

Pentagon Plastics Takes Quality Control to New Heights with the Baty Venture 3030

Pentagon Plastics has taken quality control to the highest level of precision with the Baty Venture 3030. Bowers Group supplied the West Sussex based plastic injection moulding business with the Baty Venture, enabling them to carry out First Article Inspection Reports (F.A.I.R) on plastic mouldings.

Every new moulding produced at Pentagon Plastics is required to have a First Article Inspection Report carried out, which involves measuring the dimensions of the component against drawings provided by the customer. This report is then sent to the customer for verification and approval.

The Baty unit is also used to monitor specific components throughout production runs to ensure that the parts meet precise specifications. In addition, the unit is used to carry out fine detail checks by in-house toolmakers. The Baty Venture 3030 is perfect for use as a visual inspection aid because it has a powerful zoom lens and good surface illumination.

“The Baty unit has enabled us to carry out far more precise measurements on the components that we produce” said James Penny, Quality Inspector at Pentagon Plastics. “It helps us to ensure that the quality of components is maintained throughout the production runs, and makes it easy to identify any areas for concern. Small detail such as a very small radius or a small angle are easy to measure thanks to the powerful zoom on the machine.”

Pentagon Plastics previously used a shadowgraph for the measurement process, but the Baty Venture 3030 has allowed them to carry out the process with far greater ease. It also allows them to measure additional features and give true positioning tolerances with other geometric dimensions.

“Our processes have been significantly improved following our investment in the Baty unit” said James. “The Venture with Fusion software creates drawings as components are measured, and this visual representation makes the task of building a report far more efficient and accurate than we could have achieved previously.”

The Baty Venture 3030 allows measurements to be taken and saved to the hard drive, which keeps a record for statistical purposes over many runs. This information can then be exported directly into an excel spreadsheet, which significantly speeds up the reporting process.

Pentagon Plastics had viewed a number of alternative CMM machines at various trade shows. After making enquiries with alternative suppliers, they found the Baty Venture 3030 to be better suited to their current requirements. The unit was also in line with the dedicated investment budget that they set aside for the purchase.

As a plastic injection moulding business, Pentagon Plastics offer a variety of services including design assistance, development, toolmaking and injection moulding. They provide both mould tooling solutions and repeat production of injection moulded components across a wide range of industries; from medical and aerospace to construction and security.

James said: “Following on from the training provided, the Baty Venture 3030 is simple to use and very much suited to our internal needs. Although some components can be challenging, we are always able to achieve the required results by utilising the capabilities of the machine. Some of the technique in using the machine comes from experience obtained over time, but there’s no doubt that the Baty Venture 3030 has taken our quality control to new heights. Some tasks may be easier to undertake on the CNC Version, however for a business such as ours the manual version is perfectly efficient.”

For more information about the Baty range of precision measuring instruments, please [click here](#).

