

Bringing Large Component Manufacture Back in House - It's all change

Hystat Systems invest in a Large Dugard Flat Bed Lathe Business of the year winners in 2009, Hystat Systems specialise in the design, manufacture and repair of heavy duty hydraulic and pneumatic cylinders. Based in the North of England, one of Hystat's greatest strengths now lie in their ability to control all aspects of their service. Starting with the design through to installation, the Huddersfield based company prides itself in having built a business model that equips them to provide the best possible solution to their customers.

A major part of the businesses development over recent months has been in the manufacturing facility. Historically Hystat sub-contracted major large component parts to CNC machine shops throughout the UK and in-house would only machine smaller selected parts. Changing tactic, Hystat has now begun to invest in machine tool technology to handle the more complex, large and costly items. The driving factor in this decision was two fold, firstly, finding capable and available capacity in the sub-contract field was becoming ever more difficult, and secondly, the introduction of new ideas and concepts from Machine Tool Supplier Dugard.

Dave Robins Manufacturing Director at Hystat explains how the installation of a new flat bed lathe has completely revolutionised production:

'Our original business set up meant that we would use sub-contract engineers to machine the rods and barrels of our hydraulic and pneumatic assemblies, these parts, often stainless steel could be up to 12 tonnes in weight and up to 700mm in diameter, so finding machine shops equipped with CNC lathes capable of turning to our demands was difficult.'

'Dugards had supplied us with a flat bed CNC lathe in 2006 which

has proven to be reliable, accurate and flexible. Its purpose was to machine smaller parts of our hydraulic assemblies. The success of the first installation prompted us to approach Dugard about our outsourcing problem on the larger rods and barrels. Their experience steered them towards proposing Hystat invest in a large flat bed lathe with the capacity and the power to handle all the rod and barrel manufacture, the flat bed solution would help when loading parts and offer more control whilst machining. The Dugard BN50-8000 ticked all the boxes and was very competitively priced. On calculation our pay-back on this machine will be less than 3 years, this cemented our decision to order the new lathe.'

'The Dugard BN50-8000 flat bed lathe has now been in production for six months. Its performance is very impressive. We now machine our smaller rods three times faster with the BN50 than any other lathe in our workshop and we no longer need to outsource our larger shaft work. Impressively, we can machine a 7.5 mm depth of cut on high tensile steel at a

feed rate of 0.45mm per rev and still only pull a 50% load, this is just one example of the BNC's powerful cutting performance. We believe that the lathe could perform 10-12mm depths of cut on all our materials which include stainless steel and varying grades of high tensile steels. We're now in full control of our manufacturing process and able to meet all the demands of our customers without relying on others'

'Another standout feature was the BN50-8000's control system. The lathe came equipped with the latest Fanuc control which includes a conversational programming system, this makes machining much easier and our programming a lot more reliable. We can actually track our machining path prior to machining..it's almost like a dummy run'

'Coupled with the CNC lathe as a solution to Hystat, Dugard provide us with a first class service. Our business has benefitted substantially thanks to them, their machine tools and their ongoing support' concludes Dave Robins - Manufacturing Director at Hystat Systems.

