



# **Special Tooling**

A Bespoke Design and

**Manufacture Service** 



# **Special Tool Manufacturing Service**

## **Tool Design**

**W** Component Drawing

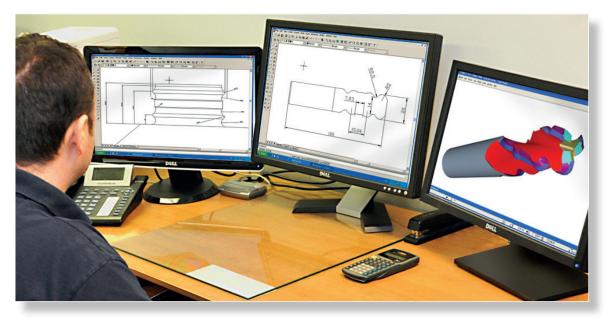
**⋘** Tool Drawing

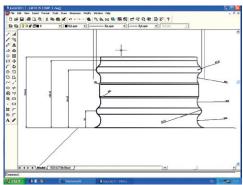
Actual Tool

At Merlin Tools we pride ourselves on understanding the needs of our clients. We know you expect quality and precision not only from our impressive range of ex stock tooling but also when you need something special.

Merlin Tools provides a full service capability that is dedicated to providing you with the highest quality in precision manufactured cutting tools to meet the most demanding requirements.

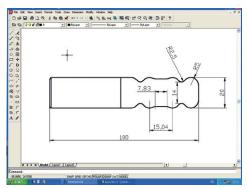
Our bespoke tool manufacturing service builds on this reputation and provides you with the exacting precision performance tool tailored for your specific needs.





Component profile drawing

The tool development process in many ways is straight forward. The careful and precise interpretation of the component profile is transferred to CAD where adjustments can be more easily applied. Our knowledge of materials, machining speeds and tolerances are used to calculate a precise cutting profile ready to be transposed into full CAD simulation.

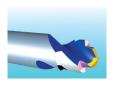


Tool cross section profile



# **Special Tool Manufacturing Service**

#### **Tool Simulation**











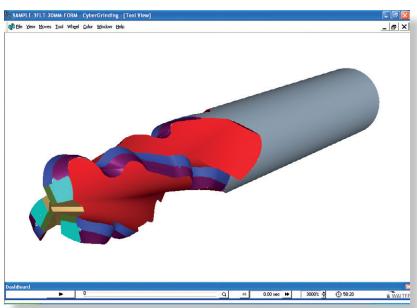








The CAD simulation is a full 3 dimensional image of the tool that can be rotated and positioned in a virtual spatial environment for client approval. It is fully colour coded for simple designation of depth and cutting angles. Working closely with our clients, we refine the design of the tool prior to manufacture.



#### **Tool Manufacture**







Our CNC manufacturing equipment is state of the art. These machines calibrate perfectly with our CAD software to produce flawless precision grinding. The fully automated system can run 24/7 producing quantities of high quality, consistently accurate tools to your specification at highly competitive prices.





# **Special Tool Manufacturing Service**

## **Tool Inspection**



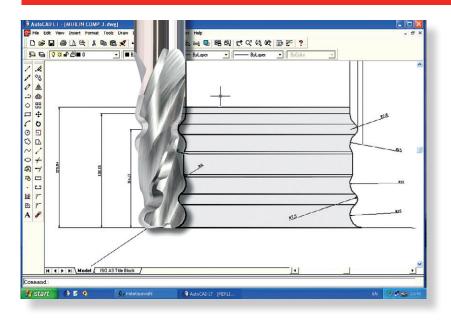
Full inspection takes place at key stages in the production process. Careful assessment of the tool, both through state-of-the art automated inspection and traditional craftsman analysis, ensure that the level of precision we have come to be recognised for is achieved every time.







## From Drawing to Tool







## **Regrinds and Tool Reconditioning**

### **A Full Tool Rescue Service**





Our special Tool Rescue service offers the opportunity for us to Regrind, Recondition and Repair your existing tools. This service will breath new life into those tools that have worked so hard for you and produce a cost effective machining solution, returning tools to you as new. Original coating can be re-applied to tools on request.





Worn drill

Drill after re-grind and re-coating

A Tool Rescue box is available upon request. Whenever you need to use the service give our sales team a call and we will arrange courier collection of your Tool Box for delivery to our technical department.



## **Modification Service**

#### **Modification of Standard Stock Tools**

Merlin Tools will modify one of our existing stock tools to fit the job, if it's appropriate to do so, saving on the cost of our full design and manufacture service. Typical cost effective modifications are radius, chamfer and diameter adjustments. Call or email our technical team who will be happy to discuss your options with you.

A full coating service is available to all modified tools.







Call us now for your FREE 200 page Product Catalogue!

01509 610300

Solid Carbide Endmills • Drills including 3xD - 5xD - 8xD
Solid Carbide Threadmills ISO Metric & NPT
Izar HSSCo & Izarmax ASP 52 Endmills • Machine Taps HSSCo & ASP2023
Carbide Rotary Burrs • Collets and Chucks