



A Division of Cutting Tools





The company was founded in 2006 under the name of Arrow Tools & In 2018, The company was converted into private limited firm, name as ARROW TOOLS PVT LTD at Aurangabad (MH), India. Whether your business ranges from Automotive, Aerospace Industries, Mould and Die, Defense sector, Medical sector, Small Part Machining, Agriculture Sector or as long as quality cutting tools are required, we are ready to serve you.

With the realization that modern production lines need more than quality tools with reasonable prices, we assure you with our technical support and reliable standardized management system (We are certified by for ISO9001:2015). We guarantee that all services and products provided are always sold as advertised.

The industry specific machining solutions are provided for:

- Automotive engine, transmission & component machining
- Solutions for Power Industry -Energy components like Blade, Nozzle, Casing and Rotor
- Aerospace frames and Engine parts machining solutions
- Die and Mould Machining
- Medical & Exotic material parts machining tools
- Jewelry & Ornament industry

Cutting tools are available for various applications like:

- Turning
- Grooving
- Milling
- Drilling
- Reaming
- Tool Holders & Cutters

OUR VALUE ADDED SERVICES

- Wide area infrastructure segregated into production unit, In-house Unit, Design unit, Quality control Unit and R & D Unit.
- End to end tooling-up support from drawing to component machining.
- Optimization of the cutting tools for efficient production.
- Tool reconditioning
- Providing high quality products to our valuable clients.

OUR PRODUCTS:

We ARROW TOOLS, having range of products in :

- PCD
- CBN
- Solid carbide
- C T Brazed Tools
- HSS
- Tool Holder & Cutter

OUR SERVICES:

- Re Lapping
- Re Tipping
- Re Grinding

WE SUPPORT CUSTOMERS TO GIVE CUTTING TOOL SOLUTIONS FOR MACHINING HARD METALS.

PCD (Poly-Crystalline Diamond):

Tools with Poly-Crystalline Diamond (PCD) cutting material can reduce your tooling cost. PCD is the hardest natural mineral, known for its superb hardness and high wear resistance.

We manufacture PCD Tools with advanced processing machine and control the product quality from the very beginning, which leads to PCD tools with high accuracy and good quality with consistency.

PCD tools are ideal for the use with Non-Ferrous metal Such as:

- Copper, brass and bronze alloys
- Carbon Fiber
- Plastics
- Graphite composites
- Wood
- Zinc and magnesium alloys
- Epoxy resins
- Fiberglass composites
- Aluminum and aluminum alloys



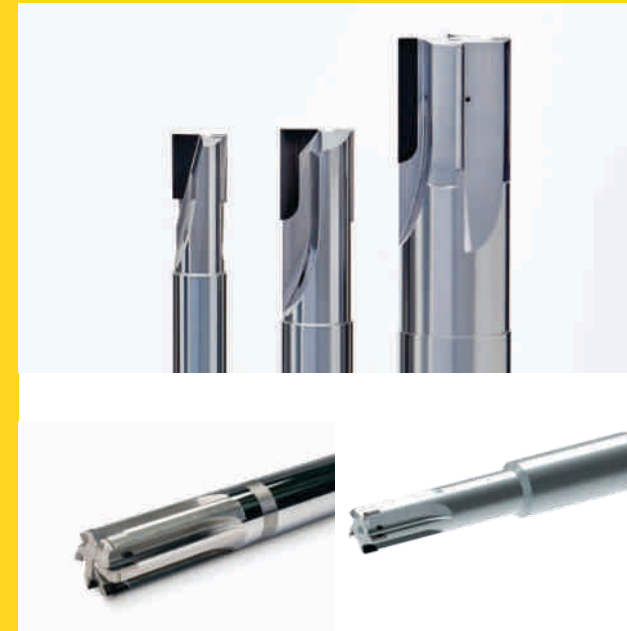
PCD INSERTS:



FORMING PRODUCTS



PCD External Turning tools



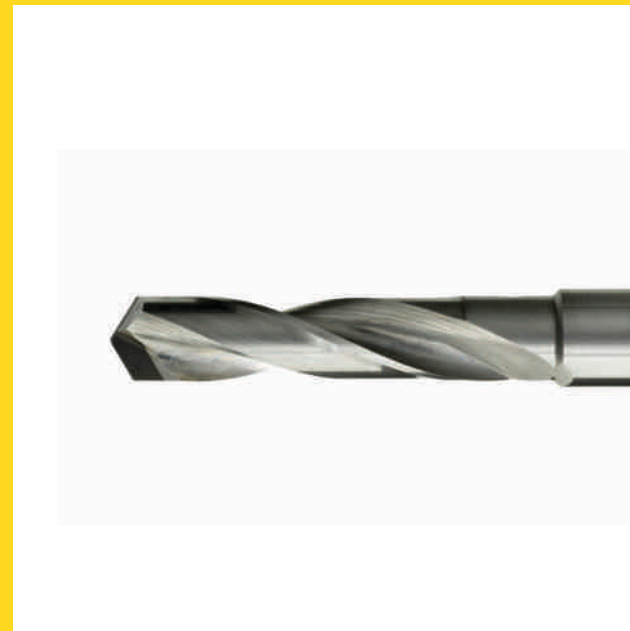
PCD REAMERS:

Having standardized the PCD reamer range, ARROW TOOLS is able to supply users with high-performance tools in a very short space of time. All brazed blanks are kept in stock and are finish-ground to the hole dimensions, tolerances and first-cut geometries defined by the user in their order.

PCD DRILLS:

PCD drills from ARROW TOOLS, increase part quality with over all consistency, improved surface finish and less tool changes, resulting in an extended tool life.

PCD has good fracture toughness and good thermal stability and is used in making geological drill bits. PCD has the advantages of diamond's high wear resistance with carbide's good toughness.



FLYWHEEL DIAMOND TOOL



GROOVING PRODUCT

DIAMOND CUTTING TOOLS :

Mono Diamond:

POSALUX TOOLS : FOR JEWELLERY PRODUCT
(NATURAL DIAMOND AND SYNTHETIC DIAMOND)

PCD ENDMILL:

The PCD end mill is the most productive tool on the market today. It stays in optimal conditions for long tool life. It can be used for cutting non-ferrous metals and non-metallic materials such as,

Carbon Fiber Reinforced Plastic (CFRP),
Glass Fiber Reinforced Plastic (GFRP),
Copper, Brass or Graphite.



COUNTERSINK CUTTERS / CUTTERS FOR CFRP:

For the aerospace industry Arrow Tools Pvt. Ltd. offers a range of cutting edge products such as milling cutters on the countersink and finish operations.

These tools stand out for their optimal cutting yield in addition by using them you prevent product edge delamination and achieve shorter machining time and longer tool life without costly rework.

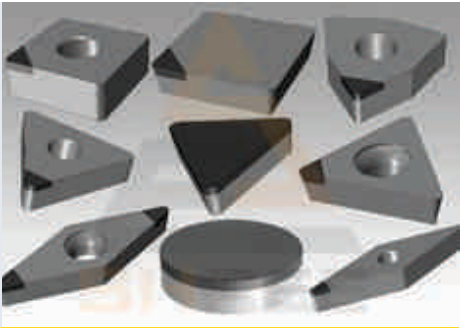
Arrow tools Pvt. Ltd. manufactures PCD countersink for composite material and carbon fiber reinforcement plastic (CFRP). High quality PCD provides a superior surface finishing of composite materials requiring minimal effort from the operator. The superiors PCD characteristics ensure the extended tool life of these cutters.



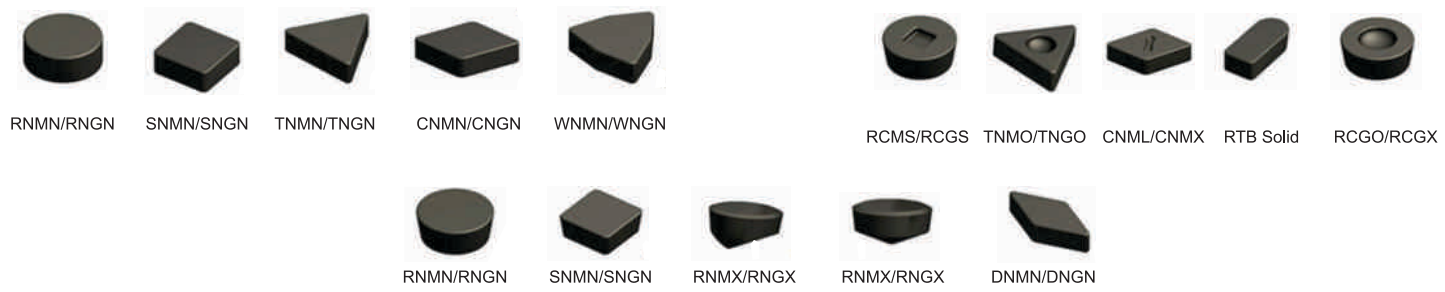
CBN INSERT: -
The major application of CBN inserts is high-speed machining of hardened steel, CBN is an artificially synthesized material exceeded in hardness only by diamond, while still offering superior wear resistance to Carbide in certain applications, ARROW TOOLS Pvt. Ltd. offers over all grades of CBN, allowing us to find the perfect choice based on your application.



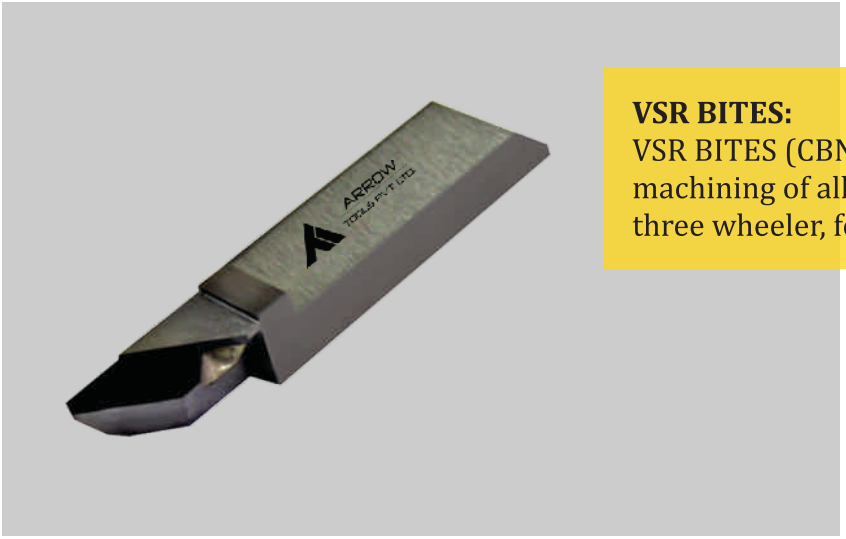
CBN (Cubic Boron Nitride):
CBN with full name of Cubic Boron Nitride. Our CBN inserts include Solid CBN insert, Tipped PCBN insert for rough and finish turning and milling use, from continuous to heavy interrupted turning and cutting, many sizes of CBN inserts available. Our CBN Inserts are mainly used for turning, cutting and milling High Nickel and Chrome Cast Iron work piece, automotive brake disc, brake drum, cast iron wheel hub, cast iron roll, roller and pump etc.



CBN Inserts: -
Tipped (Welded) CBN inserts for finish Turing and Cutting.

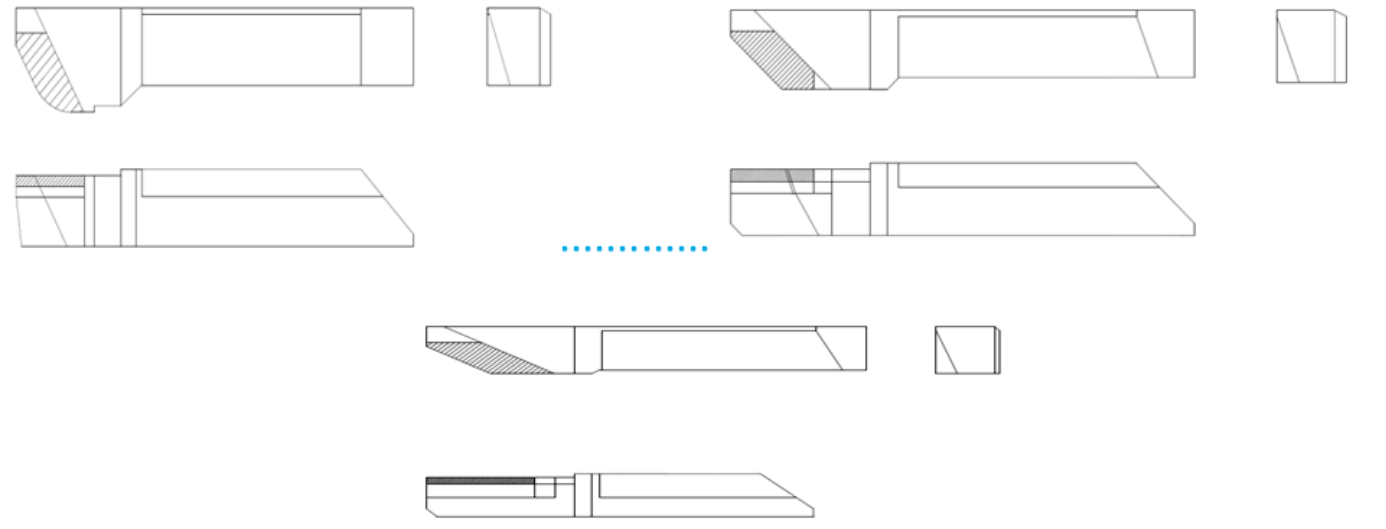


CBN REAMERS:
CBN reamers are successfully used in many automobile and engineering industries for the machining of aluminum and other non-ferrous metals. CBN reamers are manufacture in according to customer requirement with two or four flutes to suit the bore dimensions, tolerances and cutting geometries of the specific application.



VSR BITES:
VSR BITES (CBN) is especially developed to suit the machining of all Automobiles (including two wheeler, three wheeler, four wheeler etc.) .

Cylinder block where Valve seat functioning is performed. Our Valve Seat Chamfering Bite is made of a very special grade of CBN which has outperformed our competitors on many customers.



Solid Carbide Tools Pictures:
Our knowledge of various carbide step tools allows us to manufacture solid carbide step drills and high speed steel drill that are right for the job. We are the area's foremost leader in creating specialized solid carbide & HSS step drills for all types of applications. Whether the customer supplies us with a CAD drawing or hand sketch, we will help manufacture what they need with the utmost accuracy. Let Arrow Tools create the perfect through coolant or solid carbide tool that you need to get the job done right.



Drill: Solid carbide drills are a great option for excellent process security, manufacturing economy and good hole quality. They provide the best combination of penetration rate and precision, with tolerances capable of achievements. Recondition your solid carbide drills for even greater cost efficiency.

Drill l: A drill is an end-cutting tool for producing holes. It has one or more cutting edges, and flutes to allow fluids to enter and chips to be ejected. The drill is composed of a shank, body and point.

Body: The body of the drill extends from the shank to the point, and contains the flutes. During sharpening, it is the body of the drill that is partially ground away.

Neck: Some drills are made with a relieved portion between the body and the shank. This is called the drill neck. In addition to these terms that define the various parts of the drill, there are a number of terms that apply to the dimensions of the drill, including the important drill angles.

Length: Along with its outside diameter, the axial length of a drill is listed when the drill size is given. In addition, shank length, flute length and neck length are often used.

Point angle: The included angle between the drill lips is called the point angle. It is varied for different work piece materials.

Flutes: Flutes are grooves that are cut or formed in the body of the drill to allow fluids to reach the point and chips to reach the work piece surface. Although straight flutes are used in some cases, they are normally helical.

Three and four-fluted drills: There are drills with three or four flutes that resemble standard twist drills except that they have no chisel edge. They are used for enlarging holes that have been previously drilled or punched. These drills are used because they give better productivity, accuracy and surface finish than a standard drill would provide on the same job.

Helix angle: The angle that the leading edge of the land makes with the drill axis is called the helix angle. Drills with various helix angles are available for different operational requirements.

High helix drills: This drill has a high helix angle, which improves cutting efficiency but weakens the drill body. It is used for cutting softer metals and other low strength materials.

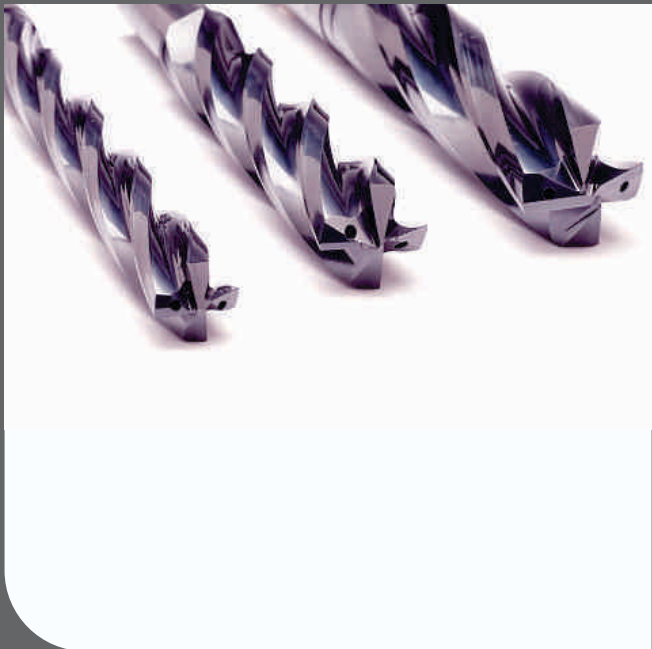


Step drill: The step drill bit drills holes by rotating in a clockwise direction, through metal sheets of up to a quarter inch thick. Each step in the drill enlarges the original hole. The smallest bits are self-starting in that they need no pilot drill to start off the hole.

Multiple flutes, allows for an even better part finish in harder materials.



End Mill: End mills are those tools which have cutting teeth at one end, as well as on the sides. The words end mill are generally used to refer to flat bottomed cutters, but also include rounded cutters (referred to as ball nosed) and radiused cutters (referred to as bull nose, or torus). They are usually made from high speed steel or cemented carbide, and have one or more flutes. They are the most common tool used in a vertical mill.



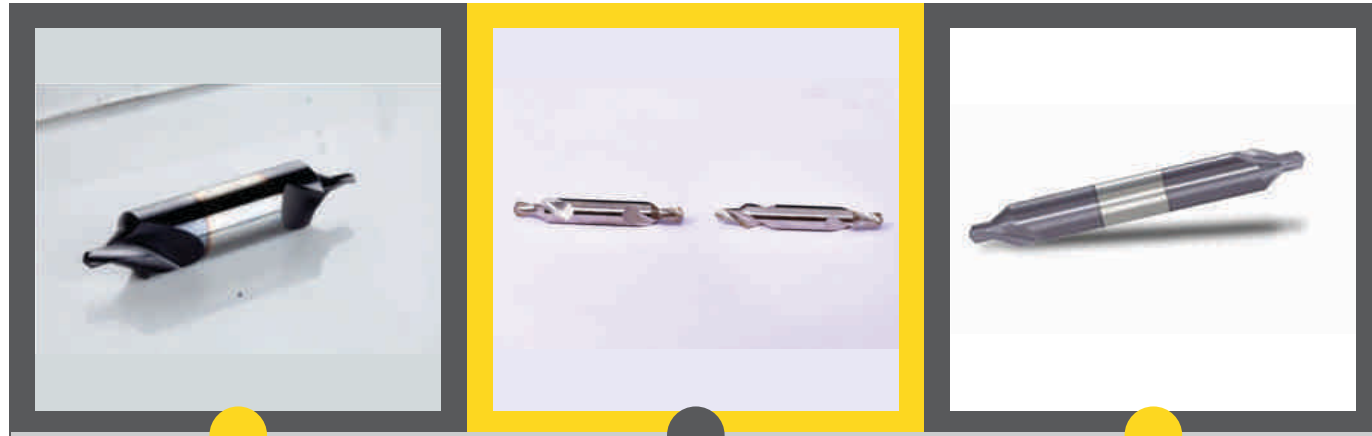
Ball Nose Cutter: Ball nose cutters or ball end mills are similar to slot drills, but the end of the cutters is hemispherical. They are ideal for machining 3-dimensional contoured shapes in machining centers, for example in moulds and dies. They are sometimes called ball mills in shop-floor slang, despite the fact that term also has another meaning. They are also used to add a radius between perpendicular faces to reduce stress concentrations.

There is also a term bull nose cutter, which refers to a cutter having a corner radius that is fairly large, although less than the spherical radius (half the cutter diameter) of a ball mill. For example, a 20-mm diameter cutter with a 2-mm radius corner. This usage is analogous to the term bull nose center referring to lathe centers with truncated cones, in both cases, the silhouette is essentially a rectangle with its corners truncated.

Center drills:

The centre drill is specially designed for complicated industrial purpose. These drills are provided with two-sided drill mouth that makes it long lasting. Both the sides are provided with different diameters that enable the two different drill sizes from single drill. These are manufactured from high-grade raw material that is procured from reliable vendors. Additionally, our experts take care that they are of high quality standard.

Available: A type, B type & R type



Hole Mill:

Durable in nature, these Hole mills are offered in the market in complete safe form. Best in quality, these mills are presented to consumers in complete safe form. Thick in frame, these mills are made of anti-corrosive material. Besides this, we charge minimal cost for this hole mill. We manufacture solid carbide hole mills as per customer drawings.



Reamer:

We produce wide range of solid carbide reamers for all materials. Reamers are available with straight and helical flute and a 45° lead cutting angle. Reamer tolerances is H7, it gives high precision and accurate diameter.

Reamers are round cutting tools that enlarge the size of an existing hole, offering high quality of finish and straightness upon completion of the operation. Arrow Tools Pvt. Ltd. has led the industry with its pioneering programs offering service on carbide reamers to customer specifications.



Burnishing Drill:

The burnishing drill has four margins which stabilize it as it is drilling.

The two extra "Burnishing" margins also help to smooth the hole after the "Cutting" margin has cut, giving the hole a better finish than a conventional drill. They also help to make a hole that is consistent from one to another, because the burnishing margin actually moves material back, it is essential for the burnishing drill to be first made of carbide, which has the compression strength and then only of the highest quality.

The straight flute construction helps to break up the chip into a smaller and more manageable size.

The rigid construction allows the burnishing drill to drill a straighter and less oversized hole than a conventional twist drill.

Although we do not advertise it, one further benefit of the burnishing drill is extended tool life, many times giving the customer 3-4 times the tool life of conventional carbide twist drills, solid carbide three flute and even subland drills.

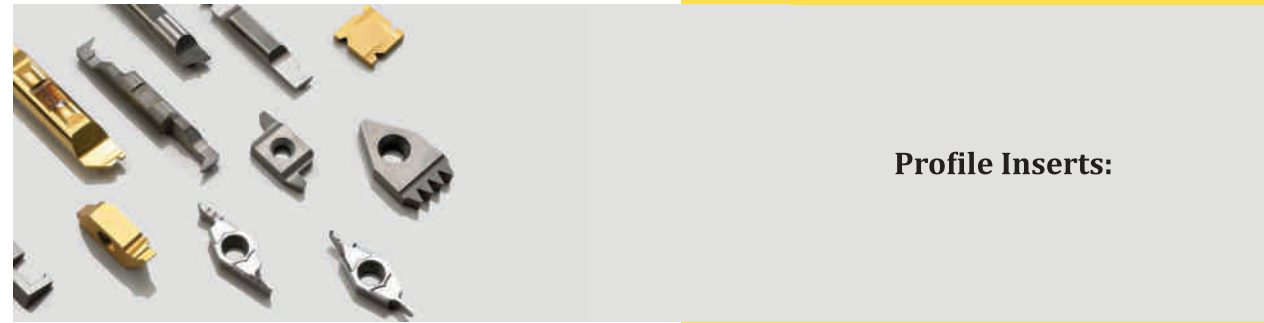


Fir Tree Milling Cutter:

We manufacture this cutter according to customer applications or special requirements.

Maximum process reliability thanks to minimal cutting forces and yet very high material removal (Q/min.) at the same time. Only a small number of special milling tools are required.





Profile Inserts:



Owing to the presence of our expert team members, we have been able to offer a wide range of Profile Insert. These are sturdily constructed using finest quality components which make these extensively durable and reliable. Our devices are admired for their robustness, dimensional accuracy and high functional efficiency. We offer these profile inserts at affordable prices.

Brazed Carbide Tip:



For many kind of high precision jobs, the carbide brazed tool remains the best solution. It is still an economic way compared with inserts and tips. Especially suitable for Swiss type lathes and small work pieces, these tools can be ground by yourself and used for different specific application. 100% Premium quality are made in our facility. We deliver of a great range of different sizes available from our stock and some special dimensions can be made on demand. For each job, you'll find the best suitable carbide quality to achieve the best productivity.



HSS Products:

High Speed Steel is the most economical material to use that can be manufactured into any type of tool needed. High Speed Steel works well on all materials and can be coated to provide even better performance.



HSS Drill:

High-speed steel (HSS) is a form of tool steel. HSS bits are hard and much more resistant to heat than high-carbon steel. They can be used to drill metal and many other materials at greater cutting speeds than carbon-steel bits and have largely replaced carbon steels.

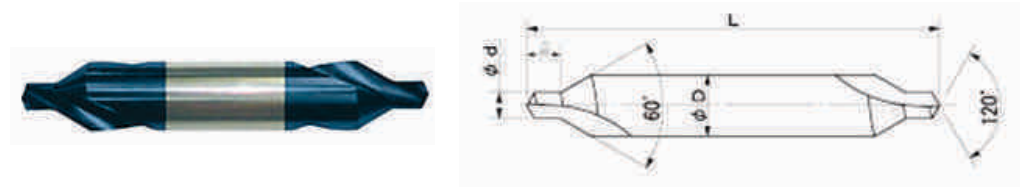


Center drill:

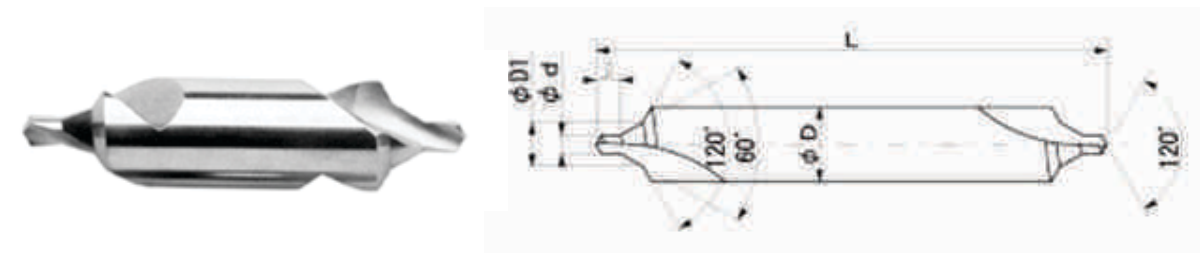
The center drill family is with high sharpness and outstanding durability. Center drills never stop evolving. In addition to improving run out accuracy, the use of cobalt HSS and an optimized tool shape delivers excellent sharpness and helps to prevent breakages.

We have following types in Center Drill:

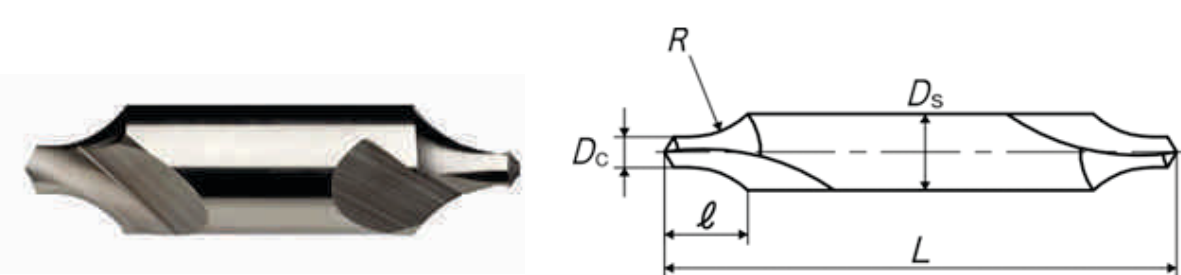
A type:



B type:



R type:



Subland Drill:

A Subland Drill is basically two drills of different diameters combined into one tool, retaining the individual characteristics and proper geometry for each diameter. The independent flutes and margins of a Subland Drill ensure that size and concentricity between diameters is maintained throughout the life of the tool and is not affected by re-sharpening the point or step angles. The Subland Drill eliminates secondary operations by drilling multi-diameter holes in one production pass. On certain applications particularly holes in steel or cast iron, the Subland Drill provides superior tool life compared to that of a basic step drill. When drill bushings are used "Double Margins" can be supplied for greater stability. The additional margins will give maximum support and guidance to provide more accurate size and hole location. Subland Drills are not practical when the small diameter is less than 50% of the large diameter. Depth of the hole should not exceed 4 times the small diameter, but greater hole depth can be achieved by withdrawing the tool or "pecking" to clear chips.



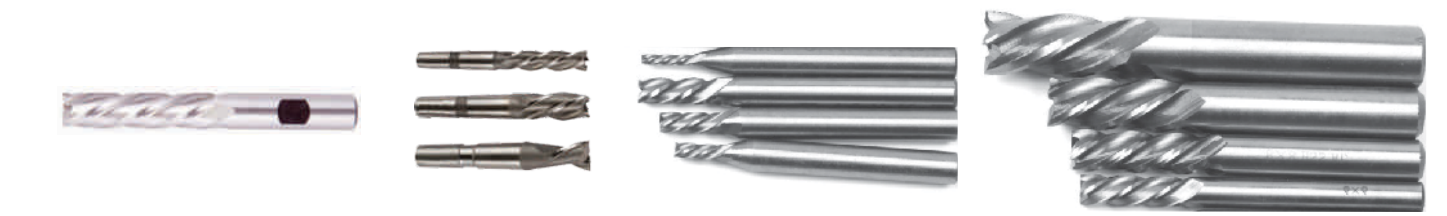
Reamers:

Being one of the reputed organizations in the market, we are engaged in manufacturing an exclusive range of **HSS Reamers**. These reamers are extensively used in cutting, drilling purposes and to create a accurate surface finish. These are coated with approved polishing material that increases the resistivity against oxidation. We are offering these hand reamers at most nominal prices.



End mills:

We offer the best range of conventional high speed steels in order to guarantee customers the best solutions for their requirements. The HSS end mills should be used when machines or work piece clamping configuration is not rigid, where cutting speed is low, or for very tough and interrupted cutting conditions. We manufacture various end mill configurations including finishers, rougher's, ball nose, dovetail, chamfering, T-slot, counter bores, corner rounding tools and woodruff cutter.





Dovetail cutter

Woodruff cutter

Woodruff cutter:

With thorough knowledge of the industry, we are engaged in manufacturing woodruff cutters. These cutters are designed and manufactured by the professionals using quality raw material, which we procure from esteemed vendors of the market. Before the final dispatch, a group of quality controllers rigorously inspects the functionality of these cutters on varied industry laid grounds.

A dovetail cutter is an end mill whose form leaves behind a dovetail slot, such as often forms the ways of a machine tool. As the number of cutting edges increases, your feed rate should increase to prevent burning and premature tool dulling. More flutes reduce chip load and improves surface finish if feed rate remains the same. The most common flute numbers for general milling operations are two (better space for chip ejection) and four (better surface finish).

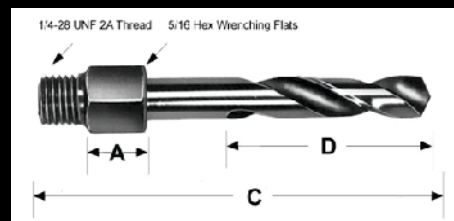
Trepanning Cutter:

For machining outside diameters such as studs and recesses in castings.



Threaded Shank Adapter Drills:

Threaded shank adapter drills are made from cobalt high speed steel and specifications with 135-degree heavy-duty split points and surface treated for drilling hard, tough, high-tensile-strength materials. When drilling low-tensile-strength materials, the type "D" cobalt aircraft drill will have a significantly greater tool life than the NAS 965 type "B" high-speed steel adapter drill, resulting in a much lower cost per drill.



Countersinks:

Countersink cutters may be used in all aerospace applications using adjustable or micro-stop countersinking units with a threaded shank drive. Our line of countersink cutters are manufactured from high-speed-tool steel, precision-ground to exacting tolerances and form-relieved to insure concentricity of countersink angle. We manufacture a complete line of high speed steel stop countersinks, carbide-tipped stop countersinks with integral pilot, pilots for carbide-tipped stop countersinks, reverse spot facers, high-speed-steel hollow cutters, rivet shavers, high-speed-steel six-flute chatter less countersinks, counter bores, counter bore pilots and paint cutters.

1.High Speed Steel Stop Countersinks 100°



2.Carbide Tipped Stop Countersinks with Replaceable Pilots



Side-and-face cutter :

The side-and-face cutter is designed with cutting teeth on its side as well as its circumference. They are made in varying diameters and widths depending on the application. The teeth on the side allow the cutter to make unbalanced cuts (cutting on one side only) without deflecting the cutter as would happen with a slitting saw or slot cutter (no side teeth).



Face mill:

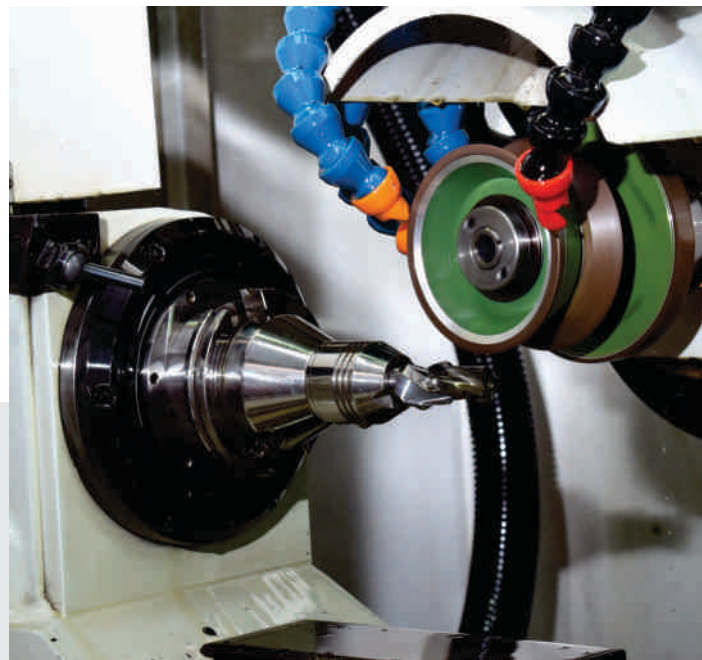
A face mill is a cutter designed for facing as opposed to e.g. creating a pocket (end mills). The cutting edges of face mills are always located along its sides. As such it must always cut in a horizontal direction at a given depth coming from outside the stock. Multiple teeth distribute the chip load, and since the teeth are normally disposable carbide inserts, this combination allows for very large and efficient face milling.



SERVICES:

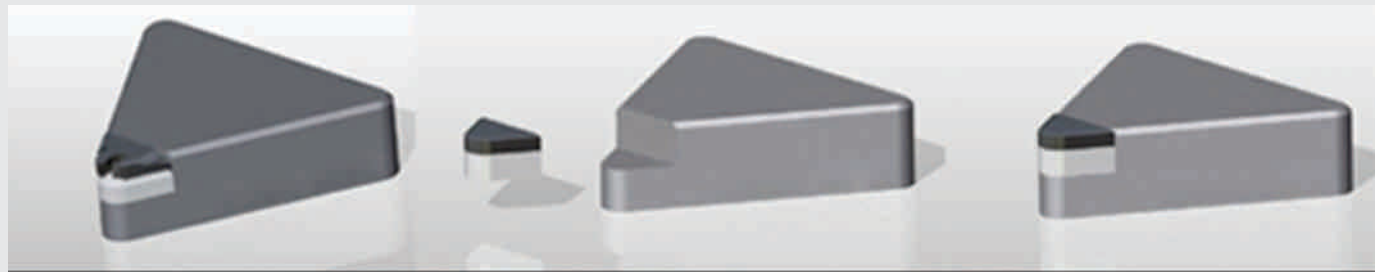
REGRINDING:

Even the highest-quality machine tools dull over time. This is where Integrity tool steps in with our tool regrinding service. We regularly sharpen, regrind and recondition high-speed steel and carbide drills, end mills, routers and custom cutting tools of all types.



RE LAPPING (PCD and CBN inserts):

The purpose of a re lapping is to enable the tool to be used as new again, by creating a new sharp cutting edge. While a tool is used the cutting edge will wear due to several dynamics. At a certain point, the cutting edge is becoming too blunt or worn out for doing its cutting job.



RE TIPPING(PCD and CBN inserts):

In this process we simply remove the used tip from its carbide body. A brand new tip is re-brazed to the tool saving you the cost of having to replace the body.



TOOL HOLDERS

Indexable cutting Tool Holders:

We are ahead in manufacturing and supplying an extensive array of Milling Tools with Indexable Cutting Inserts, fabricated from high grade raw materials, these devices are superb in quality and highly durable. Devices offered by us are extensively recommended for their sturdy construction, dimensional accuracy and application specific designs.

Indexable Tool Holders



Special tools :

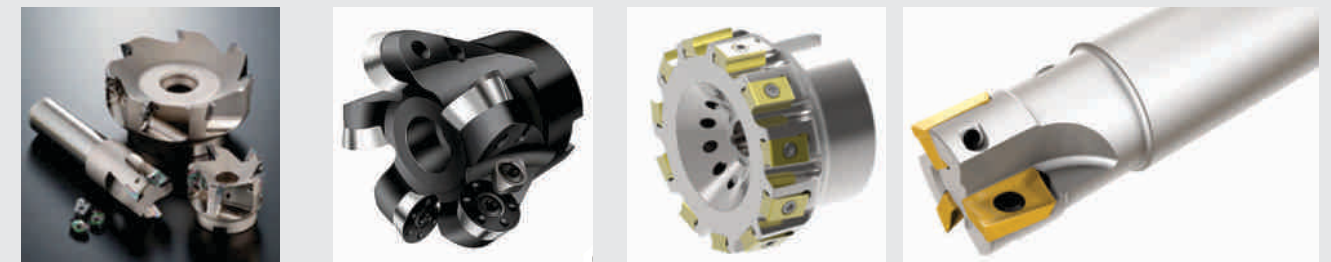


Boring bars :



Indexable cutting Tool Holders:

We are ahead in manufacturing and supplying an extensive array of Milling Tools with Indexable Cutting Inserts, fabricated from high grade raw materials, these devices are superb in quality and highly durable. Devices offered by us are extensively recommended for their sturdy construction, dimensional accuracy and application specific designs.



QUALITY:

We are well equipped with a modern manufacturing unit with highly sophisticated 6 axes CNC tool cutter grinding machine which gives high quality and precise cutting tools. You can be confident that the combinations of our expert's technicians and high quality machines produce the very best results.

Other the machines used in our units are optical profile grinding, flute grinder, cylindrical grinder machine, tool and cutter grinder.

We used high quality solid carbide, HSS, PCD and CBN raw material.

TiN, TiCN, TiAlN, AlTiN & AlCrN coating are available for high wear resistance and for high working temperature condition.

QUALITY ASPECT:

We have our own inspection room and in-house testing facility with very highly precise measuring instruments like Profile Projector, Zoller, Nikon microscope, Keynes laser micrometer, Dynascan profile projector.

We check dimensional accuracy, finishing and each tool we craft is inspected for exact precision.

The result leaves you with a guarantee of unmatched precision and accuracy.

TRY IT YOURSELF:

We work in collaboration with our customers in order to implement their each & every request, manufacturing both standard and special tools with the best results in terms of quality promptness and resource optimization.



QUALITY

MARKETS SERVED

AUTOMOTIVE INDUSTRY

DEFENSE SECTOR

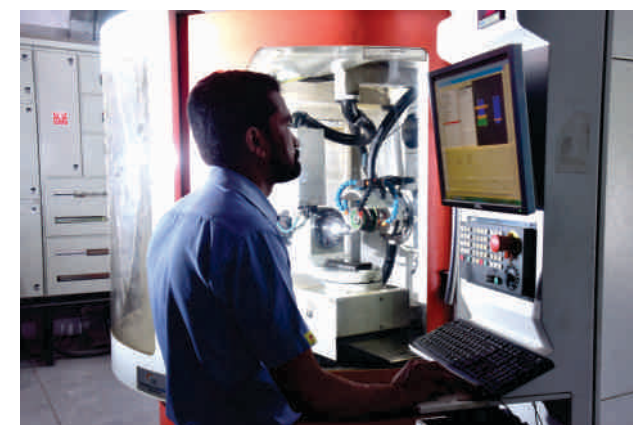
AEROSPACE INDUSTRY

ENERGY SECTOR

JEWELLERY PRODUCTS

MEDICAL SECTOR

AGRICULTURE SECTOR





📍 Sector No. 5, Plot No. 20 AURIC DMIC, Shendra,
Aurangabad, Maharashtra - 431154. India

🌐 www.arrowtoolspvtltd.co.in

☎ (+91) (0240)6600325

☎ +91 9766635313, +91 9975111100, +91 9766635311

📞 +91 9766635314

✉ sales@arrowtoolspvtltd.co.in | marketing@arrowtoolspvtltd.co.in
arrow.tools111@gmail.com

