



Machine Tools

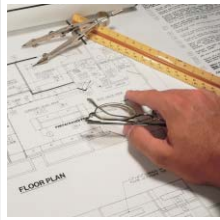
QUALITY
MACHINE TOOLS



Trigon believes in offering quality machine tools to its customers to meet their expectations of productivity improvement and cost reduction. The tools marketed by Trigon are among the top ranked products in their respective field.

Technical Services

QUALITY
TECHNICAL SERVICES



At Trigon, we believe in being an independent technical-marketing company. For this purpose, we work closely with our principals for regular product training and troubleshooting guidelines and keep our team of application engineers abreast with the latest development in machine tool industry.

Teamwork

QUALITY
TEAMWORK

At Trigon, we believe our people are the single most important factor for our existence and growth. And it is the teamwork that combines all individual efforts of different people in different departments that forms the core of our success.



Welcome to TRIGON TOOLS

Trigon Tooling Solutions Pvt. Ltd. is a renowned company in the field of cutting tools based at Gurgaon (Haryana), India. At Trigon, we aim to be your partner in offering one-stop solutions for all your machining problems. In our extensive range of products you will always find the tool you are looking for to meet your operational needs.





i About us

Started as a family business in 1995 in a small office in Hauz Qazi, Delhi to import and market cutting tools.

Continued to establish footprints until 2002. The year 2002 saw infusion of young blood and 2nd generation of family was introduced in business.

In 2003, company name was changed to TRIGON as part of an exercise to transform business into a professional organization. Subsequently, operations were shifted to Pitam Pura, a commercial hub in Delhi. The year saw the conversion of organization from a small sales office to a well managed professional marketing company.

2003-2007 was an exponential growth period. This period witnessed increase in size and reach of the business as a result of dedicated and continuous efforts.

In 2007, total operations were shifted from Delhi to Gurgaon, manufacturing hub of North India, with a vision to be in close proximity to the customer and enhance the service levels.

In 2009, business was divided into 2 divisions –Trigon & Gallus, with the objective of expanding the product portfolio and streamlining the sales efforts. Now the two divisions work independently with Trigon focusing on end-user sale and Gallus expanding the business through channel partners' network



Since then, the growth story continues and company is currently focusing on expanding the business in whole of India.

Delivering excellent tools at the right time and place was once defined as a best practice. However now the industries are letting go of multiple suppliers who do only one thing well. Major customers are opting for single suppliers with comprehensive product portfolios. Today, adding value with the right solution for specific production requirements delivers competitive edge.

To meet this objective, we are now aggressively expanding our product portfolio and identifying the new products and technology to align it with our existing range and offer more comprehensive solutions to our customers.



Why Trigon?

The TRIGON shape represents a breakthrough in tooling, being more efficient, cost effective and precise than conventional tooling devices. These are the adjectives we like to associate with our work and we believe this name to be more indicative of our philosophy and more representative of our ongoing effort towards innovative solutions.



i Quality

Quality - Machine Tools



Trigon believes in offering quality machine tools to its customers to meet their expectations of productivity improvement and cost reduction. The tools marketed by Trigon are among the top ranked products in their respective field. Our success and growth continues as a result of our desire to provide customers with the very latest, most efficient metal cutting technology in the world.

With the view to offer the new generation machine tools, we are always looking for technically advanced products from around the globe to introduce to our customers. The feedback from customer is the key to identify the need for a new product or technology.

Quality - Services



At Trigon, we believe in being an independent technical-marketing company. For this purpose, we work closely with our principals for regular product training and trouble-shooting guidelines and keep our team of application engineers abreast with the latest development in machine tool industry. Our dedicated team of application engineers is always available to offer technical proposals for machining applications and meet the challenges of product performance at the customer end. The objective is to work closely with the customer to meet his satisfaction in terms of product quality and productivity improvement.

We always strive to meet the challenges of minimum lead time in procuring the tools and delivering it to the customer in the shortest possible time frame. At Trigon, we focus on maintaining sufficient inventory levels, have a well coordinated customer support division and use extensively the modern day communication tools. The company has invested in Enterprise Resource Planning (ERP) software to keep track of all material movement and customer coordination to ensure top quality services to our customers.

Quality - Teamwork



At Trigon, we believe our people are the single most important factor for our existence and growth. And it is the teamwork that combines all individual efforts of different people in different departments that forms the core of our success. As they say, results of collective efforts are always more than sum of individual efforts. Employees in each department work collectively and support each other in their respective functions to meet the targets of inclusive growth.

We believe in working as a team with our principals and customers to develop a long term mutually beneficial relationship. The objective is to focus on all round development – benefits for the employees, customers, principals and the company, to make the relationship sustain and grow.

The basic human philosophy of honesty, loyalty and integrity is the core of the relationship that we have with our employees, customers and principals.



i Indexable Cutting Tools



Kyocera, Japan is one of the leading suppliers of Indexable Cutting Tools in the world today. With its vast range of tools, Kyocera offers practical solutions for demanding and complex machining problems in automotive, die-mold, aerospace, computer parts and heavy engineering industry. Kyocera cutting tools are highly valued for their superior quality and functionality.

Kyocera cutting tools are highly valued for their superior quality and functionality.

Product Range:

- Turning
- Boring
- CBN/PCD Tools
- Grooving
- Milling
- Drilling
- Threading



Competitive Advantage

CBN - Kyocera's new CBN inserts offers the unique advantage of MEGACOAT, Kyocera's patented coating technology. The Megacoat results in extended tool life and improved stability at high speed machining

Drilling - With its original four corners-three chips design, Kyocera's drill gives maximum tool life with high quality surface finish. The unique design of Magic Drill results in very low cutting force and allows drilling on Slant and Concave surface.

Milling - The new generation Pentagonal Facemill (MFPN), Helical Endmill (MECH) and Octagonal MOF Mill are the latest offering for Milling applications in Steel & Cast Iron. The new Megacoat technology results in long tool life at high speed milling due to high hardness and high oxidation resistance.



i Solid Rotating Tools

GUHRING
The Tool Company

With a vast repertoire of self developed suite of products (1654 varieties of tools and in excess of 44,000 different products), Guhring, today, is one of the world's leading suppliers of rotary cutting tools. Guhring established operations in India in 1997 as a 100% subsidiary of Guhring, Germany. Today, with over a decade long experience, Guhring has a pan India presence with manufacturing facility in Bangalore and regional offices in Delhi, Pune & Chennai. Guhring's business activities in India are centred on:

Trading of Standard Tools

Manufacturing Custom made tools for customer specific applications

Guhring, today, is one of the world's leading suppliers of rotary cutting tools.

Standard Range:

Twist Drills

Gun Drills

Taps

Milling Cutters

Reamers

Countersinks

Diamond Tools

Modular Tooling Systems





i Machine Taps & Threadmill Cutters



Emuge India is a joint venture manufacturing company promoted by Emuge-Franken Group of companies, Germany and Precomp Tools Pvt.Ltd, Pune. Emuge India is established for manufacturing of taps. The company positions itself as solution providers in tapping technology and it works towards finding solutions and improvements in tapping operations in every conceivable engineering material.

Emuge is the premiere supplier of taps for the most demanding tapping application.

Product Range:

HSS Machine Taps

Cold Forming Taps

Self - Lock Taps

Thread Milling Cutters

Tap Holders for Rigid Tapping

Special Taps - as per customer's specifications



Rigid Tapping Holder – KSN/Soft Synchro

The tap holders of Type KSN are preferably designed for application in CNC machining centres & CNC turning machines. By installing a minimal length compensation on compression and on tension, arising minimal pitch differences between synchronous spindle and tap - which would lead to high thread flank friction forces - are compensated. An eventual increase of the axial force during the thread cutting cycle is reduced to a minimum. The resulting advantages are the following:

No miscutting of the threads

Optimized tool life of the tap

Suited for internal coolant supply



i Tool Holding Systems & Shrink Fit Machines

HAIMER

Quality wins.

Haimer is a German, medium-sized family business. Haimer develops and produces innovative ultra-precision products, primarily in the field of tool clamping. As the market leader in Germany, Haimer invests substantially on its product development team, which constantly works on practical innovations and continual product improvements. Based in Pune, Haimer India is one of the five subsidiaries of Haimer, Germany. In spite of its international activities and distributions, all Haimer products are solely produced in Igenhausen, Germany in accordance with its corporate philosophy : Quality wins.

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Standard Range:

Tool Holders (SK/BT/HSK)

Shrink Fit Holders

Ultra Precision Collets

Shrink Fit Machines

Balancing Machines

3D-Sensors



Tool Holders

All Haimer toolholders are fine balanced at G2.5 @25,000 RPM. Haimer offers the advantage of more efficiency at high speed machining due to high runout accuracy and extended tool life. The holder range comprises of SK (SK30/40/50), BT (BT30/40/50) and HSK (HSK-A/E 32/40/50/63/80/100, F63, C40/50/63) in Collet Chuck, Shrink Fit Chuck and other std. holders.



Products

i S.C. Endmills for Die-Mold



HPMT Industries, Malaysia started operations in 1999 with an aim to become a leading cutting tools manufacturing company in South-East Asia. With the latest production machinery and in-house R & D facilities, HPMT is progressively developing new tools to serve the ever demanding industrial market. In addition to extensive range of endmills for Die & Mold, Automotive, Aerospace and Computer Parts application, HPMT also offers a vast range of special custom made tools according to customer specifications.

HPMT is progressively developing new tools to serve the ever demanding industrial market.

Product Range:

Solid Carbide Endmills

Multiflutes Endmills

Micro Endmills

Roughing Endmills

Ballnose Cutters

Die-Sinking Cutters

Multi-Purpose Endmills



Good Manufacturing Practice

Adopting good manufacturing practices especially working towards achieving ISO 9001 has made HPMT progressive in quality consciousness which enable it to continuously manufacture a wide range of precision metal cutting tools. Today HPMT products are compared to most of the leading manufacturers in the world.



i Specialty oils

MORESCO

MORESCO, brand name of MATSUMURA OIL RESEARCH CORP, has been serving the enhancement of various industries like machines, chemicals, medicines, food and packing etc. by developing such products as base materials, functional including adhesives to meet the need of customers with a motto of "R & D for our Customers".

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Product Range:

Die Casting Lubricant

Morsol SE-200A, SE-300T, MT-2, Graphase TK-11, TXT-4

Plunger Lubricant

Neocaster RE-77, PW-50, Graphace PL-1000, 275

Water Glycol Type Fire Resistant Hydraulic Fluid

Hydol Haw, H-200

Vacuum Pump Oil

Neovac MR-100, 200, 250, SX, SY

Hydraulic Oil, Sliding Oil

Hydol AW32, 46, 68, Hydol Way 68X

Cutting Fluid

Toolmate BS-33, NA-131T



Products

i Houghton - Metal Cutting Fluids



Since 1865, Houghton has been serving the metalworking, automotive, and steel industries, and a variety of other markets with the development and production of specialty chemicals, oils, and lubricants.

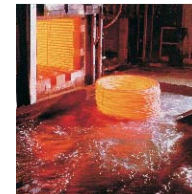
A privately held company, Houghton is headquartered in Valley Forge, PA and maintains manufacturing and research facilities throughout the world. Houghton offers a scope and depth of technical services unequaled in the industry. Through its unique FLUIDCARE Chemical Management program, Houghton customers are finding new ways to save on overall process chemical and disposal costs.

Today, as Houghton continues to expand its Pacific Rim operations and grow its worldwide manufacturing and research facilities, it is still guided by the goals of its founders: to study industry and provide the oils and chemicals needed to keep it running. Houghton works to help its customers run safer, smarter, and more efficiently.

Houghton has been serving the metalworking, automotive, and steel industries, and a variety of other markets

Product Range:

Metal Cutting Fluids	Cleaners
Metal Forming Products	Diecasting Lubricants
Rolling Oils	Quenching Oils
Fire Resistant Hydraulic Fluids	Rust Preventives



HOCUT 795 - High Performance, Bio-Resistant Machining & Grinding Coolant

Hocut 795 represents a breakthrough in coolant technology from the standpoint of biological issues. Going back to 1991, the research and development team strategized upon the formulation of a metal cutting fluid that would revolutionize the industry. As a metal processing fluid manufacturer, the Houghton team knew that the bio-degradation of coolants and other process fluids was the scourge of the industry. The use of sump side biocides then and now is still an undesirable practice to control biological populations. Houghton team knew there is a better way.

This research and development mindset and effort allowed it to introduce Hocut 795 to the metal working industry back in 1997. No guinea-pig product, Hocut 795 is utilized in more than 1000 major customer locations totaling more than 25 million sump gallons in the US alone. Houghton's customer base includes the likes of Boeing, Goodrich Aerospace, Sikorsky Helicopter, Ford, Chrysler, GM, Rolls Royce, Timken, Toyota, Mitsubishi, Caterpillar, John Deere, Briggs and Stratton, Harley Davidson and Tecumseh. Houghton has received NASA approval as well!

Houghton's bottom line to its customer base is simply this: the implementation of our product in your plant will remove the coolant-related issues from your to-do list. You will be able to focus upon manufacturing your components and not deal with baby-sitting our coolant.



Products

i ISO Holders & Boring Bars

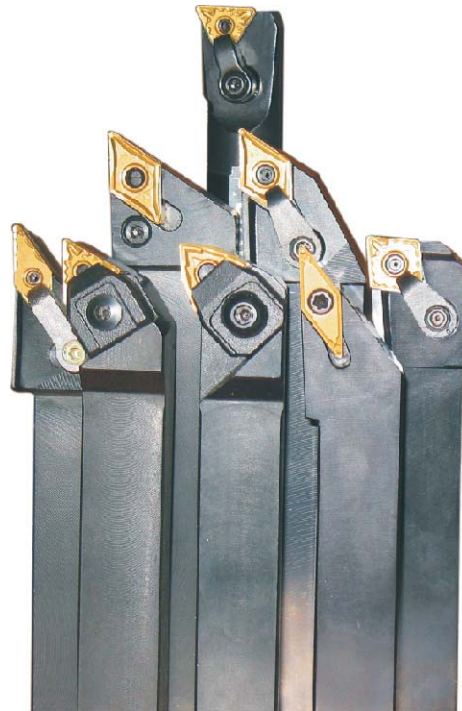


GALLUS is a brand that deals in metal working tools. Gallus represents a step towards providing customers with more options to source quality tools which are easily available, well stocked and backed up by excellent service. At Gallus, superior quality is believed to be of paramount importance in all aspects of operations to ensure that all the products and services satisfy the requirements of our customers. The Gallus products are backed up by an extensive channel partners network ensuring friendly neighborhood sourcing.

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Product Range:

- Turning Holders
- Boring Bars
- Rigid Bars
- Threading Holders
- Grooving Holders
- Milling Cutters
- Indexable Drill Body
- Special Holders





i Roller Burnishing Tools



Bright Burnishing Tools Pvt. Ltd. was incorporated in the year 1994 with an intent to carve a niche in the new arena of "Burnishing Tools" and has with sustained efforts, achieved it over the period through the intensive concept selling and aggressive sales promotional measures. Bright Burnishing is the first company in India to achieve ISO Certification in the Burnishing Tools segment. The certificate is for design manufacture, service and marketing of all types of Burnishing Tools. At present

Bright Burnishing has upgraded the quality management system to ISO 9001:2000 version. By this, Bright Burnishing is able to control processes at incoming, In-Process and Final Stages.

Technical Description:

Burnishing is a Cold Rolling Process without actual removal of metal. A set of precision rollers is used to roll on the component surface with adequate pressure. As a result all the premachined peaks get compressed into valleys thus giving a mirror like surface finish.

The No.1 company in India manufacturing the complete range of Burnishing Tools.



Advantages Of Roller Burnishing:

Mirror Like Surface Finish

Surface finish ranging from 0.05 Ra-0.2 Ra can be achieved easily by using Bright Burnishing Tools. Both ferrous and non-ferrous materials can be Roller Burnished in soft stage. Heat Treated components cannot be burnished.

Product Range:

Multi Roller Burnishing Tools

ID, OD, Taper & Face Burnishing Tools

Single Roller Burnishing Tools

OD & Carbide Multi Surface Burnishing Tools

Special Roller Burnishing Tools

Tailor-made Burnishing Tools



Clients

i Clients

Ahresty India	Hero Honda	Minda Industries
Amtek Group	Highway Industries	Musashi Auto
Ashok Leyland	Hi-Tech Gears	Rico Auto
Bajajsons Group	Honda Motorcycles & Scooters	RSB Transmission
Crompton Greaves	Honda Siel Power Products	Showa India
Denso India	India Yamaha Motors	Shri Ram Pistons & Rings
Endurance Technologies	Ingersoll Rand	Sona Group
Escorts Group	JVR Forgings	Stumpp, Schuele & Somappa
FCC Rico	Kalyani Thermal	Subros
GKN Driveline	LG Electronics	Sunbeam Auto
Graziano Trasmission	Maruti Suzuki	Suzuki Motorcycles
Happy Forgings	Micro Turners	Suzuki Powertrain
Havells India	Mikuni India	TPR Auto

i Contact Info