



**“Carbide Tools for Alloy Steel,  
SS, Titanium & Nickel Alloy  
Machining in Turbine Blades &  
other difficult materials.**



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# HISTORY

- ▶ 1963 – Setup of RIGPL with mere 2 employees to start off with & small workshop
- ▶ 1992 – Setup of Modernised Delhi Plant I
- ▶ 1996 – Setup of Bahadurgarh (Haryana) Plant II
- ▶ 1998 – SOP for HSS Round Tool Bits
- ▶ 2002 – SOP for HSS Punches
- ▶ 2007 – Modernisation of Heat Treatment Plant
- ▶ 2008 – Setup of CNC Production Facility for Carbide End Mills
- ▶ 2011 – SOP for Solid Carbide Drills
- ▶ 2011 – SOP for Solid Carbide Reamers and Centre Drills
- ▶ 2012 – SOP for HSS End Mills & Centre Drills
- ▶ 2013 – SOP for HSS Bandsaw Blade Cutters
- ▶ 2014 – SOP for HAND CRAFTED – HIGH PERFORMANCE CARBIDE DRILLS
- ▶ 2015 – Setup of Bahadurgarh (Haryana) Plant III

# RIGPL Today

- ▶ Today RIGPL boasts of over 50,000 sq. ft of Area spread over 3– Manufacturing plants & 2 Sales Offices.
- ▶ Over 80,000 items stocked in 2–warehouses
- ▶ Over 100+ employees
- ▶ With over 15 Application Engineers & 12 Engineers in production department.
- ▶ Sales in excess of over USD 5.0 Million
- ▶ Dedicated R&D Team for product improvements
- ▶ **Director's Profile:**
  - 2 Director's with over 30–years of tooling experience,
  - 1 Director with Metallurgical from I.I.T Kanpur & MBA Finance from IIMS – Kolkata & 12 years of tooling experience
  - 1 Director with Mechanical Engineer Degree from Delhi College of Engineering (D.C.E) & 6 years of tooling experience.
  - 1 Director with Electrical Engineer from D.C.E with 12 years of Tooling Experience.

# What RIGPL can do for YOU ?

Application  
Based  
Solutions

Standard  
Carbide  
Tools

High  
Performance  
Drills  
(C4HT,  
C3HS)

HSS Tools

# Application Based Solutions

ADVANCED METALWORKING  
APPLICATION SUPPORT THAT DRIVES RESULTS

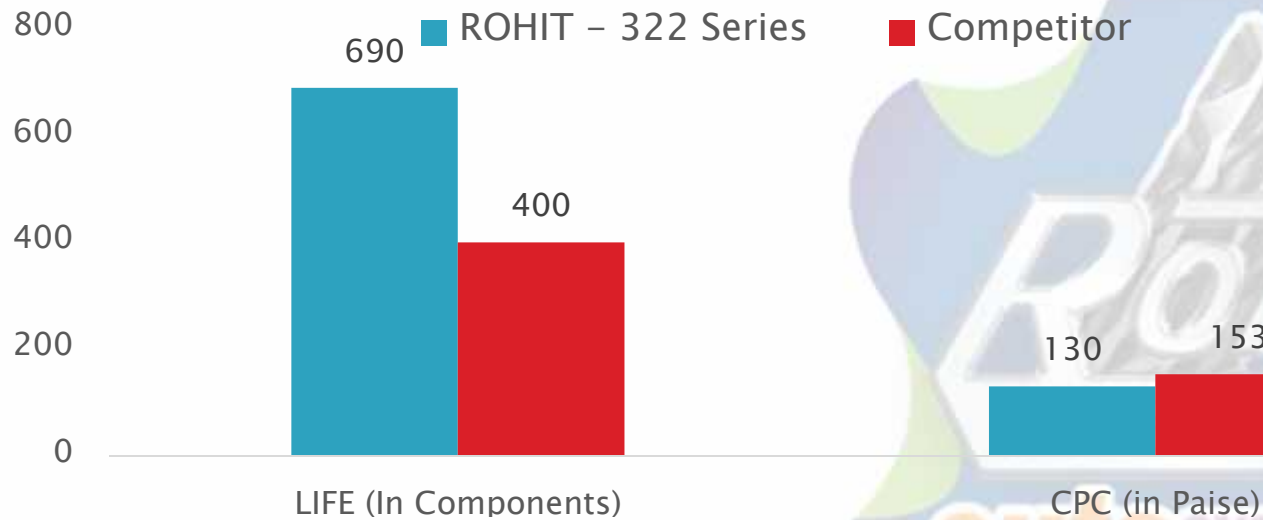


**Improve Your  
Manufacturing**



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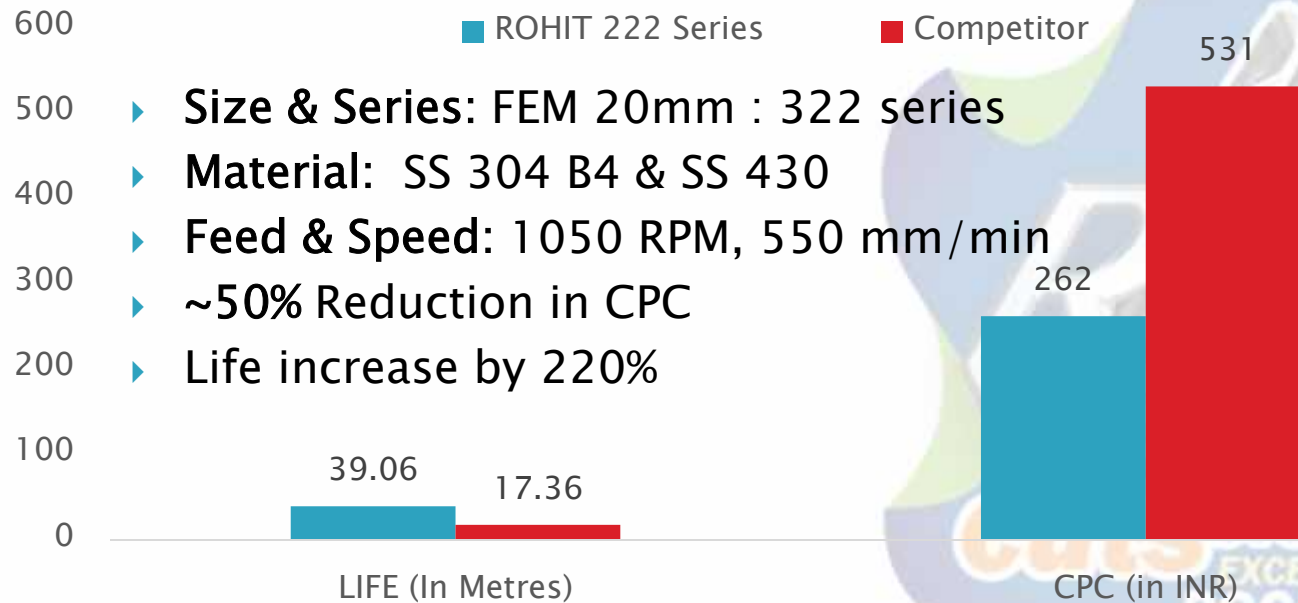
# Slotting Application



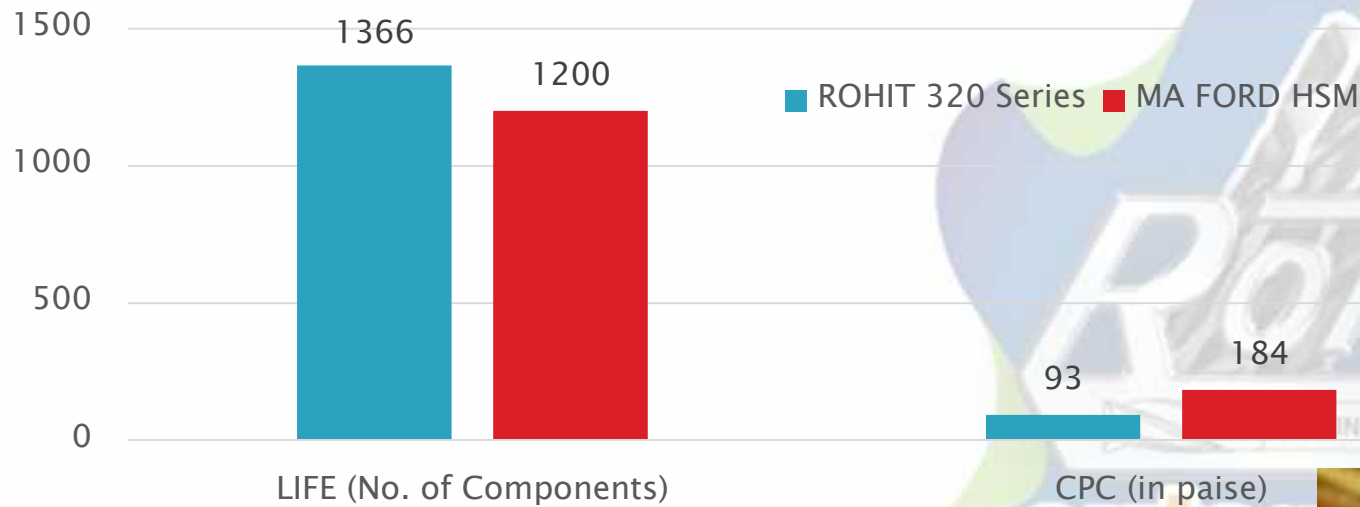
- ▶ Size of tools & Grade: 8mm - 322 Series
- ▶ Material: SCM 420M
- ▶ Parameters : 4000rpm & Feed 400mm/min
- ▶ ~20% Reduction in CPC



# Side Milling



# Side Milling

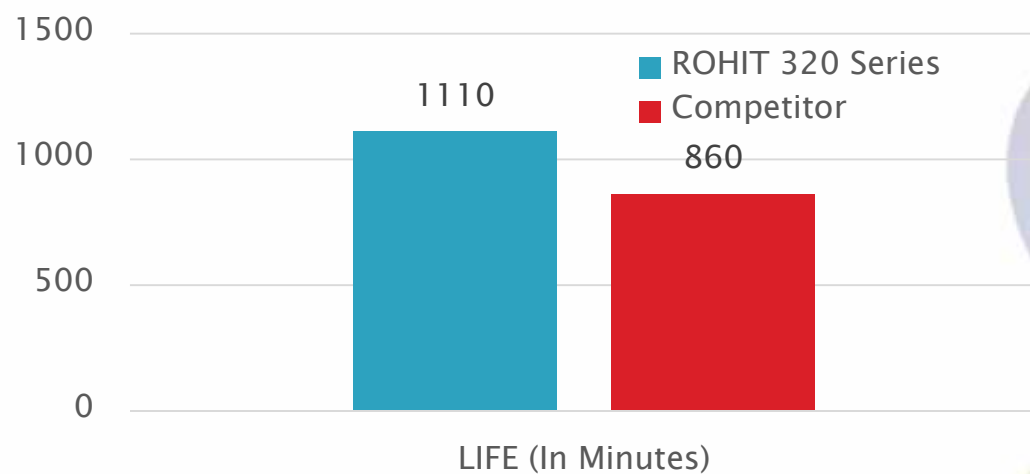


- ▶ **Component:** Bike Kick Cam
- ▶ **Competitor :** MA Ford (HSM series)
- ▶ **Material:** Steel - 15 HRc
- ▶ **Size:** 10mm FEM, 320 series
- ▶ **Feed & Speed Data:** 3200 RPM & 450 mm/min



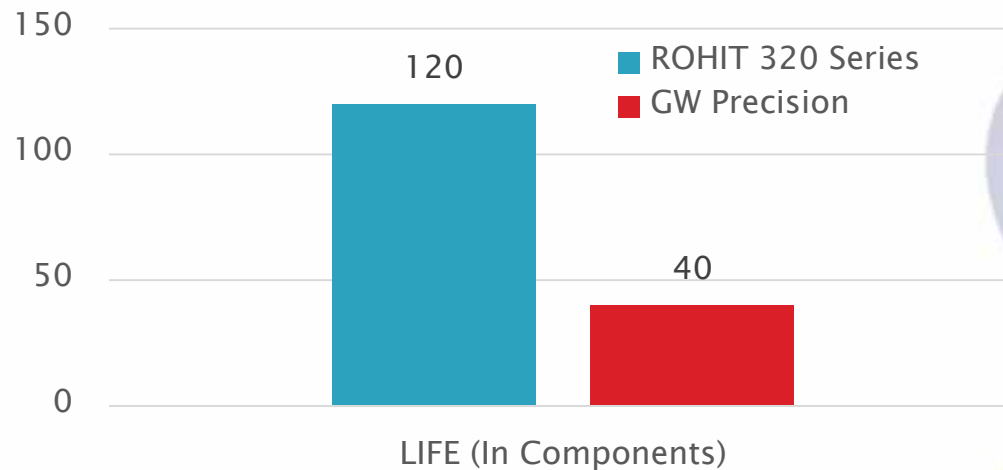


# Plunging + Slotting



- ▶ **Component:** Compressor Part
- ▶ **Material:** Steel - 15 Hrc
- ▶ **Size of tools & Grade:** Taper End Mill 4mm x 5Degree, 320 series
- ▶ **Feed & Speed Data:** 4000 rpm & 500 mm/min

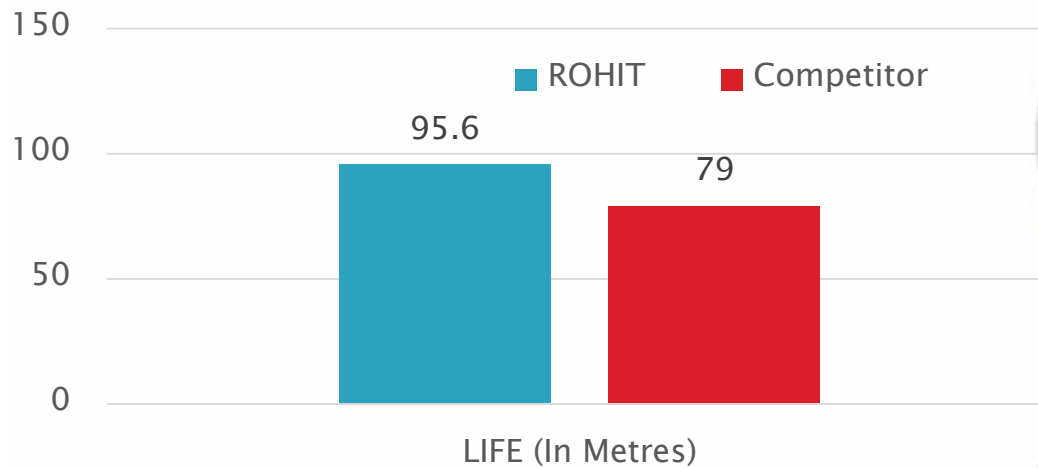
# Plunging + Interpolation



- ▶ **Component:** New Holland Tractor Part
- ▶ **Material:** Steel - 25 Hrc
- ▶ **Size of tools & Grade:** 3mm, 320 series
- ▶ **Feed & Speed Data:** 4000 rpm & 120 mm/min



# Drilling



- ▶ **Component:** New Holland Tractor Part
- ▶ **Material:** Steel – 20Hrc
- ▶ **Size of tools & Grade:** 7.8mm, C3HS series
- ▶ **Feed & Speed Data:** 2800 rpm & 500 mm/min



The background features a large teal banner with the text 'SOLID CARBIDE TOOLS'. Above the banner, there are several drill bits of different sizes and colors (purple, green, grey) arranged in a fan-like pattern. Below the banner, there are diagonal stripes in shades of green and yellow. In the bottom left corner, there is a blue and black geometric shape.

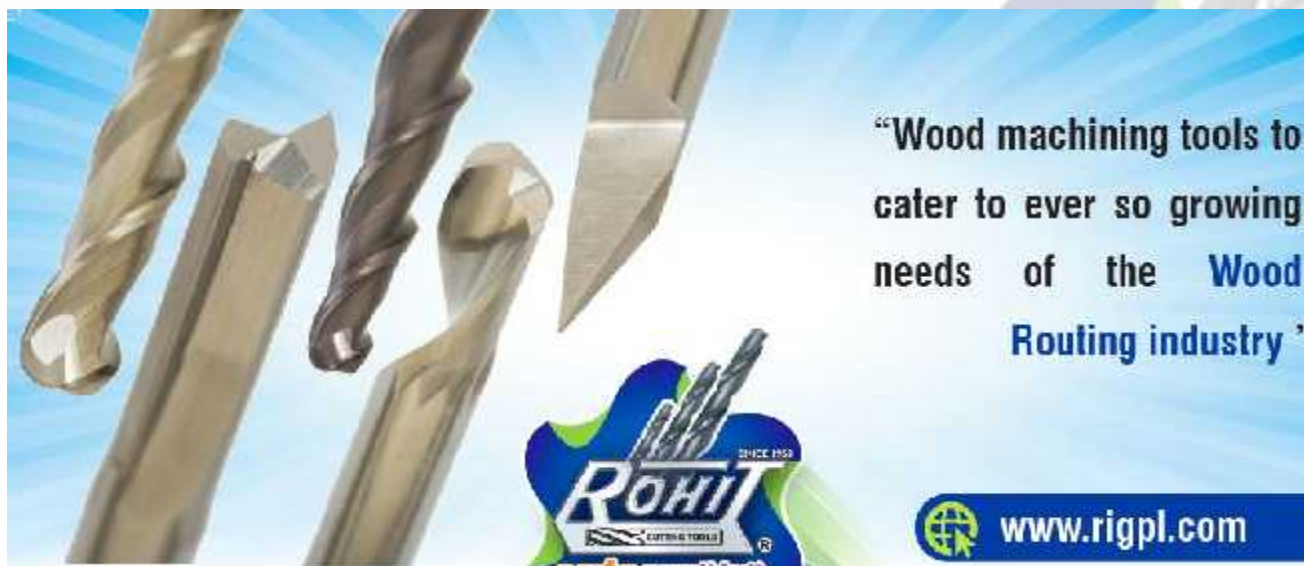
# SOLID CARBIDE TOOLS

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# CARBIDE END MILLS

- GP (General Purpose) END MILLS
- HP (High Performance) END MILLS

# Carbide GP End Mills



*GP 0X Series ( C-103, 104, 107, 108, 109, Engraving & St. flute UpCut bits)*

- **Application:** Wood Working industry like CNC Wood Router machines & non-ferrous materials
- **Type of tools:**
  - 103 Series – 2Flute UpCut Router Bits or End Mills
  - 104 Series – 2Flute UpCut Ball Nose End Mills
  - 107 Series – Single Flute UpCut Router Bits / End Mills
  - 108 / 109 Series – 2Flute Taper or Conical Bits
  - Engraving Bits
  - St. Flute Router Bits / End Mills

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# Carbide GP End Mills

## *GP-1X Series (201 & 202 series)*

- **Application:** Suitable for non-ferrous, free cutting materials, C.I below 320BHN & steels up-to 35HRc
- Comes with TiALN Coating

## *GP-TX Series (205 & 206 series)*

- **Application :** Suitable for machining pre-heat treated steels P20 up to 55HRc
- Comes with Hyperlox coating



# Carbide GP End Mills cont...

## Aluminium Machining (211–214 series)

- All products for aluminium machining are high helix
- Comes with Superior flute finish for better chip evacuation
- 211 - 2flute end mills, 212 - 2flute ball nose, 213 - 3Flute high helix end mills



**“Carbide End Mills & Carbide Drills  
for Aluminum Machining at  
cutting parameters out of your  
machine’s reach”**

**Rohit** SINCE 1993  
CUTTING TOOLS

 [www.rigpl.com](http://www.rigpl.com)



# Carbide GP End Mills cont...

## TAPER END MILLS (207 & 208 series)

- Application : For machining in compressors, impellers, taper slots or taper grooves etc.
- [USAGE IN TUBINE BLADE](#)
- [USAGE IN IMPELLOR](#)



# Carbide HP End Mills (for Die-Mold Industry)

## *HP-3X series (301 & 302 series)*

- Suitable for machining Hardened dies in range of 45–60HRc like P20, D2, D3.

## *HP-4X series (401 & 402 series)*

- Suitable for machining Hardened Die steel & tool steel in range of 55–70HRc



**“Carbide End Mills 301 or 302 Series especially designed for Hard Machining up to 60HRc, Use our 401 or 402 series for machining up to 70HRc”**

**ROHIT** SINCE 1982  
cuts everything  
EXCEED YOUR POCKET

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# Carbide HP End Mills

## *HP– Production Run End Mill series (320, 322, 422 Series)*

- Useful for Machining SUS / SS / Titanium & other difficult to machine materials.
- *320 series – is for side milling, face milling & other milling operation in Alloy Steel like S35C, S45C etc.*
- *322series – is for PLUNGING & SLOTTING operation in all difficult to machine materials.*
- Features:
  - Comes with Special NOVA coating
  - [VIDEO : TYPE OF MILLING](#)



# Carbide HIGH Feed Cutter (For Die-Mold Industry)

## ▶ *Super-Cut Series / High Feed Cutters (407 series)*

- Replace your Ball Nose in roughing or semi finishing operations with SUPER-CUT End Mills
- Suitable for HSFM (High Speed Feed Machining)
- Suitable for machining hardened dies above 60HRc like D2, D3, H13 and other types of Tool & Die steels



“Use High Feed Cutters or 407 Series for Roughing operations on your Hard-die materials before you use RIGPL 402 or 302 series to finish them”



**Rohit** CUTTING TOOLS  
cuts everything® EXCEPT YOUR POCKET  
SINCE 1963



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The advertisement features a blue and green background with a large image of a carbide end mill on the left and a circular inset showing a close-up of the tool's cutting edge on the right. The text is centered and uses a mix of bold and italicized fonts. The Rohit logo is prominently displayed at the bottom center, and the website URL is in a blue bar at the bottom right.

# Special Carbide End Mills

End Mills with Taper Neck



Bull Cutter



Taper End Mill



Double Sided End Mill



# CARBIDE DRILLS

- GP (General Purpose) DRILLS
- HP (High Performance) DRILLS
- Through Coolant Drills

# Carbide General Purpose Drills

## *General Purpose Drills*

- ***Stub Series (C1GS series)***
  - For drilling depths up to 3L/D to 5L/D ratio
  - Run-out within 20–40microns
- ***Jobber Series (C1GJ series)***
  - For drilling depths up to 3L/D to 5L/D ratio
  - Run-out within 20–40microns



# Carbide High Performance Drills

## *High Performance Drills (C1HP)*

- *Less than 10microns Run-out in the tools*
- Comes with Parallel Shank (not in stock)
- Good for M.S, Low Carbon Steel, Cast Iron, GCI, & other softer steels.
- *20~30% increase in Feed & Speed rates than GP drills*






# Carbide High Performance Drills


## High Performance Drills (C3HS\*, C3HL\*)

- *Less than 10microns Run-out in the tools*
- *40~50% increase in Feed & Speed rates than standard drills*



**Carbide HP Drills (C3HS, C3HL Series)**

- \*\*Newly developed NOVA Coating
- \*\*Edge Honing to provide sturdy drill point
- \*\*Edge Chamfer to provide longer cutting edge life
- \*\*New Chip curling design to enable faster chip breakage
- \*\*Developed for drilling in Alloy Steel, SS, Ti, Nickel Alloys



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# Carbide HP Drills cont.

## Through Coolant or Coolant Fed Series – CTHS, CTHL

- 70% Higher Speed & Feed rates
- Minimum 500psi of coolant pressure recommended for usage
- For drilling depths up to 3L/D to 15L/D ratio
- Special 4-Facet design for High Performance




**“New NOVA coated Carbide Coolant Fed Drills (CTHS Series) to machine SS, Alloy Steel, Titanium & other difficult to machine materials”**

**ROHIT** SINCE 1968  
CUTTING TOOLS  
cuts everything EXCEPT YOUR POCKET

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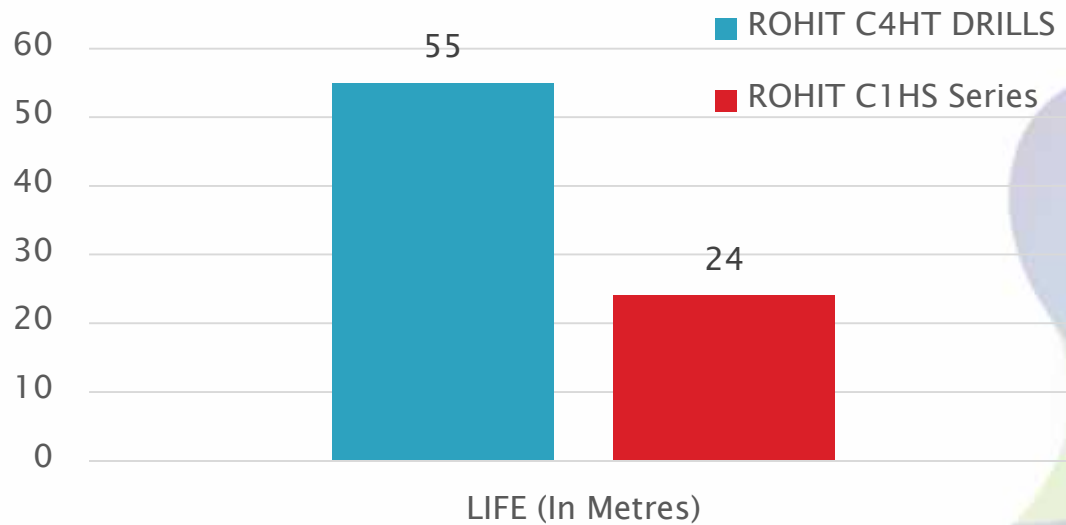


# Carbide High Performance Drills

(C4HT,C3HS Series)

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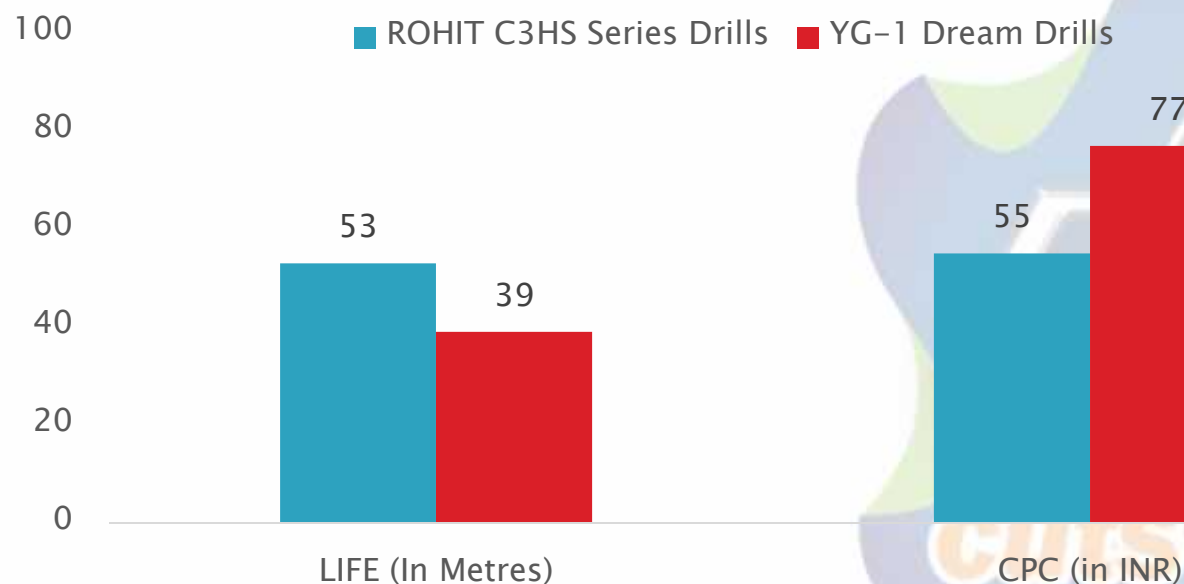
# Intermittent Drilling



- ▶ Size of tools & Grade: 8.5mm C4HT Series Tiger Drills
- ▶ Material: S35C (Steel)
- ▶ Feed & Speed Data: 2000rpm & Feed 200mm/min



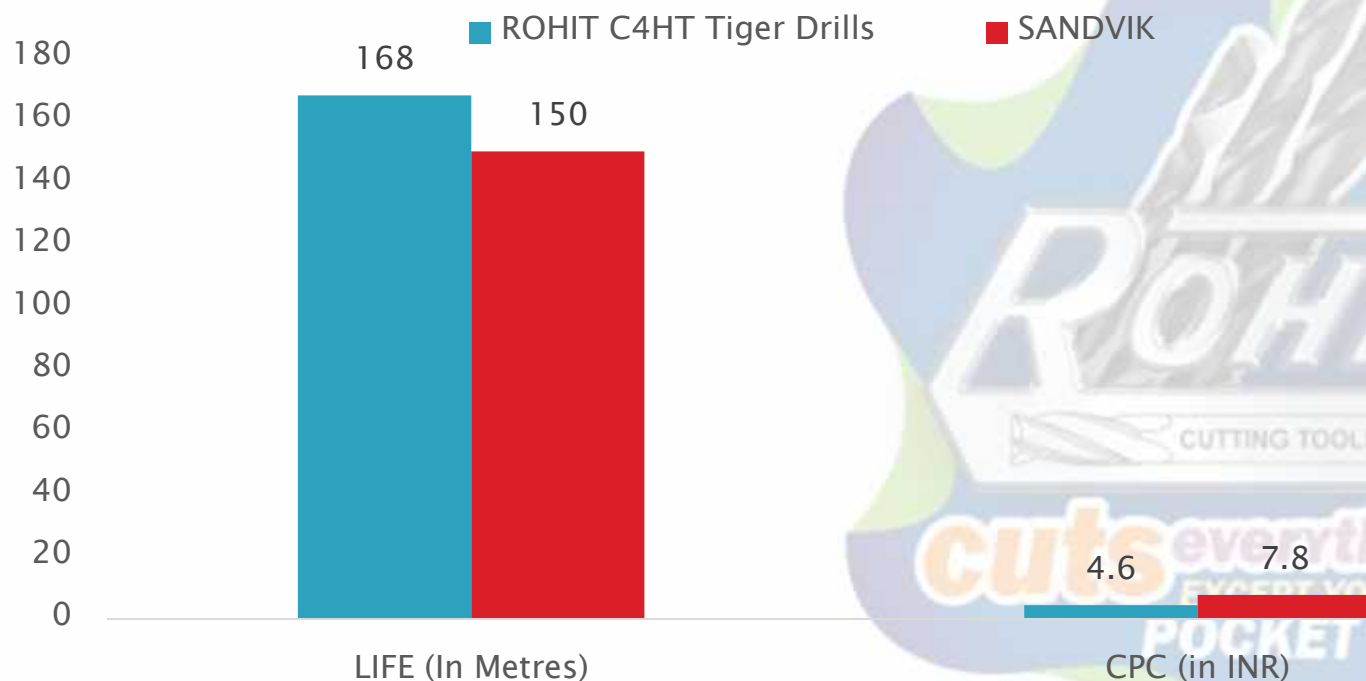
# Through Drilling



- ▶ **Size of tools & Grade: 6.5mm C3HS Series**
- ▶ **Material: S35C (Steel)**
- ▶ **Feed & Speed Data: 2400rpm & Feed 250mm/min**
- ▶ **~40% Reduction in CPC**



# Through Drilling



- ▶ Size of tools & Grade: 13.6mm C4HT Tiger Drills
- ▶ Material: Cast Iron
- ▶ Feed & Speed Data: 2000rpm & Feed 700mm/min
- ▶ ~ 70% Reduction in CPC

The background features a large, light blue trapezoidal shape that tapers from left to right. In the upper right corner, there is a cluster of three drill bits of varying sizes, rendered in a semi-transparent, light grey style. The bottom of the image is composed of several overlapping geometric shapes: a dark blue triangle on the left, a white trapezoid in the center, and a light green trapezoid on the right. The overall aesthetic is clean and professional, typical of a technical or industrial presentation.

# HSS Tools

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# Products (HSS Tools)

## *Square & Flat Tool Bits*

- **Machine:** Traub, Lathe, Automats & other special purpose m/cs
- **Industry:** Used in Fasteners, Rivets industry, Pipe industry, Auto Parts, Tool Rooms, Auto Parts etc.
- Usage of Tool bits
- Usage as Mandrels in Spring Industry

## *Round Tool Bits*

- **Machine:** Power presses, Lathe, Automats, Engravers, Router machines, used as RM for making Drills, End Mills, Taps etc.
- **Industry:** Used in Fastener, Rivets, Cold or hot Forging Bolts, Pipe industry, Tool Rooms, Auto Parts etc.





# Products (HSS Tools)

## *Parting Blades*

- **Machine:** Traub, Lathe, Automats & other special purpose m/cs
- **Application :** Used in Fasteners, Rivets industry, Pipe industry, Auto Parts, Tool Rooms etc.

## *Punches in M2 & ASP grade*

- **Machine:** Power presses, Special purpose Rivet making machines, cold or hot forging of fasteners.
- **Application :** Used in Fastener, Rivets manufacturing, Cold or hot Forging in Fasteners, sheet metal comp.,
- [USAGE IN RIVET MFR.](#)
- [USAGE IN NUT MFR \(cold forging\)](#)
- [USAGE IN PERFORATED SHEETS](#)



# Products (HSS Tools cont...)

## 8-piece HSS Sets

- Includes TURNING TOOL (LH & RH), NOSE TURNING TOOL, ST. CORNER TURNING TOOL, PARTING OFF TOOL etc...
- ONLY EXPORT HOUSES or EXPORT (s)



## HSS End Mills (M2, M35 grades)

- From diameters 2mm – 50mm
- **Machine** : Milling machines (MLTR), Turning machines (CNC / Semi automatic), VMC.
- **Industry** : Auto parts, tool rooms etc.



## HSS Centre Drills (M2, M35 grades)

- In Type "A" & Tpye "B"



# Products (HSS Tools cont...)

*HSS Drills (M2 DIN 338 from 1 – 13mm std. available only.*

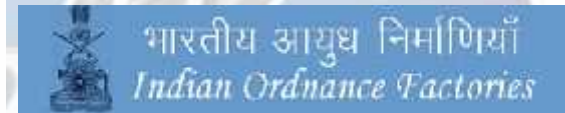
- **Machine:** Traub, Lathe, Automats, Drilling Machines, Radial Drilling Machines & other special purpose m/cs
- **Application :** Used in all type of manufacturing industry

*HSS Taps (M2 – St. flute, spiral, SPPT)*

- **Machine:** Automats, Drilling Machines, Radial Drilling Machines, other special purpose m/cs, VMC & CNC.
- **Application :** Used in all type of manufacturing industry



# Our Customers



- ▶ Note: these are some of our satisfied customers from the list of 1000+ customers



THANK YOU

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