



# SolidCAM

The Leaders in Integrated CAM

## Dixons Surgical Instruments Ltd Reduces Cycle Time Using iMachining by SolidCAM

**DIXONS**

Dixons Surgical Instruments Ltd was founded in 1948 with an aim to supply the major UK Trade Houses with high quality surgical instruments. Today their Surgical and Orthopaedic Instruments are manufactured at their Wickford factory using a combination of the latest CNC controlled machines, along with the manual skills of their experienced craftsmen. <http://www.dixons-uk.com>

The unique, revolutionary Milling technology  
**iMachining**<sup>®</sup>  
patent by SolidCAM

Utilising SolidCAM's unique, patented and revolutionary iMachining technology, Dixons Surgical Instruments Ltd have manufactured their 'Compressor Distractor' which is an Orthopaedic instrument used to manipulate bones in the foot during an operation. S/S pins are driven into the bones and then the jaws of this product are slid over the pins (there are two different sized holes in the tips) and by opening and closing the handles, the jaws are opened and closed in parallel.

It is made from 17/4PH S/S and custom 455 S/S and is made to their Orthopaedic customer's design. They were given parasolids to work from and have machined all the parts using SolidCAM. The jaws: 3 axis milled from round bar in 2 operations in a vice on their Mazak VCN410A. The handles : 4 axis milled in 1 operation from round bar on their Mazak VCN410A with a couple of tags holding it into the bar which were dressed off by hand. The linkage plates: 3 axis milled from flat bar on their Rockwell V450 VMCs. The screws, nuts and pins: mill-turned on their Mazak QTN200-MSY.



TIME SAVINGS  
**70%**  
... AND MORE!

*"iMachining has enabled us to make parts that we would otherwise have really struggled with due to the nature of their shape and lack of workholding options. It enables us to cut parts using 4 axis strategies with minimal vibration, even when the parts are hanging miles out of the 4<sup>th</sup> axis. We're especially impressed with the way it protects small cutters - I'm talking 1.0mm to 3.0mm dia end mills - they just go on and on working. Before using iMachining we used to get through lots of this type of cutter, because much of our work demands the use of them to cut intricate features, but it was always very unpredictable as to when the cutter would break. Now with iMachining it's not unusual for us to make a whole batch of parts from tough stainless steels with just one cutter!" Jay Dixon, Managing Director, Dixon Surgical Instruments Ltd.*

### SolidCAM

Founded in 1984 by Dr. Emil Somekh, SolidCAM has over 29 years of expertise in CAM development and applications. The integration strategy of SolidCAM, in the major 3D mainstream CAD systems, SolidWorks and Inventor, has created major growth for SolidCAM and established SolidCAM as the leaders in Integrated CAM. SolidCAM is a Consistent Growth Leader and has been named by CIMdata as the fastest growing CAM vendor worldwide, in five out of the past eight years.