

High Performance Solid Carbide Drills

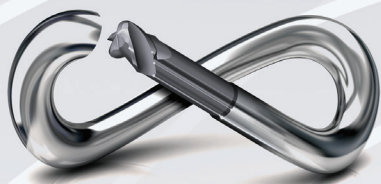
# Precision holemaking

for general use  
and super alloys



INFINITE POSSIBILITIES.®

**QUICKGRIND**®  
carbide tooling



## INFINITE POSSIBILITIES.®

What if you could have the optimum drill, 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 drills we happen to have in stock and want to sell you. Instead, our mission is to provide you with solution-based drills, to give you the right drill, for the right job, at the right price.

Our high performance solid carbide drills can be designed specifically for your application and are available in virtually any size, diameter, flute length, overall length you require, in non-through-coolant and through-coolant; with a wide range of point geometry and flute variations.

End the compromise of standard drills. Contact our team today to discuss your applications, aims and requirements. There are no limits, only Infinite Possibilities.®

Call +44 (0) 1684 294090  
or visit [quickgrind.com](http://quickgrind.com)

## Ordering is as easy as one, two, three

### 1. Choose your shank spec

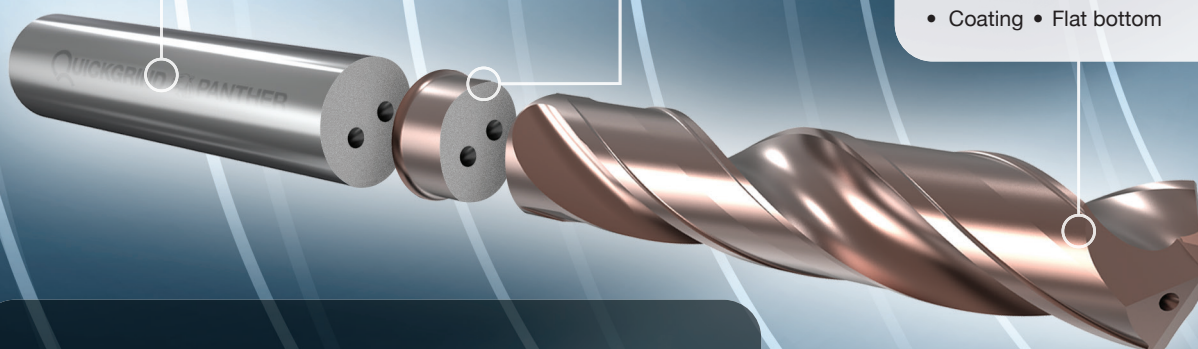
- Length • Diameter • Tolerance
- DIN or other shank standards as required

### 2. Choose your neck spec

- Length • Diameter

### 3. Choose your head spec

- Diameter • Tolerance
- Flute length • Number of flutes • Point geometry
- Corner radius • Chamfer corners • Point angle
- With or without through-coolant
- Coating • Flat bottom



That's it. No catalogues to trawl through, no complicated product codes, no lengthy tables, just tell us what you need for your job and we will make it for you. Even specials can be designed, proved and delivered in days, at a cost you could recoup on your first job. That's Infinite Possibilities.®

**Remember, just ask  
we will make it for you**





Quickgrind's ability to understand our quality standards and manufacturing process enables them to provide drills which achieve repeatable dimensional accuracy in difficult aerospace-grade stainless steels. Their drills are also highly productive compared with off-the-shelf offerings from other suppliers, with tool life increasing by over 75%.

# Any drill for any job

Here at Quickgrind we know that choosing the right drill for the right job isn't always easy. We understand the importance of selecting the tool to match your workpiece material and the specification required, and the effect this has on your bottom line.

You may not realise that Quickgrind makes such a huge variety of high performance drill designs, but we have always produced drills for dedicated applications, just like we do for any other type of tool we make. That is what Infinite Possibilities® is all about.

We can make virtually any type of drill specifically for your job, whether it is a new design or one that is already running with another manufacturer. We will either design a new drill for you to help you achieve your goals, or we will match the drills you use and optimise the design.

So if you are happy with your current drills but want to improve your tool life and your cycle times, we can help. We have the expertise, the highest specification CAD/CAM and machines plus a highly motivated R&D Technical Centre, together with decades of know-how to enable us to be extremely competitive not just in the UK but worldwide.

Wherever possible our drill designs will be suitable for remanufacture. High specification solid carbide drills are expensive and to gain an effective ROI must be used more than once. QuickEdge is our world-beating remanufacturing process that is far more than an average regrind – there are many processes involved to bring a tool back to as good as new. QuickEdge is ideally suited to high-use products where the financial benefits of multi-use tooling will show huge cost downs to your organisation.

Of course, if you want an off-the-shelf tool we can do that too, but in our experience the benefits of dedicated tools, optimised for your applications, provide you with far more stable and consistent production than simply making do with standard tools.

Finally, when it comes to management of your tools, we can provide standard tools or make your own unique tools and store them in your premises with QuickVend, our vending solutions division. Read on to find out more.

Talk to Quickgrind to discover our total engineering solutions, and start your journey to a better and more profitable world of production.



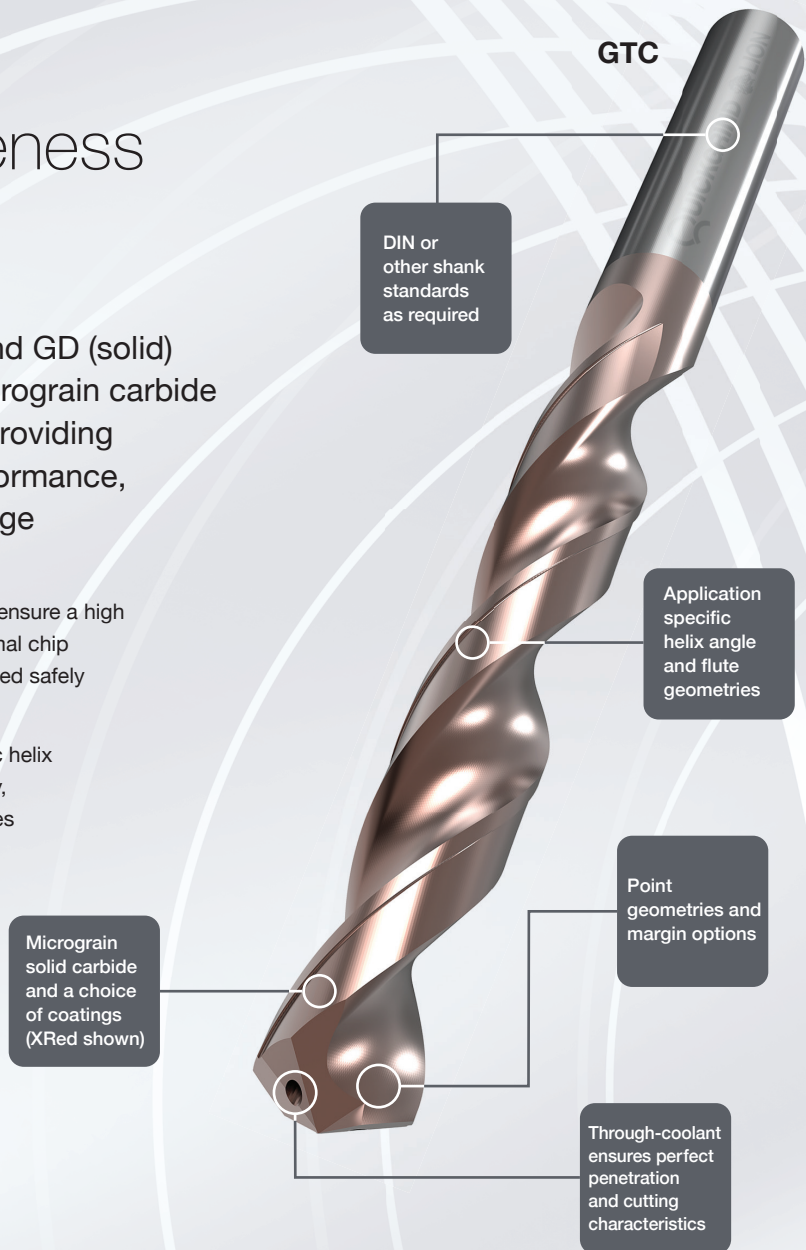
# Versatility and cost-effectiveness

Our Lion GTC (through-coolant) and GD (solid) drills have our unique blend of micrograin carbide substrate and superior coatings, providing a recipe that guarantees high performance, cost-effective drilling in a wide range of materials.

Quickgrind's high quality manufacturing processes ensure a high quality surface finish and excellent coating for optimal chip evacuation. High process temperatures are dissipated safely and effectively.

Lion drills can be designed with application-specific helix angle and flute geometries. The flute form geometry, designed especially for long-chipping steels, ensures optimal chip generation characteristics even at low cutting speeds.

The GTC through-coolant version ensures perfect penetration and cutting characteristics when machining long-chipping steels. Cutting forces and temperatures are considerably reduced.



| Steels P                |                            |                       |                           |                            | Stainless M          |           |           |
|-------------------------|----------------------------|-----------------------|---------------------------|----------------------------|----------------------|-----------|-----------|
| Low carbon<br>1010/1018 | Medium carbon<br>1035/1045 | High carbon<br>1065   | Alloy steels<br>4140/4340 | Die steels<br>400          | 300                  | 400       | 17-4 PH   |
| Irons K                 | Non-ferrous N              |                       | High temp alloys S        |                            | Hardened materials H |           |           |
| Cast iron               | Aluminium<br>6061/7075     | Die-cast<br>aluminium | Inconel                   | Titanium<br>6A14V (30 HRC) | ~35 HRC              | 35-45 HRC | 45-50 HRC |

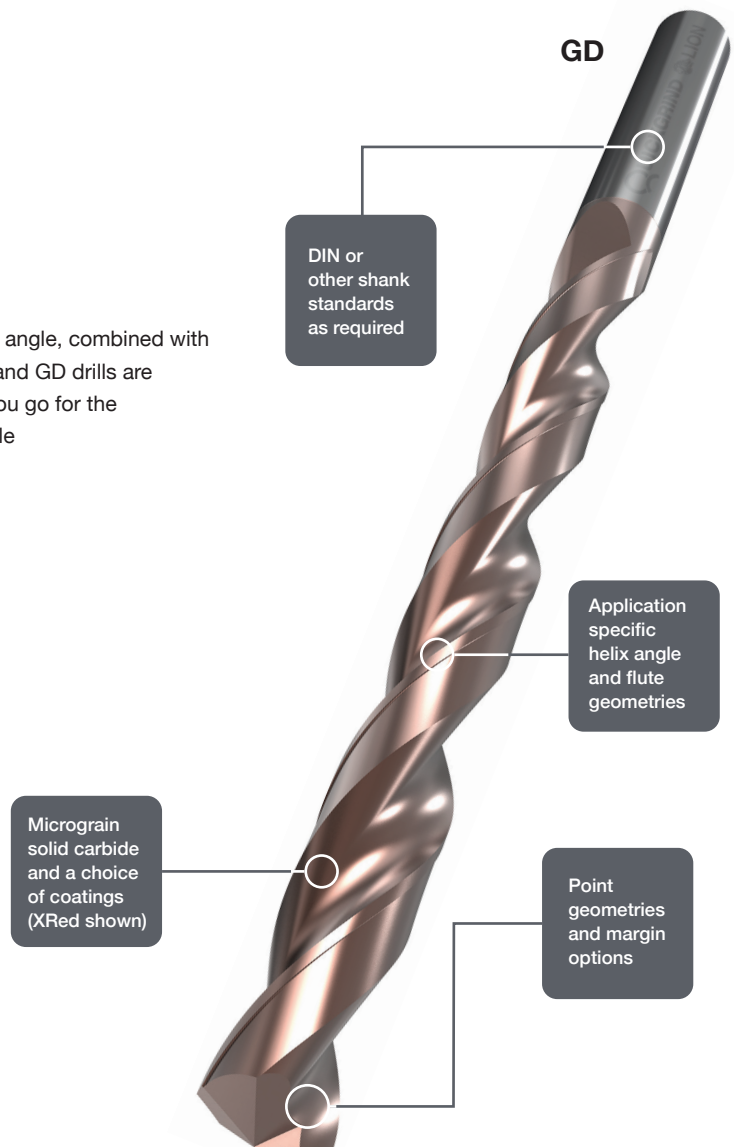
● Primary   ● Secondary   ○ Unsuitable



With their precision-ground point geometry and strong rake angle, combined with high wear and low coefficient of friction coating, Lion GTC and GD drills are versatile and effective in numerous applications. Whether you go for the through-coolant or solid variant, these drills deliver incredible performance at depths of 3xD to 10xD.

The Lion range is available now, with custom-made drills on a short delivery.

Call +44 (0) 1684 294090  
or visit [quickgrind.com](https://www.quickgrind.com)

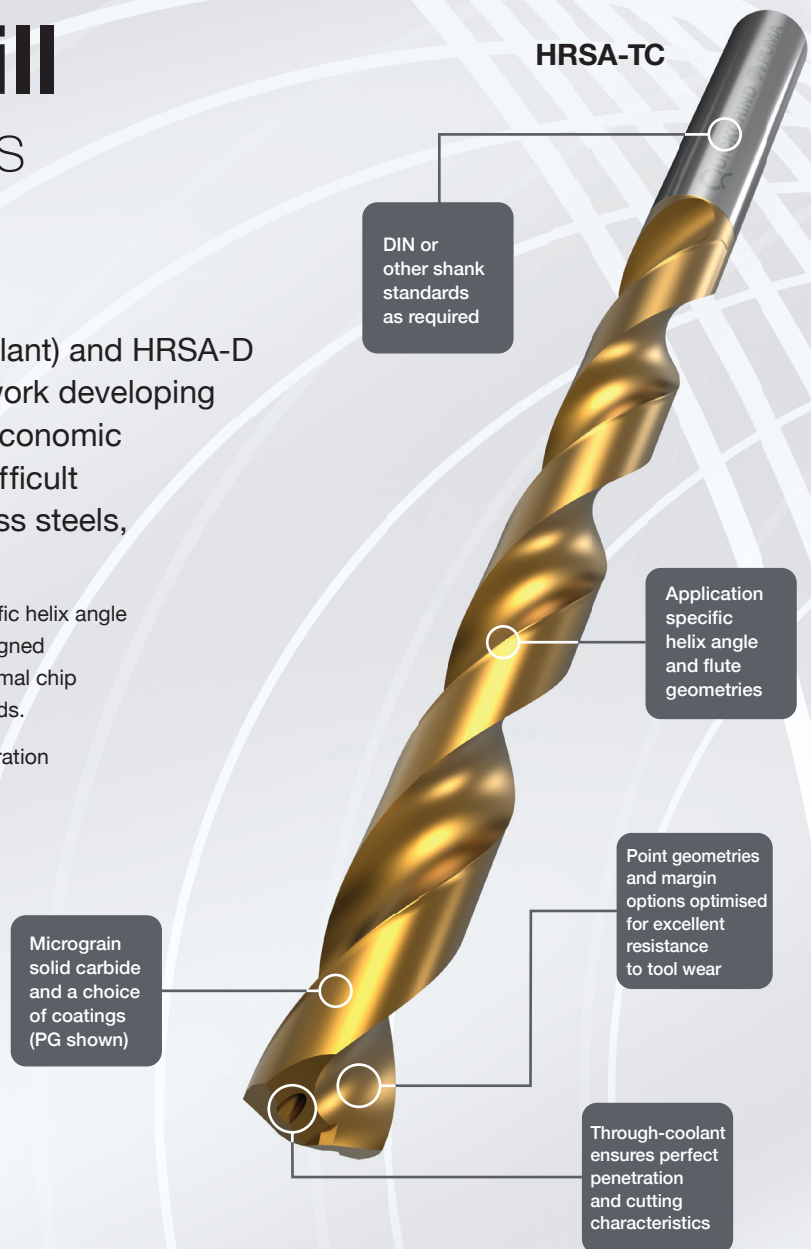


# A tough drill for tough materials

The Puma HRSA-TC (through-coolant) and HRSA-D (solid) are the result of extensive work developing the ultimate carbide drills for the economic and secure drilling of tough and difficult materials such as titanium, stainless steels, Nimonic® and other super alloys.

Puma drills can be designed with application-specific helix angle and flute geometries. The flute form geometry, designed especially for long-chipping materials, ensures optimal chip generation characteristics even at low cutting speeds.

The through-coolant version ensures perfect penetration and cutting characteristics when machining long-chipping materials. Cutting forces and temperatures are considerably reduced.



| Steels P             |                         |                    |                        |                         | Stainless M          |           |           |
|----------------------|-------------------------|--------------------|------------------------|-------------------------|----------------------|-----------|-----------|
| Low carbon 1010/1018 | Medium carbon 1035/1045 | High carbon 1065   | Alloy steels 4140/4340 | Die steels 400          | 300                  | 400       | 17-4 PH   |
| Irons K              | Non-ferrous N           |                    | High temp alloys S     |                         | Hardened materials H |           |           |
| Cast iron            | Aluminium 6061/7075     | Die-cast aluminium | Inconel                | Titanium 6A14V (30 HRC) | ~35 HRC              | 35-45 HRC | 45-50 HRC |

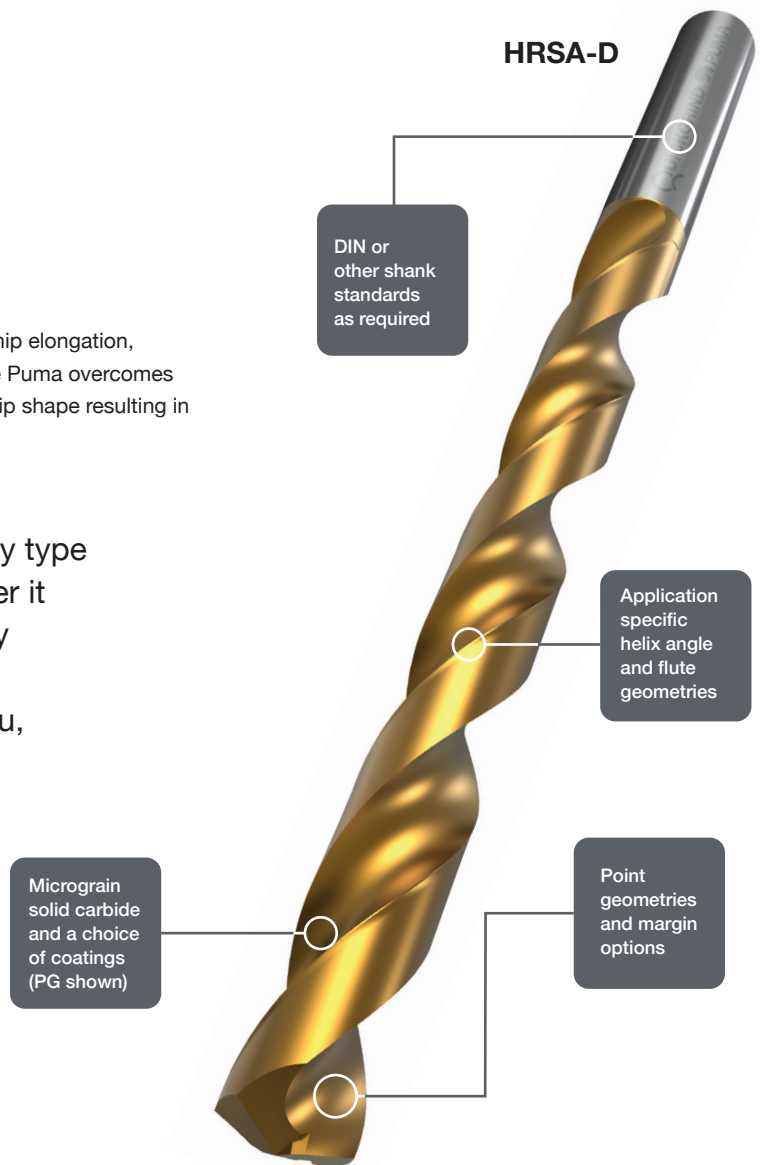
● Primary   ● Secondary   ○ Unsuitable



These types of materials can result in work-hardening, chip elongation, low thermal conductivity and welding on the tool, but the Puma overcomes these problems. Clever flute design produces optimal chip shape resulting in smooth chip evacuation.

Don't forget, we can make virtually any type of drill specifically for your job, whether it is a new design or one you are already running from another manufacturer. We will either design a new drill for you, or we will match the drills you use and optimise the design. That's Infinite Possibilities.®

Call +44 (0) 1684 294090  
to find out more.

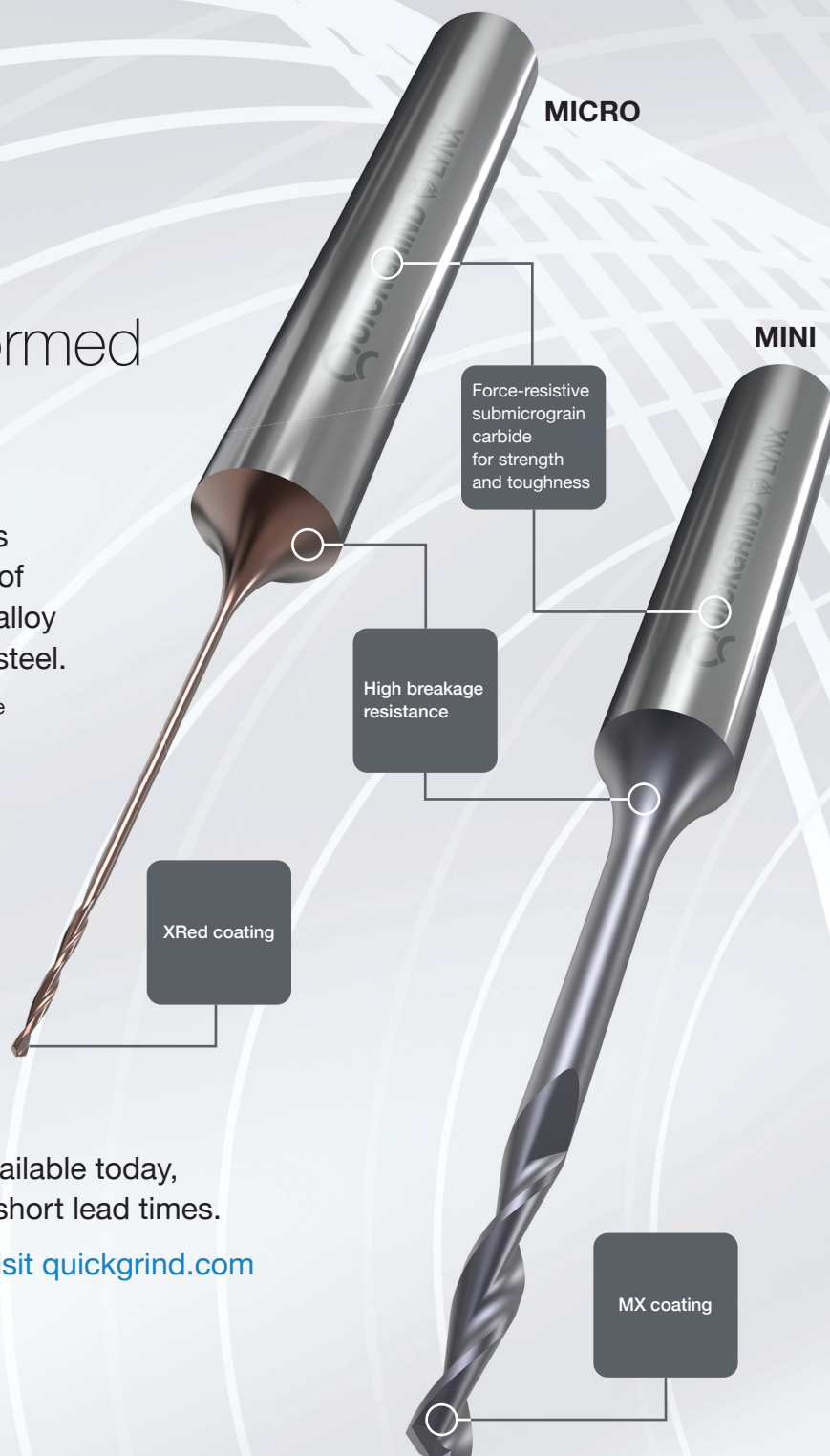


# Small but perfectly formed

Our Lynx Micro and Mini drills are suitable for a wide range of applications in carbon steel, alloy steel, die steel and stainless steel.

PVD coatings, specially formulated for these small diameter drills, result in high durability and long life.

Lynx's recipe of rigid design and strong, tough carbide substrate results in high levels of breakage resistance.



Lynx Micros and Minis are available today, with tailor-made specials on short lead times.

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| Steels P                |                            |                       |                           |                            | Stainless M          |           |           |
|-------------------------|----------------------------|-----------------------|---------------------------|----------------------------|----------------------|-----------|-----------|
| Low carbon<br>1010/1018 | Medium carbon<br>1035/1045 | High carbon<br>1065   | Alloy steels<br>4140/4340 | Die steels<br>400          | 300                  | 400       | 17-4 PH   |
| Irons K                 | Non-ferrous N              |                       | High temp alloys S        |                            | Hardened materials H |           |           |
| Cast iron               | Aluminium<br>6061/7075     | Die-cast<br>aluminium | Inconel                   | Titanium<br>6A14V (30 HRC) | ~35 HRC              | 35-45 HRC | 45-50 HRC |

● Primary   ● Secondary   ○ Unsuitable



# Process-reliable deep hole drilling

The Leopard DHD rises to the challenge of deep hole drilling with reliable efficiency, up to 50xD.

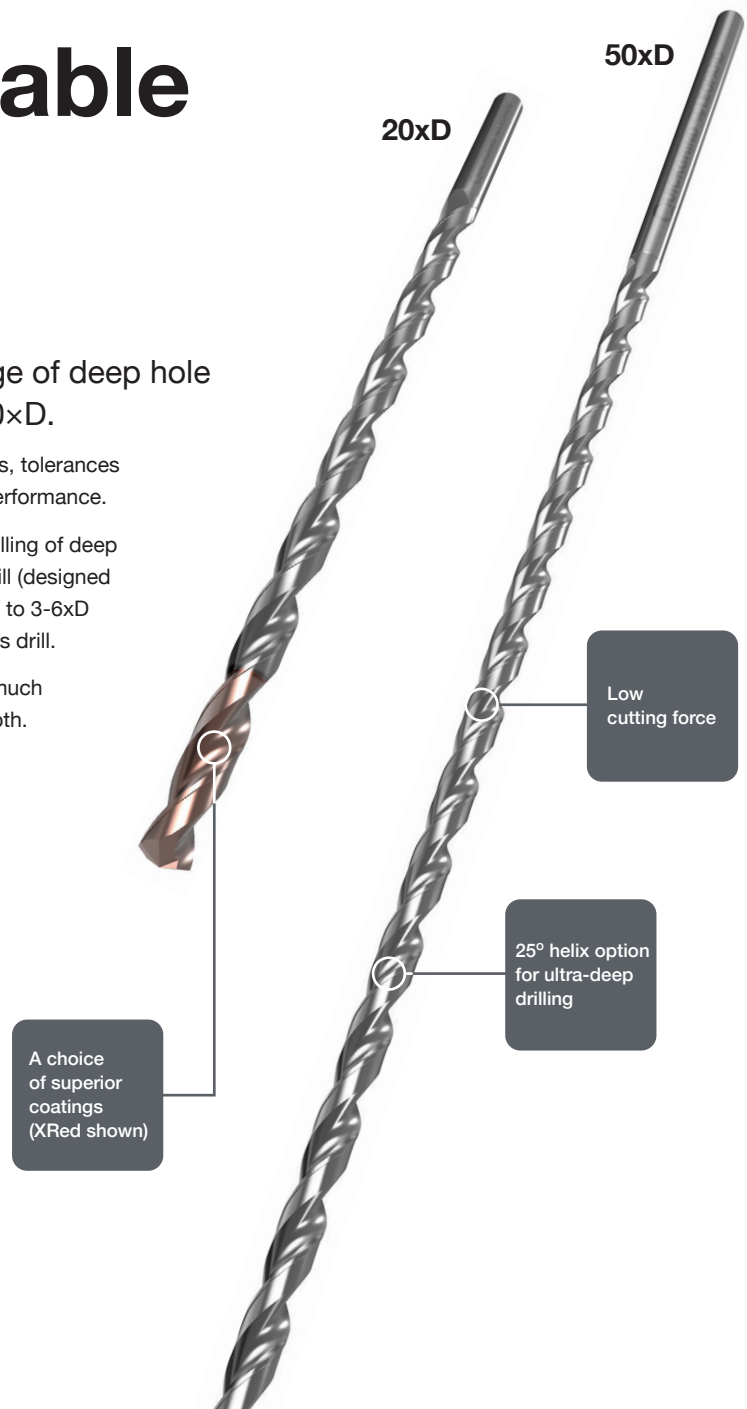
Each tool is produced with perfect symmetry – geometries, tolerances and point angles are all optimised for the best possible performance.

Correct procedures need to be adopted for successful drilling of deep holes  $\geq 20xD$  and above. Always use a Quickgrind pilot drill (designed +0.02-0.05mm larger than the long drill diameter) and drill to 3-6xD (depending on drill depth) in preparation for the long series drill.

The follow-on drill should enter without coolant and at a much reduced speed and feed, stopping short of the drilled depth. Run at selected higher speed and with coolant before proceeding.

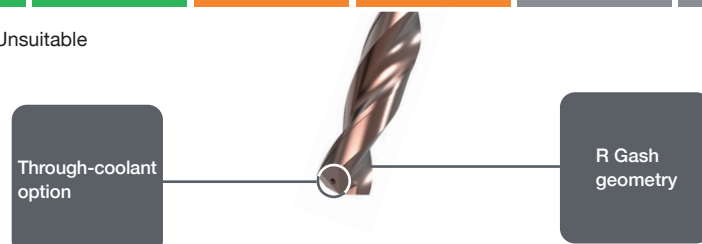
Pecking is recommended on some applications and full retraction of the drill on horizontal operations must be considered. Once full depth is achieved reduce speed and feed on retraction.

As with all drilling applications there are many variables which is why we recommend discussing with our technical team who will help with drill selection and design.



| Steels P             |                         |                    |                        |                         | Stainless M          |           |           |
|----------------------|-------------------------|--------------------|------------------------|-------------------------|----------------------|-----------|-----------|
| Low carbon 1010/1018 | Medium carbon 1035/1045 | High carbon 1065   | Alloy steels 4140/4340 | Die steels 400          | 300                  | 400       | 17-4 PH   |
| Irons K              | Non-ferrous N           |                    | High temp alloys S     |                         | Hardened materials H |           |           |
| Cast iron            | Aluminium 6061/7075     | Die-cast aluminium | Inconel                | Titanium 6A14V (30 HRC) | ~35 HRC              | 35-45 HRC | 45-50 HRC |

● Primary ● Secondary ○ Unsuitable



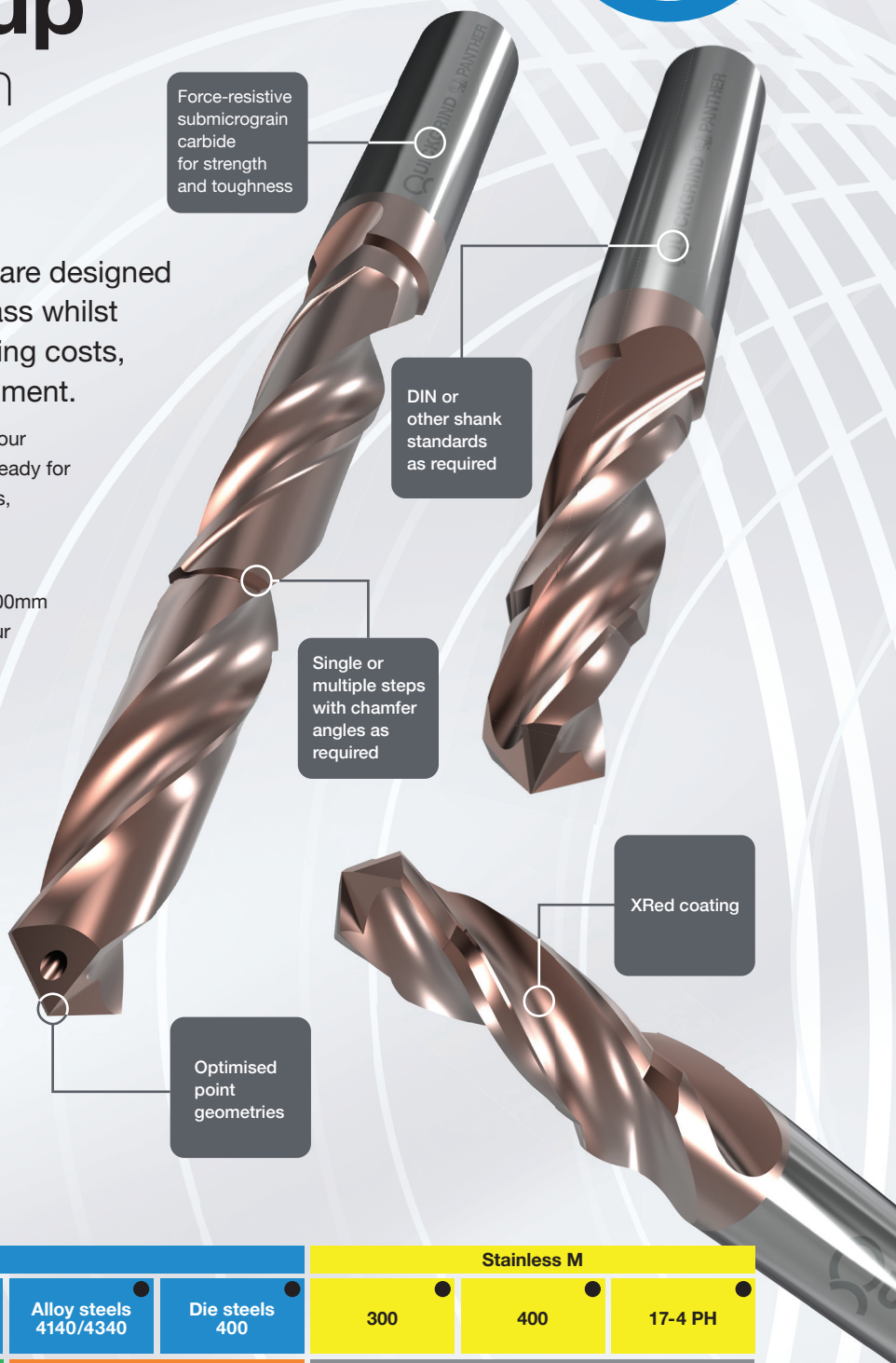
# Accuracy up cycle times down

Our Panther multi-diameter drills are designed to create multiple bores in one pass whilst reducing cycle times and machining costs, all with highly accurate bore alignment.

These application-specific drills are designed to your requirements and are used for pre-drilling bores, ready for follow-on tools such as machine taps and reamers, for example prior to threading in hydraulic ports, whether two, three or more diameters.

Available in various diameters from 3.00mm to 20.00mm and with flute and overall combinations to suit your feature, such as top chamfer, front counter-bore, single or multiple steps, with a taper, shoulder or radius.

Panther drills are suitable for machining a wide variety of materials including cast iron, steel, stainless steel, aluminium and plastics. We design the tools with relevant geometries, with or without coatings, to suit your specifications.



| Steels P             |                         |                    |                        |                         | Stainless M          |           |           |
|----------------------|-------------------------|--------------------|------------------------|-------------------------|----------------------|-----------|-----------|
| Low carbon 1010/1018 | Medium carbon 1035/1045 | High carbon 1065   | Alloy steels 4140/4340 | Die steels 400          | 300                  | 400       | 17-4 PH   |
| Irons K              | Non-ferrous N           |                    | High temp alloys S     |                         | Hardened materials H |           |           |
| Cast iron            | Aluminium 6061/7075     | Die-cast aluminium | Inconel                | Titanium 6A14V (30 HRC) | ~35 HRC              | 35-45 HRC | 45-50 HRC |

● Primary    ◐ Secondary    ○ Unsuitable





High Performance Solid Carbide Drills

# More throughput

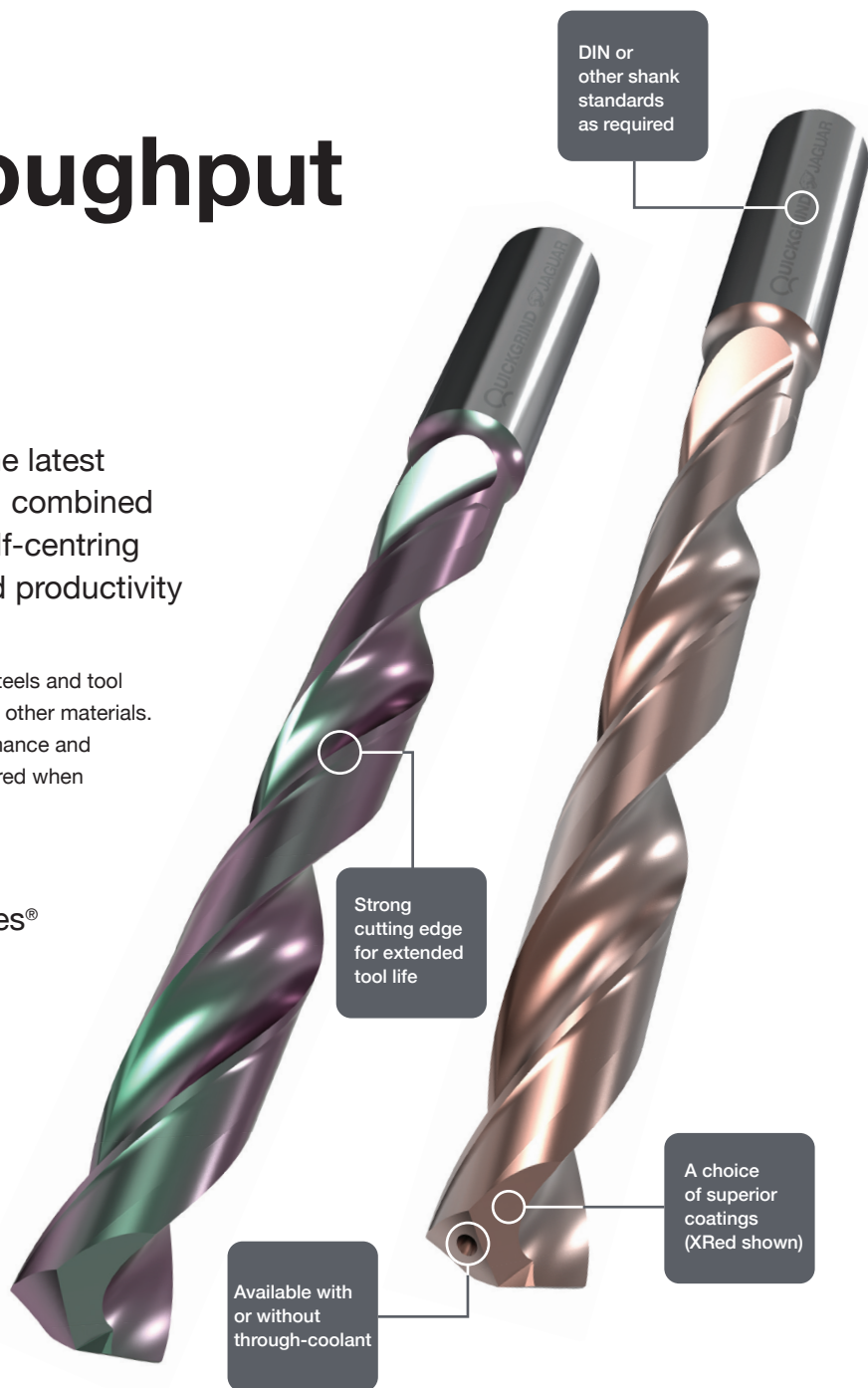
## lower costs

Jaguar drills are made with the latest submicrograin carbide which, combined with a special coating and self-centring geometry, results in increased productivity and a reduced cost per hole.

The Jaguar is primarily designed for use in steels and tool steels but is versatile enough to work well in other materials. Various coatings are available to aid performance and lengthen tool life. Centre-drilling is not required when boring high quality holes.

Remember, Infinite Possibilities® means we can tailor-make any drill for your application. We will even match, and of course optimise, a drill from another manufacturer.

Call +44 (0) 1684 294090  
for more information.



| Steels P                |                            |                     |                           |                            | Stainless M          |           |           |
|-------------------------|----------------------------|---------------------|---------------------------|----------------------------|----------------------|-----------|-----------|
| Low carbon<br>1010/1018 | Medium carbon<br>1035/1045 | High carbon<br>1065 | Alloy steels<br>4140/4340 | Die steels<br>400          | 300                  | 400       | 17-4 PH   |
| Irons K                 | Non-ferrous N              |                     | High temp alloys S        |                            | Hardened materials H |           |           |
| Cast iron               | Aluminium<br>6061/7075     | Die-cast aluminium  | Inconel                   | Titanium<br>6A14V (30 HRC) | ~35 HRC              | 35-45 HRC | 45-50 HRC |

● Primary   ● Secondary   ○ Unsuitable



**COUGAR TF**

High Performance Solid Carbide Drills

# High feed accurate holes

Cougar TF (three flute) drills are used on difficult steels, alloyed steel and non-ferrous materials and are designed for core drilling and opening out existing bores.

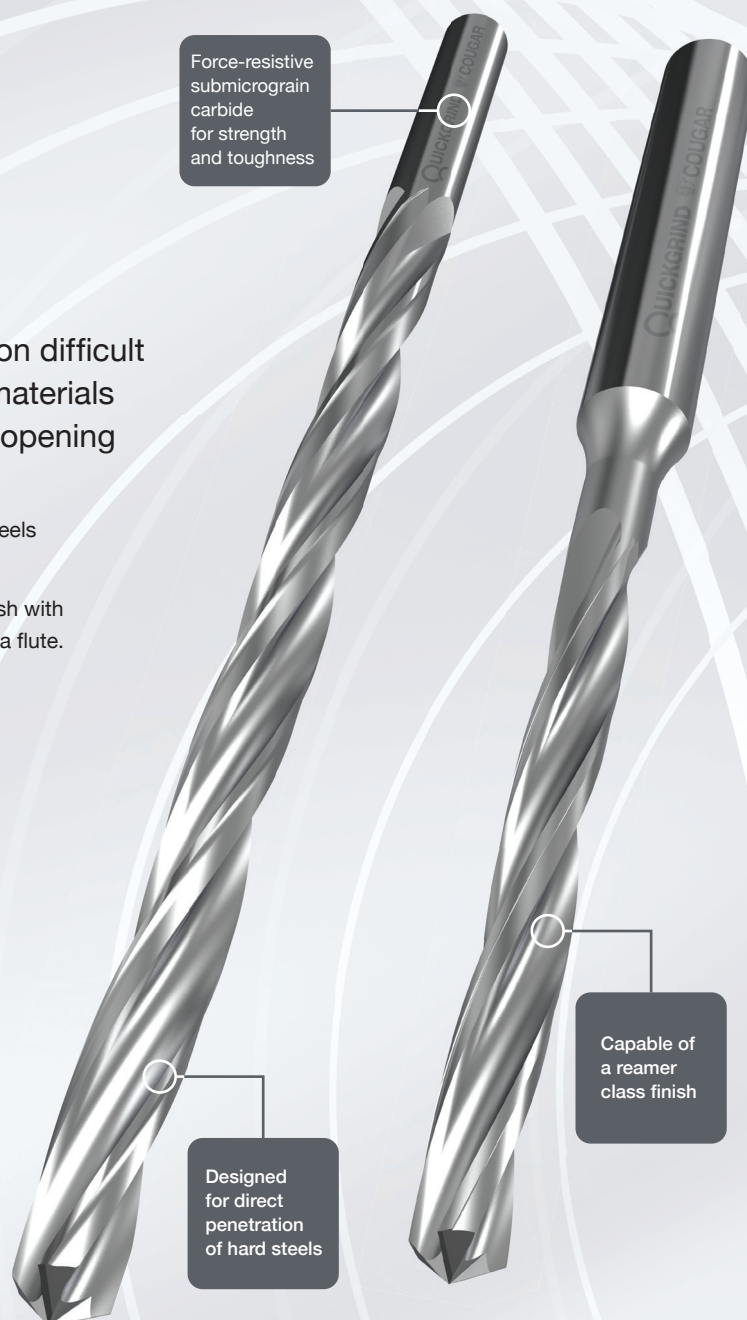
The three flutes allow direct penetration of hard, tough steels and other materials without the need of pre-centring.

Cougar drills are capable of achieving a reamer class finish with added support during the cutting process due to the extra flute.

With three flute drills, under the right circumstances, it is possible to achieve up to 50% higher feed rate per revolution.

The Cougar TF is available now, with bespoke drills on a quick turnaround.

Call +44 (0) 1684 294090  
or visit [quickgrind.com](http://quickgrind.com)



| Steels P                |                            |                       |                           |                            | Stainless M          |           |           |
|-------------------------|----------------------------|-----------------------|---------------------------|----------------------------|----------------------|-----------|-----------|
| Low carbon<br>1010/1018 | Medium carbon<br>1035/1045 | High carbon<br>1065   | Alloy steels<br>4140/4340 | Die steels<br>400          | 300                  | 400       | 17-4 PH   |
| Irons K                 | Non-ferrous N              |                       | High temp alloys S        |                            | Hardened materials H |           |           |
| Cast iron               | Aluminium<br>6061/7075     | Die-cast<br>aluminium | Inconel                   | Titanium<br>6A14V (30 HRC) | ~35 HRC              | 35-45 HRC | 45-50 HRC |

● Primary ○ Secondary ○ Unsuitable



# Straight to the point

The Tiger ATC (through-coolant) and AD (solid) straight flute drills are designed for highly productive holemaking in aluminium and cast iron automotive and aerospace components.

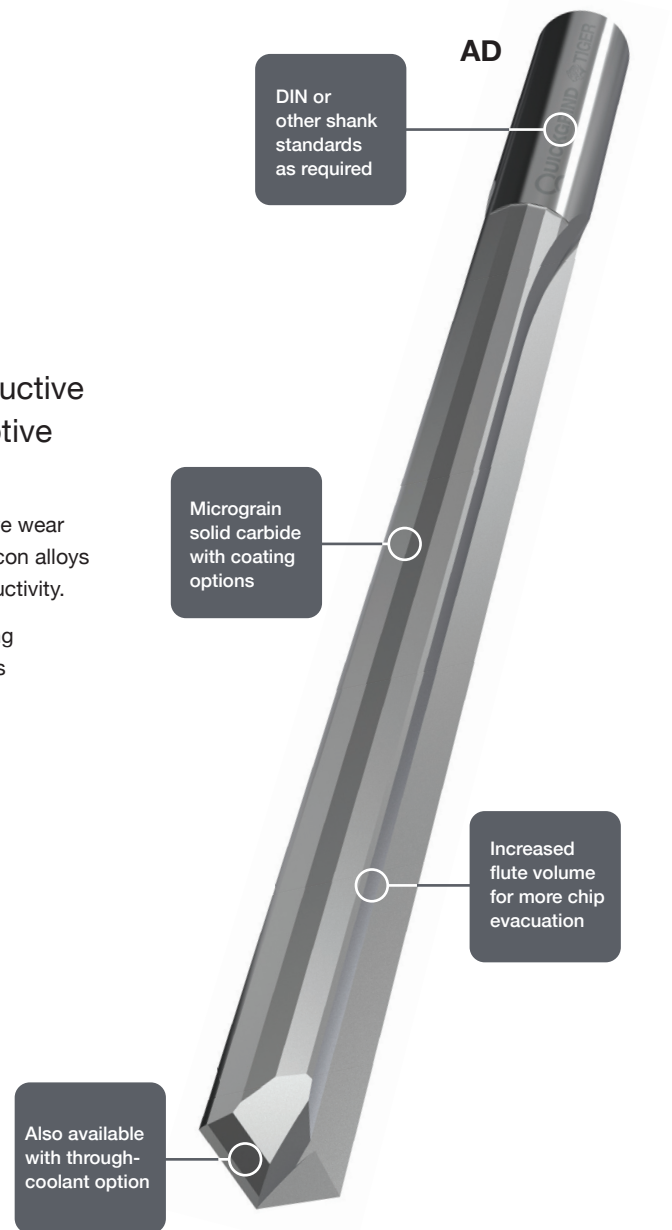
Their dedicated substrate and optional coatings withstand the abrasive wear resulting from high speeds and temperatures, typical in aluminium silicon alloys and cast iron machining. This helps extend tool life and improve productivity.

Typical applications are cylinder blocks, cylinder heads, cases, steering knuckles and brake cylinders in aluminium silicon alloys and all grades of cast iron including GCI, CGI and nodular.

These drills are also ideal for pre-tapping hole sizes, chamfer holes, radii and multi-step forms.

Tiger drills support complex, multi-step applications and are custom made to suit your precise component requirements. Features include step angles with chamfer and radii, point angle and up to 8xD capability. All of this adds up to high productivity and long tool life, providing you with a low cost per hole.

And like all our drills, Tiger ATC & AD are designed for multiple remanufactures, guaranteeing you new tool performance again and again.



| Steels P               |                           |                      |                          |                           | Stainless M          |             |             |
|------------------------|---------------------------|----------------------|--------------------------|---------------------------|----------------------|-------------|-------------|
| Low carbon 1010/1018 ○ | Medium carbon 1035/1045 ○ | High carbon 1065 ○   | Alloy steels 4140/4340 ○ | Die steels 400 ○          | 300 ○                | 400 ○       | 17-4 PH ○   |
| Irons K                | Non-ferrous N             |                      | High temp alloys S       |                           | Hardened materials H |             |             |
| Cast iron ●            | Aluminium 6061/7075 ●     | Die-cast aluminium ● | Inconel ○                | Titanium 6A14V (30 HRC) ○ | ~35 HRC ○            | 35-45 HRC ○ | 45-50 HRC ○ |

● Primary   ● Secondary   ○ Unsuitable

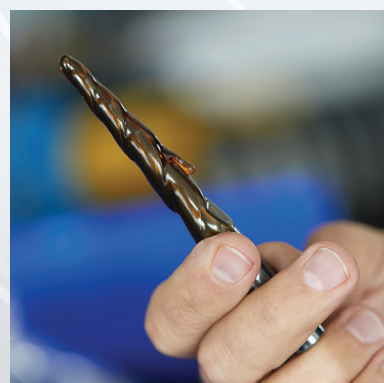
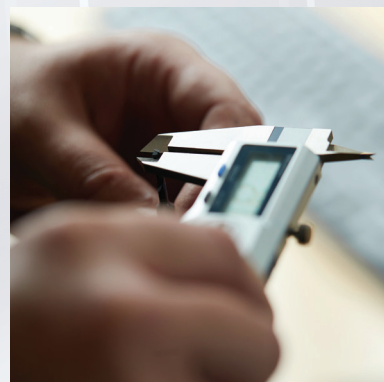
# Adding value to your tooling investment

Our solid carbide drills are suitable for remanufacture. Our unique QuickEdge process can give you up to nine times extra usage out of your tooling, and with material (and environmental) costs increasing, the benefits of remanufacture are clear.

- Drills controlled by size, number of reissues and remanufactures
- Extremely attractive price and performance over the life of the drill
- Reduces the need for virgin raw material, a limited resource

Remanufacture doesn't mean compromising on quality. It has always been our policy to produce drills of such high quality that they can be used more than once. Which means that even after up to nine remanufactures you will continue to enjoy new drill performance, and a clear conscience.

Ask  
about our  
introductory  
offer today





# 24/7 control

## of your drills inventory

Is your drills inventory reduced to a minimum? Is it secure?  
Are your re-stocking orders generated automatically and on time?  
Do you want to reduce your drill purchase administration costs?

Quickgrind's robust, proven drill vending solutions are the answer to all these issues and more. Once we have audited your drill requirements and consumption levels, we will supply you with a fully stocked machine (our machines can hold from 300 to 1,680+ individual drills). Usage and stock levels are then automatically monitored and replacement drills sent before your stock runs out.

And because your inventory and usage levels are pre-determined, you regain complete control of your purchase administration time and costs, to as little as one purchase order and one invoice per month.

Save time and money. Take control of your drills with a vending solution from Quickgrind.



### Benefits

- 24/7 secure access
- Allows minimum stock holding
- Automatic re-ordering
- User-friendly operation
- Tailor access to specific users and times
- Easy access to stock information and statistics
- Audit your drills stock at the push of a button
- Suitable for new and remanufactured drills
- Stocks a wide range of drill types and sizes, and for high or low stock turnover
- Reduces purchase administration costs

# Improving your machining performance

Quickgrind's state-of-the-art Technical Centre offers a comfortable and technologically advanced environment to discuss all of your cutting tool requirements, challenges and ambitions.

Our experts will 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 ground-breaking tooling and tool management solutions.

The centre is fully equipped with a seminar theatre and training room, meeting rooms and machining centres. Visitors can take a guided tour of our production facility, undergo technical training and discuss their specific requirements.



Call us  
today to  
arrange  
your visit

