes which will be more and more required by a sector that is keen to keep up to date with trends and Hi-Tech manufacturing process methods.

UPDATE ON MACH 2022

The Manufacturing Technologies Association (MTA), which owns and runs the MACH exhibition on behalf of the industry, has taken the decision to reschedule MACH from April 2021 to April 2022.

Given the spread of the Coronavirus, the MTA has decided that, in order to minimise the risks to visitors and exhibitors and to provide the best possible platform for both exhibitors and visitors, the event will now take place **4th-8th April 2022**. The event will still be held, in the same Halls, at the NEC.

The MMMA 'Metalworking' Village is officially FULL, filling the largest area the association has ever taken at MACH, this is a fantastic achievement, with 25 members exhibiting.

The Metalworking Village covers 650 square metres, one of the largest areas of any exhibitor at MACH. Demonstrating technologies, services and products from across many sectors of UK

Manufacturing industries. We are very proud to boast that over 25 individual companies are exhibiting from the MMMA.

The association goes from strength to strength, over the last two years many changes have been implemented. These include, upgrades on the website, increasing focus on social media platforms and new member benefits – The membership remains positive and trending upwards as we currently, with 44 members, covering many manufacturing sectors within UK Manufacturing.

MMMA hosting our specialist Metalworking exhibition within MACH 2022 provides a fantastic opportunity for our members to show off their skills, services and Technologies to visitors across manufacturing UK. Within the Village, visitors will be welcomed to call on each member stand, to discuss and see, what is available, how it could help them in improving production, winning more orders and increasing profitability.

MACH 2018 – MMMA Metalworking Village



MACH 2018 – Nidec Press & Automation



MPPS INSTALLS FIRST SIMPAC PRESS LINE IN THE UK

MPPS as the UK Sales and Service Agent for SIMPAC Mechanical and Hydraulic presses has just installed an automated press line at a leading manufacturer of central heating products. The line includes four 300 tonne Solid Frame Mechanical Presses with Blank Destack / Feeder and Inter-press Shuttle Transfer system.

MPPS project managed and provided personnel and heavy lifting equipment for the unloading of the equipment from delivery vehicles, unpacking, then transporting and positioning of the presses within the factory using twin VersaLifts. Working within the constraints of Covid-19 conditions MPPS successfully completed the installation within the scheduled programme. As project manager and service agent for SIMPAC, MPPS was responsible for all Planning, Risk Assessments, Methods Statements; plus providing personnel approved for working in confined spaces, compliance with health and safety requirements including working within Covid-19 constraints. MPPS provided ongoing support to the SIMPAC engineers for final commissioning.

The SIMPAC product range includes mechanical and hydraulic presses, servo presses, transfer presses, blanking and tandem lines. Worldwide users include manufacturers of domestic

appliances and household goods and electronic components in addition to the automotive industry and its suppliers.

The SIMPAC range of presses is complimentary to MPPS's established reputation for the installation, maintenance and repair of mechanical power presses and hydraulic presses.

For further information please visit the Midland Power Press website: www.mpps.co.uk





Servo Presses
Monobloc &
Tie-rod design
300 – 3000 tonnes

Solid Frame Presses
Crank, Link or Servo Drive
200 – 1000 tonnes

C-frame Presses
Crank or Link Drive
35 – 300 tonnes



Automation – Coil Handling, Blank Destack/Feeders, Robotics, Tool Changing Systems



Forming Lines



Transfer Presses



Hydraulic Presses

CHS Automation/Pneumatic Feed Service Joins Nidec Press & Automation Group

MINSTER, OH – Nidec Minster Corporation, a member of the Nidec Press & Automation (NP&A) group, has announced the acquisition of Michigan-based automation equipment manufacturer, CHS Automation, and service provider, Pneumatic Feed Service.

Nidec Press & Automation CEO David Winch said the acquisition of CHS Automation and its emphasis on heavy duty coil lines and high tensile material straightening equipment directly complements the existing NP&A market offering for contract and automotive stampers.

"As Nidec Press & Automation, we now have an extremely strong product portfolio that meets our customer needs. We are also the only North American manufacturer to have total ownership and control over the major inputs that complete a full metal-forming production system with the increased line functionality and a single-source for customer support," Winch said.



"We are excited to welcome the CHS team to our family," said Ron Arling, President of Nidec Minster and CAO/CFO of Nidec Press & Automation. "We look forward to new customer solutions and growth opportunities as a result of the synergies generated by bringing our companies together," Arling said.

Well-known in the North American metal forming industry, CHS has built a reputation for high quality automation machinery, including

turnkey heavy-duty coil lines. In addition to the OEM business, CHS operates the Pneumatic Feed Service organization, known for its highly-competitive regional service, machinery remanufacturing, and used equipment offerings.



"Combining our service offerings will enable us to support the metal formers in Michigan with a local and immediate response, which is critical when downtime is involved," said Steve Gruber, Executive Vice President, Global Service for Nidec Press & Automation.

Since its founding in 1966, CHS and its business entities have grown to employ more than 60 employees. Current President and CEO Eric Werner and his leadership team will continue with their existing responsibilities in addition to working closely with Nidec Minster leadership to ensure high quality customer solutions.

By combining the expertise, experience, and resources of industry leaders in the metal forming market, Nidec Press & Automation has established a single-source solution for machinery, services and technology. Nidec Press & Automation now brings CHS together with the Minster, Arisa, Kyori, Vamco and SYS products, allowing combined synergies to offer efficient, cost-effective, and timely solutions to manufacturers looking for increased production and profits. To learn more, visit www.nidecpa.com or www.chsautomation.com.



Institute of Sheet Metal
Engineering

isme.org.uk

In partnership with

AMADA

Presents
The 2021 ISME
Sheet Metal
Technology Competition

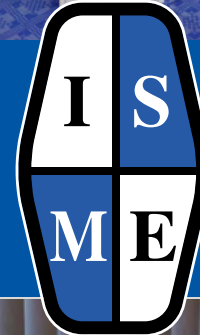
FOR APPRENTICES & TRAINEES

Judgement Day to be held at:

AMADA UK Ltd
Spennells Valley Rd, Kidderminster DY10 1XS

On Thursday, 10th June 2021

Go to our new website for
Competition Drawings and Entry Form
isme.org.uk



**Previous ISME Skills
Competition Entries**



AP&T joins with NPA Plast to manufacture protective aprons for healthcare professionals

In the AP&T test centre in Ulricehamn, Sweden, one of the presses is running two shifts. But rather than cutting steel, it is cutting plastics for protective aprons for healthcare professionals. In the wake of corona, the need is great.

"A while back, NPA Plast in Ljungby, Sweden contacted us asking for help with increasing their production of plastic protective aprons. Up until this time, they mainly cut their plastic manually. Naturally, we wanted to help, so as of the end of May, production is in full swing at our Ulricehamn facility," Patrik Haglund of AP&T tells us.

Bundles of plastic are fed into the press and cut by a punching tool that was produced in-house. "It's a very rational process that enables great volumes of plastic to be cut at once."

The punched plastic pieces are then sent directly to a few of the state-owned Samhall facilities in southern Sweden where the final aprons are produced. The completed products are then sent to the healthcare facilities in need. The aprons have been approved by the Karolinska Institute, the Swedish Armed Forces and others. In addition, NPA Plast is the first company in Sweden to obtain the approval of the Swedish Work Environment Authority.

"It is very pleasing that our company can contribute its resources in times of healthcare and societal strain, that is, to 'be part of the solution' as the Swedish Civil Contingencies Agency often refers to it," says Patrik Haglund.



1.

1. At AP&T in Ulricehamn, large volumes of plastic protective aprons for healthcare professionals are cut. Hassan Kanaan is the production technician responsible for the project.



2.

2. In the wake of corona, there is a great need of protective aprons in healthcare facilities. NPA Plast in Ljungby, Sweden enlisted the help of AP&T in increasing manufacturing. Photo: NPA Plast

aptgroup.com

Bruderer 'first' helps Xandor Automotive Canning Brett boost production output by 400%



A leading supplier to the European car market has invested in its first ever Bruderer to help it increase output for current and future models.

Xandor Automotive Canning Brett, which manufactures exterior, interior and under bonnet components, installed a refurbished BSTA 40 high-speed press and BBV 202-120 feeder three months ago and is already achieving a 400% daily increase in volumes on selected lines.

The company is using industry-leading control and patented ram tool guidance technology to manufacture up to 200,000 clips, fasteners and washers every day, with the flexibility of the bed size and 1200 strokes per minute capability future-proofing its investment for years to come.

"The car industry is all about achieving more efficiencies and this means constantly looking at getting the most out of your manufacturing processes," explained Gethin Williams, Production Shift Manager at Xandor Automotive Canning Brett's specialist metal pressings site in Swansea.

"We had identified a number of parts that could be made quicker and in higher daily volumes, whilst still retaining the same level of repeatable quality. This prompted us to look for a new press and this is where Bruderer UK came into the equation, visiting us and identifying a solution that would work."

He continued: "They arranged for us to take a tool up to their site in Luton and run it on the actual machine we were interested in - the results were very impressive."

Bruderer's BSTA 40 tonne press can operate up to 1200 strokes per minute and offers a bed area of 690mm x 550mm - ideal for allowing slightly larger tools to be used that do not require the extra tonnage.

The press has also been designed to provide a range of adjustable strokes (from 13 to 57mm), with the longer stroke suitable for small electrical components and a shorter stroke for more intricate formed parts.

Xandor Automotive Canning Brett, which was keen to optimise performance and reliability, also invested in a tonnage and tool protection package that has improved the tool life significantly.

Gethin went on to add: "The first few months have been impressive, with the BSTA easily the best performing machine we have at our Swansea facility, which employs 46 people.

"These production uplifts have given us the confidence to actively go out and tender for new projects in new markets. I'm pretty certain it will not be the last high-speed press we buy from Bruderer, especially if it continues to quadruple daily output on certain parts."

Adrian Haller, Managing Director at Bruderer UK, continued: "This is the first machine we've ever supplied Xandor Automotive Canning Brett and we're delighted it has had an immediate impact on its productivity and ability to cope with increased volumes.

"It all started with our desire to spend time with a potential client, look at its entire manufacturing operations and where we feel that our technology can add real value. The answer on this occasion was a refurbished BSTA 40, which offers world class speed, accuracy and control."

He concluded: "Once we'd shown Gethin and his team the performance first-hand, it was an easy decision for them to make and the installation, commissioning and training was all completed within a two-week period.

"Our technology has delivered higher quality parts with far less burr, faster tool changes to support the implementation of single-minute exchange of dies (SMED) and freed up capacity as it is doing the work of three conventional presses."

For further information, please visit www.bruderer.co.uk or follow @brudereruk on twitter. More details on Xandor Automotive, can be found at www.xandor.com





THE POWER TO IMPRESS

Specialists in Mechanical Power Press Repairs, Spares, Inspection & Upgrades

Est. 1980 - MPPS boasts a dedicated and skilled team of experienced engineers providing comprehensive support and service to the Power Press, Metalworking and allied industries.

Core Services

- Site Service
- Spare Parts
- Power Press Inspections
- Machine Refurbishment & Upgrades
- Hydraulic Presses
- Machine Relocation
- Electrical & Control Systems
- Sub-contract Machining



MPPS, 34 High Street, Princes End, Tipton, Dudley DY4 9HP
0121 520 4320 / admin@mpps.co.uk / www.mpps.co.uk