

P J Hare presses ahead with help from WNT

With a history dating back to 1947 when the company was formed by Pat Hare, PJ Hare (Hare Presses) has evolved into the UK's leading manufacturer of hydraulic and hydro-pneumatic presses, with systems ranging from 1 ton to 400 ton force. Along the way the business has added precision press tooling to its product range, making use of leading edge technology to deliver advantages to its many customers. The ability to achieve zero defects, load monitoring, in-tool Poke Yoke devices and fixtures, part presence sensing and, of course, increased productivity and reject rates are just some of the benefits of Hare tooling. These benefits are of particular interest to the automotive and food packaging sectors, which accounts for much of PJ Hare's business.



With sales growing and further export markets being targeted the demand for machined parts is also increasing, with typically two presses per week plus press tooling requiring machine capacity. Traditionally, P J Hare has had manual machining capacity in-house, but this wasn't sufficient to meet its needs, so a high proportion of machining was sub-contracted. As part of a business review the company took the decision to pull back in-house much of this machining work, a choice that meant investment in new machine tools under the guidance of Production Engineer Konrad Nerc. This process was started with the purchase of a Doosan DNM 500 vertical machining centre, quickly followed by an XYZ TC 320 LTY turning centre.

As a result of this investment P J Hare had to make a major shift in tooling technology, from what was predominantly high speed steel and morse taper shank drills, used on its manual machines, to the latest in indexable insert and solid carbide tooling. With components machined from a variety of materials, from mild steel and cast iron, through to more exotic materials at up to 50HRc, it would also need to be able to rely on the support of its tooling supplier to achieve its aims. Added into the

mix was also a desire to move away from castings to machining parts from solid. The decision was taken to work with WNT (UK) to make these aims achievable.

“In order to justify the investment in machine tools we had to show productivity gains and keep cycle times as short as possible through use of tooling technology. We were able to develop efficient machining strategies through use of Edgcam and this was aided by the depth of information available on the WNT website. We can download CAD drawings of all the tools directly from the WNT website and behind that is a wealth of cutting data that has proved invaluable to us,” says Konrad Nerc. “In addition we can call on the support of our local Technical Sales Engineer Nigel Marsh, who worked with us in the early days to carry out trials and point us in the right direction. The response and service we continue to receive from WNT is way ahead of what we had been used to.”

With the process of change well under way, Hare Presses is now using mainly U-type indexable insert or, the WTX Change style of replaceable head drills, the latter are greatly improving productivity as the speeds and feeds used sit nicely within the power bands of the machines. Milling is a combination of indexable WNT (HFC) high feed cutters (HFC) cutters that are being used machine small diameter deep pockets; solid carbide with a reliance on WNT’s Silverline range being superseded by the latest WNT CCR milling system, that is enabling deep pockets to be cut much quicker and to a greater depth in a single cut, thanks to the six-flute design and geometry that delivers much better chip evacuation. Hare Presses also makes use of WNT’s Exchange system of milling cutters which, similar to the WTX Change drills, allows the cutting head to be replaced with alternative size cutter heads. These are also being used on extensions up to 250mm in length. As a result, toolholding has also been reviewed and the WNT Centro P collet system is now the toolholder of choice due to its higher gripping power and accuracy.

“From the outset WNT set out its service level of delivery next day before noon. As our customer base has grown, so has the logistics that allow us to maintain that service level,” Says Glenn Stanton, WNT’s UK and Ireland Sales Manager. “The ability for customers to rely on our delivery means that they can reduce tooling inventories, safe in the knowledge that tools will be delivered when they need them. In addition to the logistics investment, we have also dedicated significant resource to providing face-to-face support through our team of Technical Sales Engineers and Applications Engineers. Backing up this face-to-face time is the level of detail on the WNT website, where we have embraced the use of technology to simplify the selection and application of our entire range of cutting tools.”

The investment in machine and tooling technology, with the help of WNT, has allowed P J Hare Presses to bring back in-house over 70 per cent of its machining requirement. This is giving the Wrington, Bristol-Based company much greater control over its production and quality, the success of which will lead to further work being produced in-house as business continues to expand. “The positive experience that we have had, combined with the service levels from WNT give us the confidence that we can continue to develop our in-house machining programme to meet the increase in business that we are experiencing,” says Konrad Nerc.