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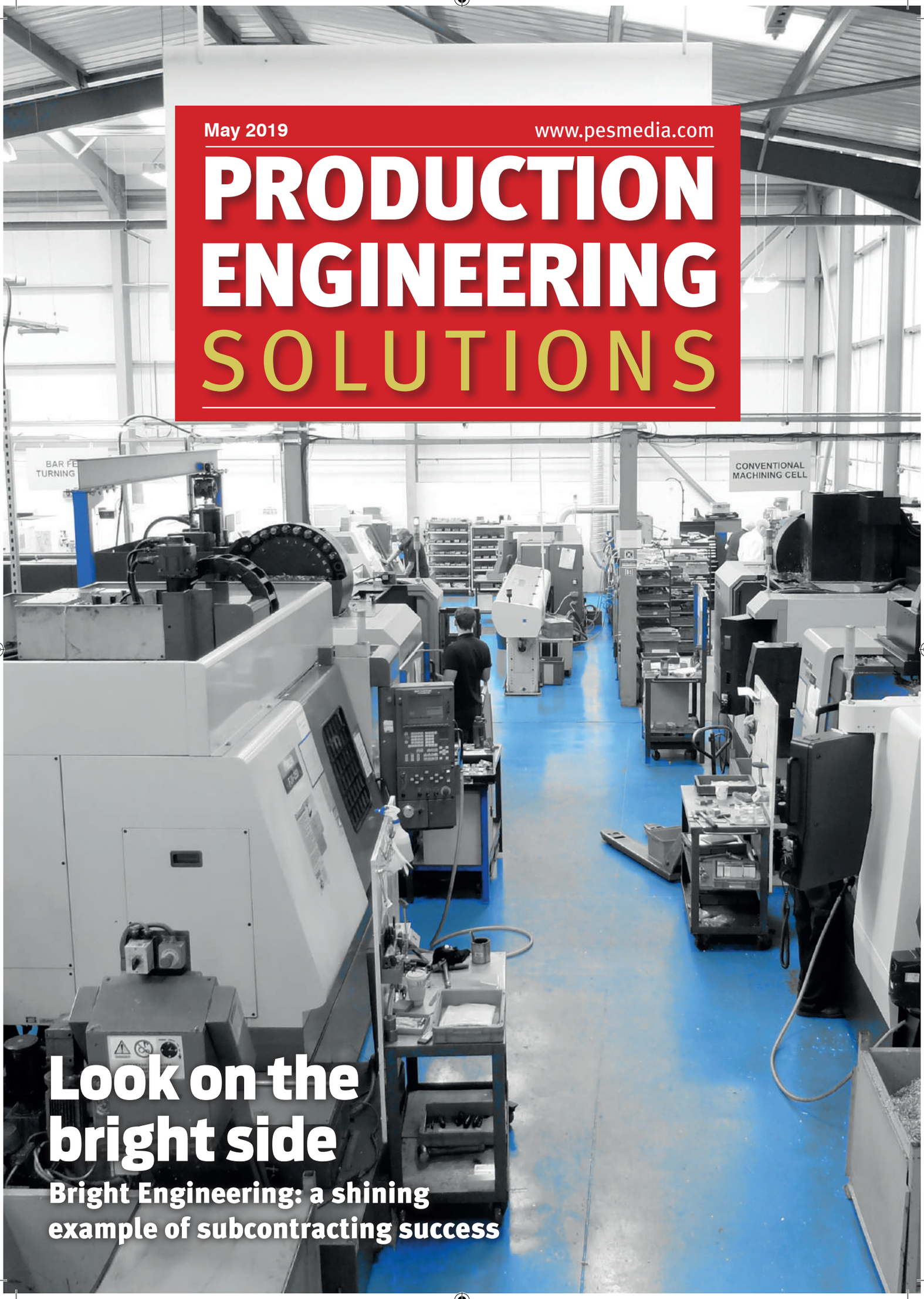
PRODUCTION ENGINEERING SOLUTIONS



Look on the bright side

Bright Engineering: a shining example of subcontracting success

Look on the bright side

PES Report
Dave Tudor

UK manufacturing in recent times has been driven and underpinned by an army of dedicated, resourceful and highly skilled precision subcontractors – just like Nelson, Lancashire-based Bright Engineering for example. Dave Tudor dropped in for a visit.

Small and medium enterprises (SMEs) need to be entrepreneurs as much as engineers in these rapidly changing times.

Connected manufacturing and digital technology is changing the way people think about running their organisations. Nowadays, and certainly in the future, it's as much about data as it is about cutting metal.

At 36 years old, Bright Engineering's managing director Jon Hoyle is wise enough to appreciate the need to invest in new equipment regularly but savvy enough to appreciate that the future will be distinctly more data driven.

He is inspired and motivated by both: Bright has invested more than £1 million in new machine tools over the past year and Mr Hoyle and his team are investigating ways of using the data produced by these machines – and indeed the entire business – to make the company more productive, efficient and ultimately more profitable.

Securing a high-value turnkey project prompted the purchase of a Mazak Integrex j-200S multi-tasking machine

Along with his co-owners Nigel Jenkins (production director) and Geoff Hall (finance director) Jon Hoyle took over the reins at Bright Engineering as part of a management buyout in 2014.

Bright Engineering managing director, Jon Hoyle

"Just in time for the downturn of the oil and gas industry," he recalls wryly, "but we learned a valuable lesson and that's to work hard at building a diverse and loyal customer base by going the extra mile for clients.

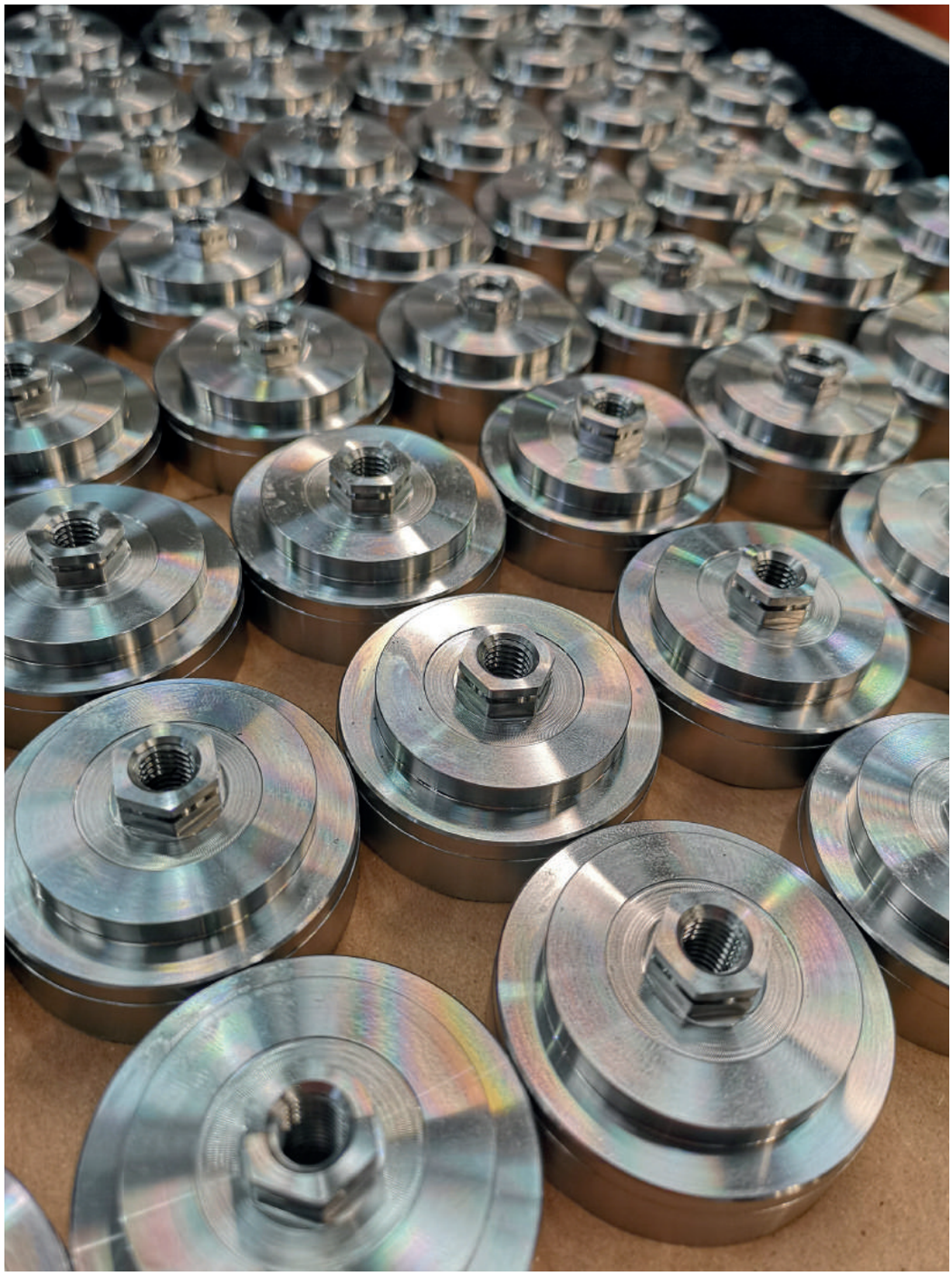
"30% of our work is in aerospace which encompasses three main areas – lighting and electronics, aircraft seating and nacelle components and this will continue to be a growth area for us. The remainder is spread across a multitude of sectors – oil and gas, electronics, packaging, food processing and general engineering. In 2017 our turnover was £1.2 million; this year we'll hit £2 million and over the next two years the target is to accelerate growth to £3 million."

He continues: "Internally we do things a little differently. Instead of a five-year business plan spouting vague words and lengthy paragraphs, we favour a more visual representation of our goals and objectives through something we call the Roadmap.

"Essentially, this is a timeline document accessible to all employees. It contains order book figures, milestones – such as the planned delivery of new machines, investment details and the appointment of new staff over a five year period. Transparency is important to us and our people are our most valuable asset. They're vital to our future growth and prosperity so we want them to feel part of that evolution."

The Roadmap also shows details of Bright Engineering's plans regarding apprentices. It's a remarkable statistic that a third of the company's workforce are – or were – apprentices.

"We currently have seven apprentices undergoing



> Up until three years ago, our export business was non-existent, but then we won some business in the US on the back of an existing customer here in the UK located just 20 miles from here. They decided to open a US facility and we were the nominated supplier for a particular component so we began dealing directly with the US factory

training, but a further three have recently completed their apprenticeships and are now in staff or technical roles. We're very proud of our commitment to training young people and futureproofing the business," Mr Hoyle enthuses.

Encouraging exporting

Another area of growth for Bright Engineering has been its export business. This came about almost by chance, but it has developed into a healthy revenue stream for the precision subcontractor.

"Up until three years ago, our export business was non-existent," Mr Hoyle explains, "but then we won some business in the US on the back of an existing customer here in the UK located just 20 miles from here. They decided to open a US facility and we were the nominated supplier for a particular component so we began dealing directly with the US factory.

"It's something we've worked hard to develop," he continues. "Several of our customers are part of larger groups and we've found that often the best way to win new business is through our existing client base."

A recent example of this philosophy in action was with Fortune 250 listed Parker Hannifin, a global leader in motion and control technologies – and a customer of Bright Engineering.

"We manufacture a number of stainless steel hydraulic components for Parker Hannifin in North Wales so I was delighted to be invited to one of their supplier conferences in Switzerland last month. It proved to be an excellent networking platform, not only to meet other Parker suppliers – but also buyers and purchasing people from its other sites. Through those meetings we've received two or three really good enquiries from Parker sites in Germany.

"We've been able to replicate these arrangements with some of our other customers as well as investigate other export opportunities through our local Chamber of Commerce's International Trade team."

Machine tool muscle

At its heart, Bright Engineering is a machining company that can also offer a full gamut of complementary services through a tried and trusted supplier network.

Its plant list is extensive. Looking around the distinctly cellular, recently rearranged shopfloor area, it doesn't take a brain surgeon to realise that this organisation is pretty keen on Mazak and Doosan (Mills) machines.

It has a veritable armoury of machine tool muscle at its disposal, from Doosan DNM 500/650 VMCs through to Mazak FH-4800 twin pallet HMCs and FLV250 VMCs on the 3-axis

milling front to a Doosan Puma 2600Y, Mazak QT200MS and Quick Turn 10 machines on the turning side. Sliding head work is catered for courtesy of a Citizen A32 sliding head machine.

Over the past 12 months, Bright Engineering has worked very closely with Mazak, the focal point being a long-term, high value turnkey project secured with a tier 1 aerospace customer. Also part of the project team is tooling specialist Iscar.

Make no mistake this is a monumental coup for the company. Non-Disclosure Agreements are predictably cast in stone but the order could represent a 20% hike in turnover, manufacturing 500 - 1,000 parts a month.

In fact the turnkey order is so significant it has prompted a £300,000 investment in the purchase of an Integrex j-200S twin-spindle multi-tasking machine from Mazak – but that's only part of Bright Engineering's shopping list for financial year 2018/2019.

Add to this a Mazak HCN 4000 twin pallet machine and a Doosan DNM 6700 VMC from Mills purchased just before Christmas last year and we're getting really serious.

But there's more. Up until now, Bright has had to walk away from full-blown 5-axis work. That's about to be remedied in June this year with the delivery of a twin pallet Mazak i-500 Variaxis machine. This will also help to process existing work more efficiently through its one-hit machining capabilities. On the investment stakes, this takes Bright past the £1 million mark.

It's all in the data

The principles of Industry 4.0 and connected manufacturing are things that inspire Jon Hoyle: "Our ultimate aim, long-term aim is focused on developing a Smart factory environment but at the moment, I see a practical applications of Industry 4.0 as being total knowledge and control of all the assets in our business," he says.

Steve Amey, Bright Engineering's southern business development regional manager

"We know what our employees are doing; we know how our finances are doing, but we have £2 million worth of kit sitting on the shopfloor that, apart from the red and green indicator lights, we know very little about in terms of optimisation," he adds.

"We're looking to change that: my motivation is to run a business that is data driven so that we are better placed to make educated decisions. Short-term we'll be looking at implementing a dynamic scheduling system; longer-term we want screens displaying live machining data all around the facility in real-time.

"We've started the journey – recently we engaged with 'Made Smarter' a government funded scheme designed to help businesses in the North West embrace and implement Industry 4.0 strategies," he states.

Take a walk on the sales side

Many readers will know Steve Amey, formerly of deep hole drilling specialist Perfect Bore, but some may not know that for the past 18 months or so he's been working on a self-employed basis for Bright Engineering as Southern business development regional manager.

"Steve has a great work ethic and years of industry experience," Mr Hoyle affirms. "Back in 2017 he was looking for a new challenge so he began working with a small handful of non-competing customers as a consultant. We became his machining company and from our perspective his brief was simple – to win more business to facilitate our ambitious growth plans.

"It's working really well. The aerospace turnkey project – which evolved from an initial meeting with the customer at the Farnborough Airshow in 2018 – is a fruit of Steve's endeavours and I can see his role expanding in the future.

"He has brought in around £250,000 worth of new orders – some of which have evolved into repeat business. We now have six or seven new customers that we simply wouldn't have had without his input. He brings some much needed focus and strategy to the sales side of the business."

A word or two from the man himself: "Having been in the engineering sector for 40+ years I had reached a crossroads in my career where I wanted to try something different," Mr Amey explains.

"A chance conversation at an exhibition with Jon opened up opportunities in that direction. The rest is history. I started working with Bright Engineering in October 2017 as their southern business development regional manager.

"The great thing however is that we have developed a really close, strong integrated working relationship. It feels like I'm working in the same office rather than at the other end of the country."

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