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# PRODUCTION ENGINEERING SOLUTIONS



## Ethical manufacturing

Hone-All: tried, trusted and transparent

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# Ethical manufacturing

**Solutions Report**  
Dave Tudor



It's not difficult to see why Leighton-Buzzard-based Hone-all Precision has evolved into a successful business. This is a highly ethical company that values its employees just as much as its customers and since its formation, the focus has been refreshingly simple – to exceed expectations by going the extra mile for customers and staff alike. There's a real passion for excellence that runs throughout the business as **Dave Tudor** discovered during a recent visit.

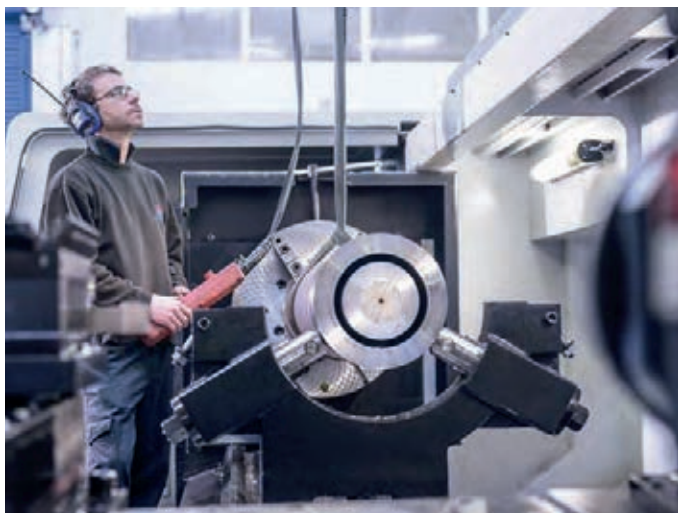
**T**o some, setting up in business with a respective wife or husband is a frightening prospect and would be the quickest route to the divorce courts, but

for Hone-All's owners Colin and Andrea Rodney, the process was evolutionary and has proved to be highly successful.  
"From day one we've brought different skill sets to the table

and that's why it works," Mrs Rodney says. "Colin is a very good engineer and excellent on the technical aspects of the business. My skills on the other hand are centred around customer service and the ability

to communicate effectively with people at all levels."  
The couple actually met in 1994 but for some years prior to that, Hone-All was essentially a small subcontract honing service with Mr Rodney

operating out of a small 1,100ft<sup>2</sup> unit in Luton.  
The early days of the relationship were challenging with Mr Rodney having to work obscene hours at the factory just to make ends meet. "I

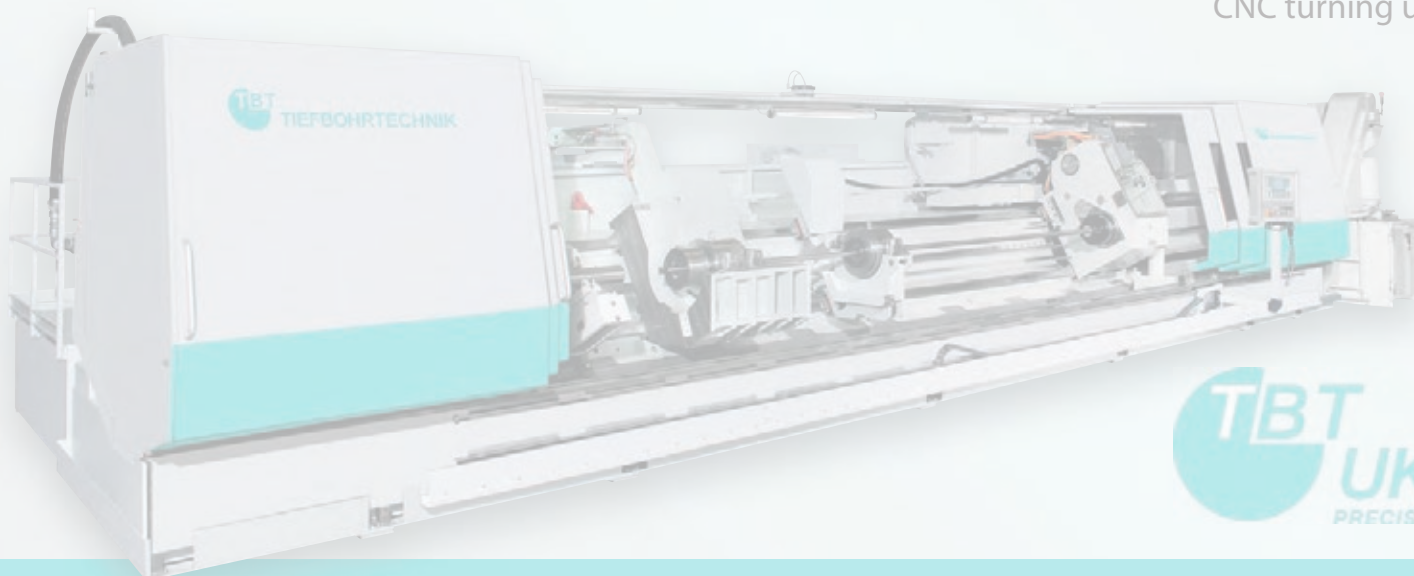


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When something goes wrong we take it personally. Clients place their trust in us and we'll always do everything in our power to never let a customer down

But as the saying goes, if you can't beat them, join them and that's exactly what Mrs Rodney did. Flexibility in her working hours at Lenzkes meant she could start early, finish at a sensible time in the afternoon and then help out work swamped Colin on the administration side at Hone-All afterwards. According to Mrs Rodney, it was an arrangement that helped both the business and the relationship: "If the mountain won't come to Mohammad, Mohammad must go to the mountain."

#### Growing pains

One of the main drivers behind Hone-All's success is that practically since its inception, the company has invested continuously in its staff and equipment so outgrowing premises was a recurring headache. Thankfully, salvation finally came in 2008 through the purchase of a 20,000ft<sup>2</sup> factory in Leighton Buzzard that today is home to Hone-All's 35 members of staff.

The company's range of services comprises: CNC turning (up to 550mm diameter, 4m length between centres);



CNC honing (1.55 - 700mm bore diameter, 3.5m overall length); deep hole boring (20 - 200mm diameter up to 2.8m overall length); deep hole drilling (2 - 25mm to depths up to 2.5m); and gun drilling (3 - 25mm diameter to depths up to 2.5m). Its plant list reflects this diversity with machines from Boehringer, Sunnen, TBT, Delapena, Mollart, Jones & Shipman, Nagel and Permamo (amongst others) populating the shopfloor areas.

"Moving to our new factory represented a massive change both culturally and operationally," Mrs Rodney affirms. "The shopfloor layout is much more ergonomic and productive from a flow perspective and because we're all under one roof communication between departments and members of staff is greatly enhanced.

"We do invest in new equipment regularly - we've



Andrea Rodney

bought five new machines costing around £600,000 plus an additional £100,000 on gauging, tool cabinets, hoists and ancillary equipment in the five years we've been here - so it's really important that we use the available space to its full potential. The move was also a time to leave all our bad housekeeping habits behind

and make a totally fresh start, aiming for exemplar standards in not just safety and efficiency but aesthetics too."

#### The personal touch

Hone-all believes in the power of collaborative partnerships with both suppliers and customers alike and attributes much of its success to the way it treats

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its customers, communicates with them and nurtures close working relationships. "When something goes wrong we take it personally," Mrs Rodney declares. "Clients place their trust in us and we'll always do everything in our power to never let a customer down."

Indeed over the years, the company has built up a loyal client base spanning industries such as oil and gas – Hone-All is part of the supply chain for companies such as Schlumberger, Baker Hughes and Cameron – automotive, F1, medical and aerospace. As well as company approvals which include ISO 9001 and AS 9100, the company also achieved Bronze SC21 status with ADS in 2010. Unfortunately however, Mrs Rodney is somewhat sceptical regarding the real

benefits this has produced.

"I have to say I am disappointed," she reveals. "Don't get me wrong – SC21 has been very effective as a business improvement tool and the CSIP (Continuous Sustainable Improvement Plan) that we developed has galvanised and reinforced many of the Lean manufacturing techniques that we use within the company. It has also helped us streamline analysis processes for vital aspects of the business such as quality and on-time delivery performance."

"But when we signed up we were told that SC21 was the exemplar – the thing that would differentiate us from other companies when tendering for aerospace business. The truth is that most of the buyers in the aerospace companies



we approach don't even know about SC21.

"The irony," she continues, "is that SC21 was introduced initially to standardise, unite and ultimately improve the aerospace supply chain via a system of performance benchmarks. In reality nowadays it's almost a closed shop. I don't think it's brought in any new business for us at all, but all that said, we'll continue with it purely for the benefits it provides us from a business improvement perspective."

#### The right attitude

It's hard enough finding skilled staff in engineering generally, but in deep hole boring, drilling and honing the skill levels required can be even harder to find. At Hone-All there's a healthy blend of youth and experience which combines to reveal an average employee age of 38. "We tend to recruit people on character and attitude first and ability second," Mrs Rodney explains. "We can teach people the necessary skills, but having the right mindset is far more important in our opinion. Our people are our most valuable asset and we expect a lot from them, but we also give a lot back in terms of flexibility, opportunities for personal development and realising an individual's true potential."

#### Three steps to heaven

Not surprisingly, Mrs Rodney

is fiercely passionate about the raising the profile and encouraging new blood into manufacturing and engineering and she has pretty clear views on how things could be improved: "There are three main areas I would address," she says. "Firstly I would implement a standardised syllabus for schools and colleges that would ensure that kids have access to the right equipment – lathes, mills, grinders – as well as covering the right subjects – metallurgy, machining, metrology and programming for example. The emphasis here is on the words 'standardised syllabus'; it needs to be uniform across the board and the people doing the training would need to be suitably qualified."

"The second thing would be to make the funding allocated to manufacturing by the Government more easily

accessible to companies like us. I can apply for funding to send eight of my employees on a business improvement course but I may only want to send two. Everything needs to be more flexible.

"Finally I would appoint a Minister for Manufacturing who is totally independent of any political party. All too often when governments change, continuity and consistency is lost – along with all the hard work conducted by various manufacturing organisations who are lobbying for change. We need someone that lives and breathes manufacturing who can bang the drum for our industry. That person also needs to be given time to see the job through."

#### All change

Currently, significant changes are taking place at the very core of Hone-All's



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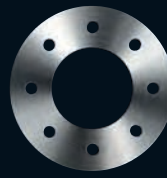
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# Double development

management structure. Colin Rodney, who previously handled production and sales will be taking more of a backseat role from an operational day to day perspective. Andrea on the other hand will now be directly responsible for production in addition to her other responsibilities of quality, HR, finance and administration. Put another way, for all intents and purposes, she'll now be running the show.

"When you have two directors with responsibilities that cross over and overlap to a degree – production and quality for example – it can lead to confusion amongst the staff in terms of priorities," she explains. "The change in my role should make business needs and expectations, as well as communication links much more direct and unambiguous.

"Another thing that's changed is that we've improved communication between the management team and the shopfloor staff," she adds. "Every six months we run a Staff Satisfaction Survey and one of the overriding points that came to light is that the operators wanted to see the works and operations managers on the shopfloor every day. Sometimes they would be confined to the office or be tied up with a particular section but now they go round to all members of staff just to make sure everything's OK on a daily basis. This also provides the opportunity for them to take on board any concerns, suggestions and comments."

It's clear that a totally transparent management style is the order of the day as far as Mrs Rodney is concerned: "All members of staff receive a monthly newsletter which details important statistics such as customer complaints, reject rates and on-time delivery performance as well as employee birthdays, events and company visits," she concludes. "In addition we hold quarterly staff communication meetings and copies of our monthly management meeting minutes are available for all members of staff to read. Like I said earlier – our people are our greatest asset."



Cutting trials for an aerospace customer carried out at Mollart Engineering's Chessington subcontract production facility using a totally new hybrid deep hole drilling system to produce 89mm diameter holes from solid in high performance Inconel alloy 718, has enabled the hole penetration rate to be doubled against existing deep hole drilling tooling.

The Botek Typ 07A Deep Hole Drill is a hybrid design combining the advantages of a gun drill with a BTA drilling

system using guide pads and solid carbide inserts. The drill head is screwed into a smaller than the bore size support tube that carries high pressure coolant through its bore to the cutting zone. This pressurised flow creates a back flush to force chips down the drill flute, to the outside of the tube and out of the component.

The system can be fitted to any machining centre or boring machine having through coolant facility and is available to create bore sizes from 50mm diameter to 135mm diameter. In the standard range of tools

the Botek Typ 07A can produce holes up to 3,200mm in depth or for special applications, can be specified for bores up to

4,500mm deep.

The drilling head has two carbide guide pads set in the outside diameter to support the tool in the bore plus a series of staggered inserts positioned according to its diameter. Each insert also incorporates Botek's latest SP5 universal design of chip breaker. The inserts are configured to provide peripheral sizing with intermediate and centre positions to create a balanced cut and full face contact in the cutting zone of the bore. This arrangement also ensures a positive feed start from solid without any pre-conditioning operation.

As a guide, cutting speeds for drills of 50mm diameter on free machining steels are between 80 and 120m/minute, heat treatable steels (1,100N/mm<sup>2</sup>) and stainless steels 55 ▶



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