

Moulding the Future

Edition **5**

The Latest News and Information



Our factory has changed – and it is going from strength to strength

Since the completion of the factory extension in November 2016, a programme of improvements has been underway in Broanmain's manufacturing facility.

Three new cranes have been installed, new conveyors are in place and the entire injection mould shop has been re-organised with a view to improving process flow. The main objective for these changes has been to boost efficiency and therefore delivery performance for our Customers – these are Broanmain's focus goals for this year.

We can already see reduced materials movement, an improvement in tool-change times and a reduction in contamination. There is still work to do. Our next focus will be reorganising the after-moulding area, compression department and tool room.

See you at Southern Manufacturing & Electronics Show 2019

We will have examples of a range of electronic, automotive, aerospace, medical device and industrial plastic components, all moulded at our new facility at Southern Manufacturing & Electronics Show 2019 (5 to 7 February) stand E145. Drop by and come and discuss how we can help you to fulfil your just-in-time component production requirements in 2019 and beyond.

Tooling



Plastic manufacturing re-shoring picks up pace

Gone are the days when the UK was producing 40% of world manufacturing output. A recent study by the GMB union found that the British manufacturing sector has lost almost 600,000 jobs in a decade.

By contrast, China has transformed itself into a production powerhouse. It is now the world's largest manufacturer, its output totalling \$2.0 trillion¹. Yet, Broanmain is utilising the best of both manufacturing worlds to help our customers meet tight production deadlines without compromising on quality.

Attracted by cut-price production and a huge, low-paid workforce, many UK firms outsourced their manufacturing to China. As many of our customers will testify, not all are completely satisfied with the arrangement. Long lead times, expensive shipping costs, large orders requiring upfront payment, communication barriers and concerns over quality are just some issues reported. With Britain looking to create more homegrown employment in the face of Brexit, we explore the alternative that offers the best of east and west?

Offshore toolmaking, reshored production Broanmain offers clients a 'best-of-both-worlds' solution that makes the most of China's low-cost manufacturing yet returns production to British shores.

Instead of producing thousands of units of a component in China, we help our clients to design and make the master tool via our Chinese toolmaking partners, then bring production of the component itself back to our UK workshop. Not only does this

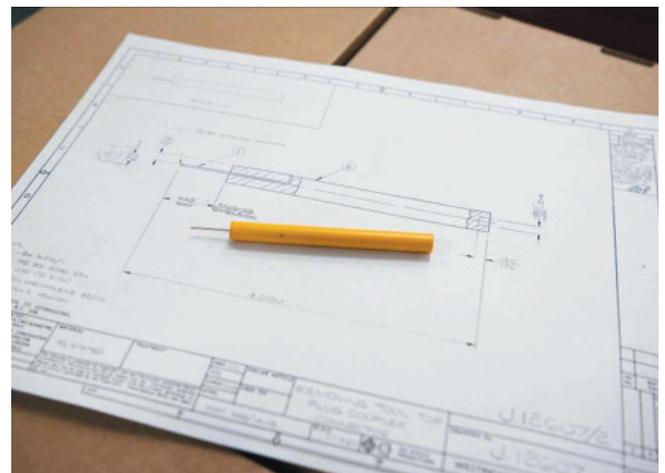
deliver significant savings, it speeds up the production process, increases the quality of the finished item, enables just-in-time production and boosts the UK economy.

Since embarking on a trade mission to China 17 years ago, Wilf Davis has forged strong bonds with reputable toolmaking workshops. He explains: *"Due to a decline in the number of UK toolmakers, we recognised that there was an opportunity to speed up the design timeframes, pass on cost savings to our customers and enable them to sidestep export delays by moving the moulding of components back to the UK."*

"Chinese toolmaking firms typically have several people working on different stages of the same tool and it can take as little as 15 weeks to design, make and ship. In contrast, it is not uncommon for one UK tradesperson to work on the same tool from start to finish, taking over a year in some instances."

A helping hand

Dealing with a country where the culture, language and working practices are so removed from our own can be a daunting prospect. However, Broanmain manages the entire toolmaking process on behalf of our customers from start to finish.



Designing, making and shipping the master tool from China takes just several months compared to a year in the UK claims Wilf Davis

Tooling



Factoring in moulding parameters is essential in the tool design process, which Broanmain manages from our UK toolshop

"From our UK office we assist with the initial design of the component, which we send to China where the tool design is created. Our in-house engineers then scrutinise the Chinese design and make any changes," explains Wilf. "Once the customer has signed off the tool design, our Chinese partners manufacture the tool. Crucially, it's made from a number of different parts rather than one solid piece, which enables us to access any insert if we need to make changes further down the line."

Samples are then sent to Broanmain, which we review with each customer. Any final modifications are made before the finished tool is shipped to the UK, ready for Broanmain to begin manufacturing the component at our modern Surrey facility.

Pocketing the difference

The benefits of offshoring the toolmaking to China and reshoring ongoing production of the component are multiple. For one Broanmain customer - Johnston Sweepers - the ability to call in around 60% of their components on a three to four-day delivery cycle has been critical to their business strategy of switching production of parts from metal castings to plastic. Steve Hurst, Head of Purchasing at Johnston Sweepers

comments: *"By sourcing the tooling from a high quality Chinese-based specialist, we were able to justify the payback."*

There are other savings to be made, too. *"Chinese manufacturers usually require a minimum order of 5,000 units to guarantee the best price. In addition to the upfront financial commitment this incurs, there are shipping costs, import duties, taxes and VAT to take into account, as well as storage fees," states Wilf. "What was a cheap deal can suddenly seem far less attractive."*

Trend Control Systems is another company to have realised the convenience and cost efficiencies to be gained by reshoring moulding close to its Sussex manufacturing site. Being a 100% made to order business with just a two-day lead time for parts, Peter Light, Supplier Development Engineer notes that the export price differential as a result of shipping and holding inventory prompted them to switch from a moulding company in Malaysia to Broanmain for production, with our Chinese partner manufacturing all 27 tools for Trend's flagship modular IQ4E climate control system.

Just-in-time production

By operating a Kanban inventory system, Broanmain can help to ensure companies of all sizes benefit from holding sufficient stock



Making a tool in different parts rather than one solid piece means toolshop apprentice Kamil Stec can access any insert if changes need to be made

Tooling



to meet current demand, facilitating efficient production, eliminating waste and keeping overheads low.

"We review our customers' stock levels in real time and send them just what they need, on a weekly basis if necessary," says Wilf. "This enables our customers to meet just-in-time production schedules and can often be the difference between securing or losing an order."

This approach has proved particularly useful at Trend. Twice weekly, assembly cases are sent back and forth between the two sites, with Broanmain replenishing stock using the Reorder Point Planning (ROP) methodology.

"Because our units are made to order, we are unable to forecast. It also means our average daily usage fluctuates. Yet, once it reaches a certain point a replenishment order is triggered," explains Peter Light.



Reshoring manufacturing of plastic components to the UK speeds up production and helps to reduce transport, export and storage costs.

Quality ... not quantity

Another benefit of shorter runs and local production is increased quality and quicker reactions if a customer requires a customisation. *"If there's a problem with the component or consumer trends dictate a change, our customers can call us, or even visit us at our factory, talking to us in the same language, in the same time zone. Our in-house workshop engineers can amend the component and run off a new*

batch, dispatching it to the customer within 24-hours. Waste is kept to a minimum and production schedules aren't affected. This wouldn't be the case if they were manufacturing in China, where lead times of months, communication difficulties and huge minimum orders are the norm."

Broanmain's involvement from the start of the toolmaking design process pays dividends further down the line, too. *"Toolmakers aren't moulders so will often make a tool without understanding the moulding parameters,"* explains Wilf. *"We consider what the final component will look like, the materials it will be made from, and even the machines it will be made on. For example, different materials have different shrinkages. We ensure this is factored into the original calculations to ensure high quality of the finished component."*

Facing the future

With Brexit looming large, keeping production on home ground is more important than ever. *"Without the help of our Chinese toolmaking partners, many of these UK projects would have been dead in the water, or the whole manufacturing process (not just the tool) would have been sent to China,"* claims Wilf. *"Instead, we're creating ongoing manufacturing work here in the UK."*

Once the master tool is made, clients can expect it to enjoy a long and successful service life. Broanmain stores and services tools to ensure they're kept in good working order. As a result, each tool should run at least half a million components, although figures upwards of four million are not uncommon. This not only ensures continued manufacturing on home ground for the foreseeable future, but also ongoing savings for the customer. As Wilf concludes: *"Just think of the transport, export and storage costs saved by not having to import that number from China!"*

Staff

Directing your enquires to the right expert in order to ensure your enquiries to Broanmain are answered most efficiently, please can you update your contact records:



Despatch and delivery enquiries should be directed to monikasiakala@broanmain.co.uk



Accounts questions need to go to accounts@broanmain.co.uk where **Tina** will be able to help out



New Enquiries, Production and Engineering matters are dealt with by our Production Manager, **Thomas**, who can be contacted at thomascatinat@broanmain.co.uk



Quality matters will be dealt with by **Agnieszka** – agnieszkakreczko@broanmain.co.uk



Our SHEQ Manager, Andy Armstrong, handles items relating to Safety, Health Environment and Quality systems – please use andyarmstrong@broanmain.co.uk to reach him



Tooling work is handled by **Alan Pudifin** at alanpudifin@broanmain.co.uk



Jo Davis is our **Operations Director**, and has responsibility for the day to day running of the business – jodavis@broanmain.co.uk



Wilf Davis is our **Managing Director** – wilfdavis@broanmain.co.uk



Purchase orders and Kanban call offs should be sent to orders@broanmain.co.uk – where they will be handled by one of the orders team.

Company News

Plastics Industry Awards 2018

Broanmain were very proud to take along some of the team to support Maria Lopez in her entry for the Trainee/Apprentice of the Year at the Plastics Industry Awards.

To be nominated for this prestigious award is a great honour, and although not successful on the night, Maria is most definitely a winner to us.



On the brink of Brexit

While people at Broanmain are by no means political commentators, as we go to press Brexit is looming down upon the United Kingdom without businesses having a vision of our trading position with Europe and the rest of the world. No support is being offered to our businesses by the British Government to help manage the potential fall out and we are being left to prepare for the unknown.

The whole country is of course in the same position, and Broanmain is putting our best efforts into ensuring that deliveries to our customers are not affected. We are monitoring materials prices and availability, adjusting our working patterns to accommodate customer requirements who are ordering ahead of 29th March 2019 and will continue to support our European friends who work with us.

Please do not hesitate to get in touch if you have concerns in relation to deliveries during this period of uncertainty. As always, Broanmain is happy to flex to your Company's needs; the more forward planning we can do, the easier this might be.

Surrey Care Trust – 2018 Hikeathon

Well done to all walkers that took part in this year's Surrey Care Trust Hikeathon through the Surrey Hills. Surrey Care Trust provides learning, training and mentoring to support young people and adults in improving their chances in life. For more information about the work they do, to see if you would like to take part in one of their events or get involved in volunteering please visit their website www.surreycaretrust.co.uk for more information. SCT is Broanmain Plastics' chosen charity to support. With our support, the walkers raised over £16,000 for this local charity.



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