

Moore & Wright digital external micrometer with LCD display, and a Moore & Wright workshop digital caliper



BOWERS GROUP

Case Study - January 2017



Company Name	Phoenix Steels Ltd
Location	Sheffield, S. Yorkshire, UK
Product Installed	M&W Micrometer and Caliper

Industry	Steel Stockholding
Component Type	Precision Measurement

APPLICATION BACKGROUND

Phoenix Steels Ltd is a family run business that been supplying quality tool room steels directly to the precision engineering and manufacturing industry for more than 25 years. Based in Sheffield, Phoenix Steels is involved in the day-to-day processing of all popular grades of tool steels, including the manufacture of ground flat stock.

In addition, the company also supplies and stocks key steel and silver steel, along with O1, D2, H13, P20, M2, and 1.2767, bar from its 8000sq ft warehouse in the centre of Sheffield. They also stock and supply O1 sheet from 2.4mm thick up to 6mm which can be cropped and precision roller flattened to customer specifications.

Phoenix Steels' supply of ground flat stock is predominantly used in tool making, as well in the making of knives, punches, jigs and fixtures. The company is also well equipped to produce special sizes for the bespoke requirements of customers; whether these are individual pieces, small batch, or full production quantities of ground flat stock or pre-machined bar.

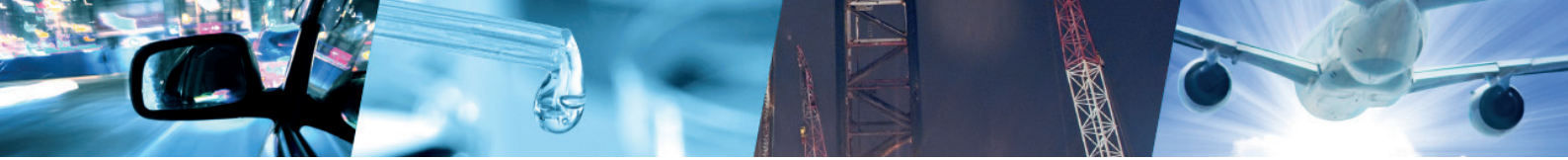
CHALLENGE

Phoenix Steels manufactures and stocks a full range of standard metric and imperial sizes, and tolerances are typically tight; +/- 0.001 inch or - nil + 0.05mm.

Tolerances for finished products are industry standard for ground flat stock, and as long as these standards are met with accuracy they can be passed for sale. The company has an in house grinding facility to ensure speedy, small batch production in order to keep the stock programme up to date.

Phoenix Steels Ltd relied heavily on Moore & Wright micrometers to meet high levels of quality and accuracy of their ground flat stock. Until recently, the company used a traditional Moore & Wright micrometre that was at least 30 years old. Although this model was still working well for them, the company approached Bowers Group to supply them with a newer model with a digital display for ease of use.





SOLUTION

Bowers supplied Phoenix Steels with a brand new Moore & Wright digital external micrometer with a large LCD display, as well as a Moore & Wright workshop digital caliper, which they use on a daily basis. Micrometers are used to measure the sheet prior to the cutting and roller flattening process, giving the surface grinding machine operators an accurate measurement of the starting size of the steel. After the grinding process, during which various sizes of ground flat stock are produced, micrometers are used again to check that the finished product is within tolerance.

COMMENT

Steve Thompson, formerly of Sheffield based Tool Steel Blanks, runs the cropping and roller flattening operation at Phoenix Steels. Steve is in charge of the quality control of the finished products, and uses the micrometers to ensure accurate measurement. Steve said: "Meeting the tight tolerances of our ground flat stock is imperative to the quality and repeatability of the products we sell. Our customers trust that the steel we provide them with is consistently accurate, ensuring that they can manufacture their products with confidence."

Phoenix Steels is very satisfied with the Moore & Wright products, and firmly believes they are the best on the market. Steve continued: "Compared to other generic copies on the market, Moore & Wright micrometers are noticeably more accurate, more reliable, and of higher quality. We use them several times a day and trust them completely to provide an accurate readout. They are a key instrument in the day to day working of the business."

The new micrometer has a large digital display, Mark Skinner, Production Director at Phoenix Steels said: "We have developed the supply of special sizes of ground tool steel down to a fine art. The Moore & Wright micrometers are very useful as they enable us to ensure that the steel we provide matches standard tolerances, as well as the specialist requirements of customers. It is our aim to produce stock with precision, accuracy and quality, directly meeting the required customer specification."

