

Solid carbide tooling for  
Aerospace | Aircraft | Medical | Defence  
Motor Sport/F1 | Oil & Gas | Mould & Die | Sub-contract

# INFINITE POSSIBILITIES<sup>®</sup>



# The tools you need, when you need them

What if you could have the optimum tool, with the marginal cost increase more than covered by improved production throughput and efficiency? With Quickgrind, you can. Welcome to a world of Infinite Possibilities.®

At Quickgrind we do not limit ourselves to standard ranges, and we do not limit you to tools we happen to have in stock and want to sell you. Instead, our mission is to provide you with solution-based tooling, to give you the right tool, for the right job, at the right price.

The tools you see in this overview brochure can be designed specifically for your application and are available in virtually any size, diameter, radius, neck relief, coating or reach. Many are available with chip-breaker, through-coolant and other options.

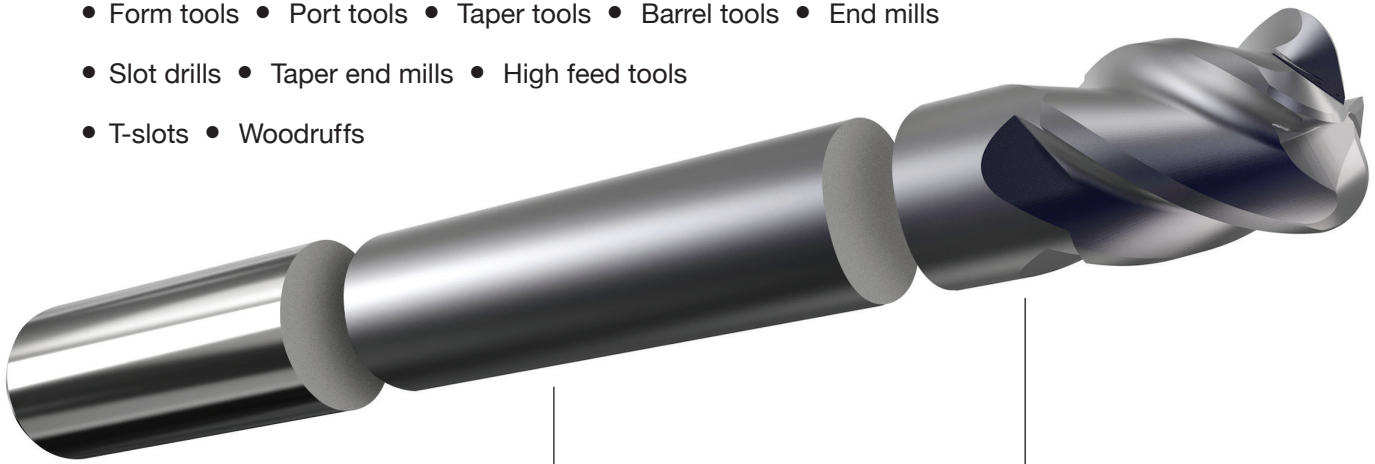
End the compromise of standard tooling. Contact our team today to discuss your applications, aims and requirements, and discover Quickgrind's world of infinite possibilities.

+44 (0) 1684 294090 | [contact@quickgrind.com](mailto:contact@quickgrind.com) | [quickgrind.com](http://quickgrind.com)

## Without the limitation of catalogues the possibilities are infinite

Bespoke features are available in every tool type we do, for example...

- Form tools • Port tools • Taper tools • Barrel tools • End mills
- Slot drills • Taper end mills • High feed tools
- T-slots • Woodruffs



### Shank length

Length, diameter, tolerance, type HA/HB/HC, through coolant, with oil grooves...

**we will make it for you**

### Neck

Length, relieved, diameter, with coolant grooves...

**we will make it for you**

### Head

Diameter, tolerance, flute length, number of flutes, helix angle, anti-vibration, radii, chamfer, radial or axial through coolant, ballnose, chipbreaker, rougher...

**we will make it for you**

## Our aim

To be a supportive, stable and financially strong supply chain partner that is dedicated to continuous improvement, working with like-minded clients who value and require:

- A personalised and responsive service with rapid turnaround capabilities
- Affordable and mission-capable quality products that are environmentally friendly and progressive
- Constant innovation as the “norm” and made available as soon as demanded

We aim to be your trusted partner in innovation and stability, completely aligned with your requirements

## Machining aluminium with high performance end mills

### Caiman high performance 3 flute

- Optimised geometry and submicrograin substrate allow for substantial HSM
- Developed for 700 and 600 series aluminium
- Trochoidal milling at full flute ap and high feed with 25% ae as used by many of our clients
- Available with long flute lengths allowing 3 x D ap (depth of cut) or more
- Long tool life and suitable for our remanufacture service
- Part of our Infinite Possibilities® range, tools designed with dimensions for your particular applications and at near standard prices with short delivery times
- A must for all aerospace and motorsport/F1 applications
- Chip-breaker and through-coolant options



### Alligator Duo a 2 flute for all occasions

- Two flute and aluminium geometry for many applications
- Design the tool you need with our Infinite Possibilities® programme
- Any radius or chamfer you require on a short delivery
- Long reach/short flute or long reach/long flute, the choice is yours
- Zero-dished option for fine surface finishing on flat surfaces
- Ballnose available to suit all your requirements
- Roughing, finishing in pockets or profile milling – we do it all

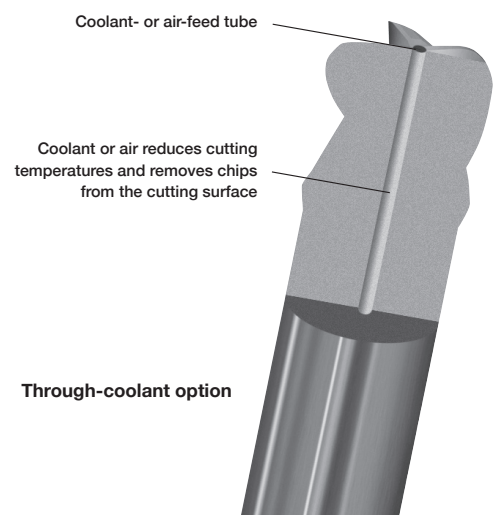
### Alligator Trio the 3 flute when 2 are not enough

- Advanced cutting geometries allow highly increased superior geometry and submicrograin substrate for performance milling
- Any tool combination, to give you the most optimised tool for your work
- Don't be limited with standard dimensions, create the tool you need for the programme strategy you want to use – just tell us and we'll do it
- Long reach/short flute or long reach/long flute, the choice is yours
- Available with square corner, chamfer or radii
- Roughing, finishing, pocket milling or profiling



### Infinite Possibilities options and ideas

- Consider using chip-breaker end mills when roughing or trochoidal milling
- Through-coolant with axial or radial options
- Stub length with short flutes will give high stability
- Long overall length (up to 330mm) will give you the reach you need – just ask us
- Why compromise with standard catalogue items when a customised tool will give you everything you need at virtually the same price
- Our TX coating is available for all aluminium materials and will give you excellent tool life



## Superior cutting tools and much more

### Other tools to consider

- Taper end mills – we will design the tool to suit your application
- Form tools to your design
- Drills to suit your applications, including step drills
- Custom-made tools with multiple diameters or port cutters
- Miniature end mills with square-end or ballnose
- Woodruff, T-slot, dovetail, undercut, corner-rounding – we do them all



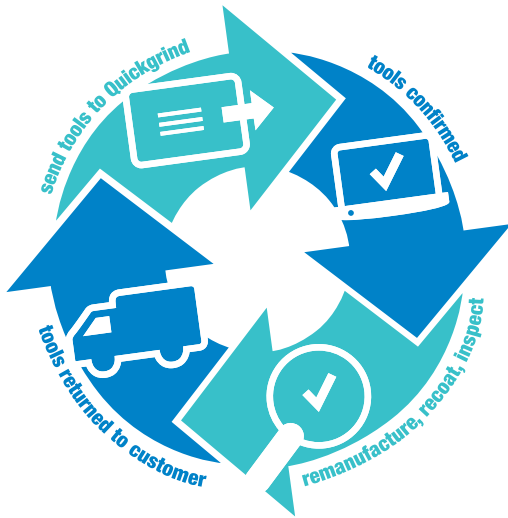
### Remanufacture service

Our remanufacture service can give you up to 7x extra usage out of your carbide tooling. And with material costs continuing to increase you can't afford to ignore the benefits that remanufacture offers.

- Reduced delivery issues and stock outs
- Tools controlled by size, number of reissues and remanufactures
- Reduced logistics costs
- Extremely attractive price/performance over the life of the tool

Remanufacture doesn't mean compromising on quality. It has always been our policy to produce tools of such high quality that they can be used more than once. Which means that even after seven remanufactures you will continue to enjoy new tool performance.

Ask for a sample and discover why remanufacture is the right choice for your business.



### Performance-improving strategies

Do you have a component that is taking too long to manufacture?  
Are you struggling to find the time and resources to investigate advanced machining and cutting tool strategies that could easily double your output?

Yes? Then you need to put QuickCam to the test.

Offering the latest machining strategies for turnkey solutions, toolpath optimisation, tooling packages, fixture design and more, QuickCam will give you reduced cycle times and tooling costs, increased output, better due date performance and improved capacity, all of which equals more throughput and greater profit.

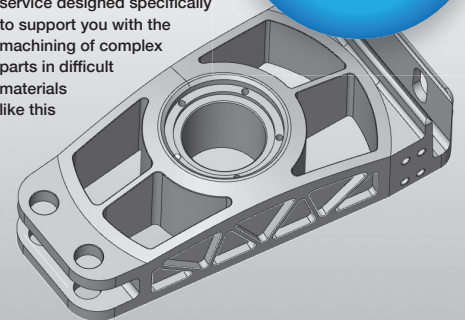
Why not invite us into your machine shop and allow us to demonstrate how we could improve your current processes and tooling requirements?

To find out more please contact Jonathan Butler  
+44 (0) 7808 535583 | [quickcam@quickgrind.com](mailto:quickcam@quickgrind.com)

**QUICKCAM**<sup>®</sup>  
ultimate profitability

Cycle times down  
**90%**

QuickCam is our advanced service designed specifically to support you with the machining of complex parts in difficult materials like this



### Tool vending Revolutionising tool management

As well as designing and manufacturing your tooling, we are also experts in tool management, such as our secure point-of-use delivery solutions for controlled issue and tracking.

We have a total understanding of today's logistics needs, eliminating tool outages and providing concise consumption and usage trend reporting. Vending allows you to manage the stocking and dispensing of your high value carbide tooling via in-built tracking and reporting software.

Tool stock can be managed from any web browser, and its use monitored by the click of a button. Speed of issue and re-stocking reduce production down-time.

Contact us today to arrange your free, no obligation demonstration.





### Eliminator Barrel Tools ≤90% cycle time reduction

- Part of our Infinite Possibilities® range, tools designed with dimensions for your particular applications and at near standard prices with short delivery times
- Versions include conical, tangential and form F (flat surfaces)
- Suitable for applications such as medical implants, turbine vanes, blisks, aircraft, automotive and motorsport/F1 parts
- Replaces scanning with ballnose end mills for ≤90% cycle time reduction
- Suitable for a wide range of materials including aluminium, plastics, stainless steel, steels and high temperature alloys
- We provide full CAD and CAM support for 3-axis and 5-axis machining
- Suitable for our world renowned tool remanufacturing service
- The tool of the future *available now*



### Orbis Lollipop Cutters for 5-axis tube milling and machining contour shapes

- Designed to suit your applications
- 2, 3, 4, 6 or 8 flutes in various diameters, reach and overall lengths as well as reduced neck diameters for full access to the relevant feature
- Part of our Infinite Possibilities® range, tools designed with dimensions for your particular applications and at near standard prices with short delivery times
- Suitable for fine finishing of irregular, uneven surfaces and tube milling
- Designed for 5-axis machining of unique features and to allow access of difficult to reach areas as well as intricate tool paths
- The answer to many programming issues where other tooling restricts access – you will not be limited by Orbis lollipops
- Spherical ball profile and geometry allows for the fine finishing of hard to reach areas on the front or reverse side of the feature
- Available in our unique geometry styles of A (aluminium), S (titanium/high temperature alloys) and D (die steels)



### High Feed Tools for high milling success

- Advanced cutting geometries allow highly increased feed and speeds rates with exceptional tool life
- Small depth of cut (ap) with up to 6x feed rates over end mills achieve greatly improved machining times with high MRR (metal removal rates)
- Strong and stable tools for all roughing operations in a wide range of materials
- Infinite Possibilities® gives you huge options of tool diameter, reach and overall length – just ask!
- Spectre 3 Flute High Feed with or without through-coolant – you could have a 2mm diameter tool with 40mm reach or a 12mm diameter tool with 100mm reach and 150mm overall
- Phantom 4 Flute High Feed with or without through-coolant – 12mm to 25mm diameters with reach and overall lengths to machine deep pockets in stainless steels, titanium and other difficult materials
- Bulldog 4 Flute High Feed roughing end mills for steels, die steels and hardened steels – available up to 32mm diameter and 330mm overall length
- Both Phantom and Bulldog are capable of being reground many times with our world-renowned remanufacture service



### High Performance End Mills for optimised machining of high temperature alloys and exotics

- Mirage High Performance Solid Carbide XRed Coated End Mills – a true thoroughbred, giving daily satisfaction to discerning buyers, engineers and programmers around the world
- Infinite Possibilities® can provide you with 4, 5 or 6 flute, stub and long flute with chip-breaker and through-coolant options
- With any combination of edge preparation, radius or reduced neck to allow you to optimise your programming and machining without compromise
- Unrivalled performance on titanium, inconel, duplex or stainless steel
- Suitable for trochoidal milling with full flute engagement as much as 3 x D
- Our chip-breaker versions reduce swarf to small, manageable sizes
- Capable of being reground and recoated a number of times with our remanufacturing service – reducing your tool budget by as much as 40%



## Education & training



# QUEST Quickgrind Educational Support Team

A growing number of universities, colleges and training facilities are benefiting from our Quest Programme including University of Strathclyde's Advanced Forming Research Centre, the Advanced Manufacturing & Automation Centre/Training 2000, University of Cambridge, The University of Edinburgh, Kirklees College, Newcastle University, University of York and more.

When educational facilities engage with us, they receive the full support of the Quest Programme. Quest's Technical Support Engineers educate staff and students alike in how to achieve optimal performance of cutting tools. They visit your machine shop and review, report and implement best practice with regard to improving applications and machining strategies.

To find out more please contact Graeme Hogg | +44 (0) 7788 311258 | [graeme@quickgrind.com](mailto:graeme@quickgrind.com)



## The Technical Centre Everything you need to improve performance



As part of our commitment to client service and support excellence we have opened a state-of-the-art Technical Centre. The new centre offers a comfortable and technologically advanced environment to discuss all of your cutting tool requirements.

Collaborating with our Technical Partners including CAM vendors Open Mind, Tebis and CG Tech Vericut; tool holding and work holding from Schunk, Bilz, Air Turbine Tools and Roemheld; Blaser coolants and others, Quickgrind experts can work with you to conduct trials whilst generating and running tool paths and machining strategies. Our investment in the centre enables us to demonstrate what is possible with our innovative tooling and tool management.

The centre is fully equipped with a seminar theatre and training room that can accommodate 30 attendees, two meeting rooms, workstations and two brand new machining centres. Visitors can take a guided tour of our production facility, undergo technical training and discuss their specific requirements – everything you need to improve your machining performance.



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