

Accusharp shows why it is special

When compared to tool development and benchmark performance, Accusharp shows why it is way above its competitors

For one of its customers, Accusharp designed a Tungsten Carbide Special Drill. This special drill is used for final operations on a component of large batch sizes having component dimensions between 125 mm & 330 mm. The component requires to have multiple hole in a range of 36 to 70, in a single work piece.

Special requirements

Precision of drill sizes requires dimensional consistency less than 0.005 mm. If any drill, while in operation, breaks into the component, the costly component is directly rejected. Therefore, the prime requirement of the tool performance is that, the tool should not break, while in operation. Any inaccuracy or variation in the drilled hole-size results in component rejection. From the drilling operational cost point of view, tool Life performance is also important. The same tool is required for drilling holes on the work piece at different locations having different hardness between 48 & 60 HRC. And therefore, the same tool needs to perform equally at different working conditions. For work piece components, in material EN 36C, as a part of product being exported to end customers. Cost of the finished work piece component is between 1,50,000 & 5,00,000 INR.

Issues with competitor's tool

The customer was facing issues,



with the competitor's tool, like size inconsistencies, poor surface finish, poor tool life, frequent tool breakage, and on-time delivery of tools.

Because of the above problematic issues from the competitor's tool, the customer's productivity was much lower than his estimated norms. The process rejection was high. This caused high rejection cost beyond acceptance by the management. The delivery performance to end customers was getting affected. Frustrated with the issues, the customer invited Accusharp to assist and provide a better solution. An Accusharp cutting tools specialist was invited by the above customer to assist him, and to resolve the issues of the competitor, by developing tools with appropriate design and solution, to meet customer's requirements.

Accusharp's field engineer appeared at the customer's work place and studied the application details, and process parameters. The case study data, compiled by Accusharp's field engineer was shared with the design department. Analysis of the data was done by our development team, consisting of Field Engineering, Design, Development,

Production, and Commercial cells, to arrive at a solution to resolve customer's issues and meet the requirements.

Proposal drawing was prepared for customer's approval. After the customer's approval, a few samples of tools were manufactured and supplied to the customer. Accusharp's field engineer conducted trials with the sample tools, at the customer's end. The following test result are self-explanatory.

It goes without saying, that Accusharp, today, is the preferred supplier to the customer, for these tools.



Benefit of Accusharp's tool

- Tool changing frequency improved by 50%
- Increased productivity due to extended tool change
- Cost /pc lower than that from the competitor's tool
- Quality consistency of drilled hole extended up to last drilled hole
- Inspection cost reduced due to quality consistency.

