

現場の最前線をゆくプロフェッショナルを支える  
切削工具のプロショップ

**TOTIME**

業界の嫌われ者と呼ばれた工具メーカー  
すべての真実は現場が語る

*Make it Simple*

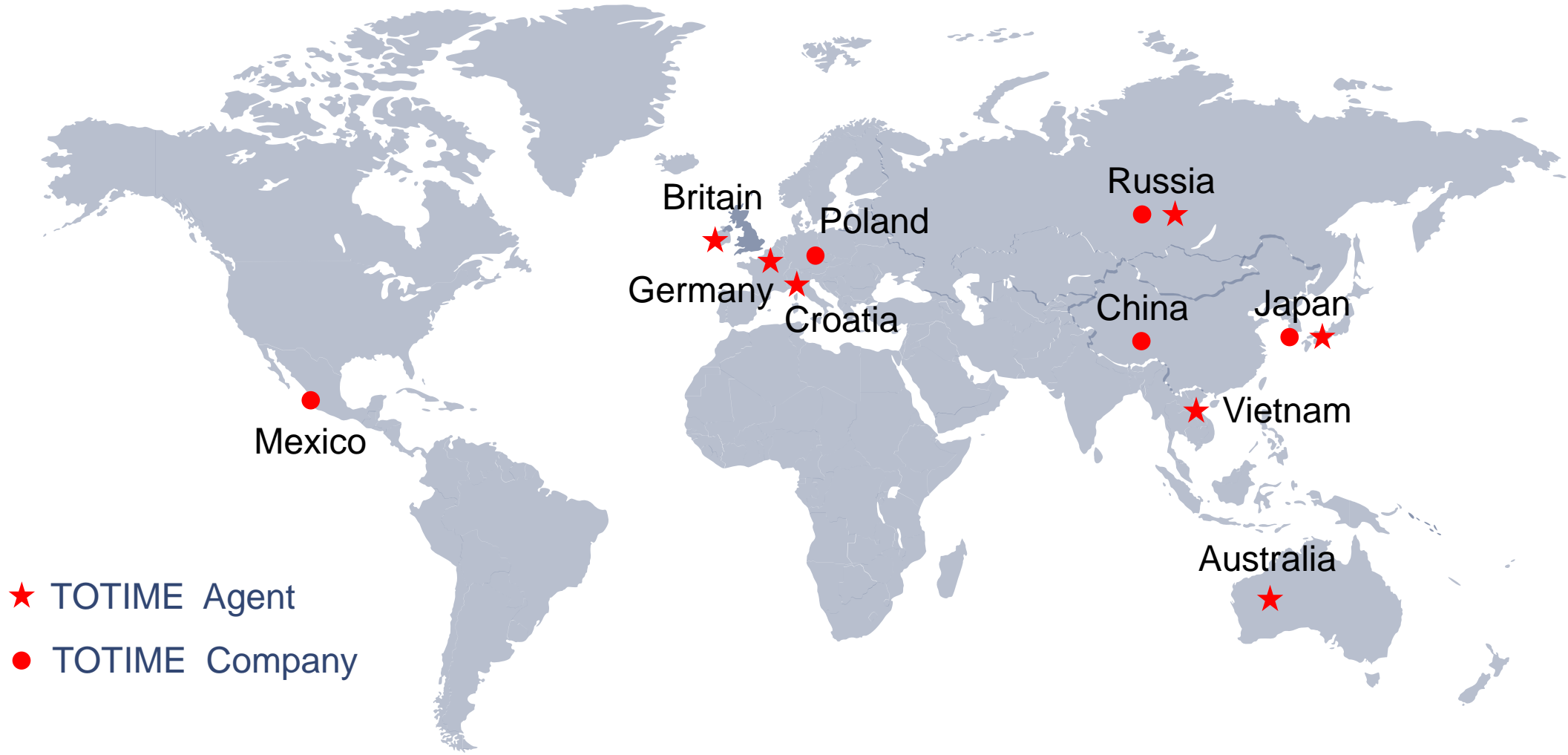
# INTRODUCTION

TOTIME, an original Japanese tools brand, aiming to offer more great quality cutting tools for each of our clients from all over the world. With the Japanese cutting tools technology and know-how, TOTIME is now a comprehensive brand of cutting tools for metal-cutting industries.

- ★ ISO Turning Tools
- ★ Milling Tools
- ★ Drilling Tools
- ★ Non-Standard Cutting Tools
- ★ Tooling and Measuring Tools

All catalogs are available on [www.totimetools.net](http://www.totimetools.net)





★ TOTIME Agent

● TOTIME Company

## Participate in influential international exhibitions



**EMO**  
Hannover



**CIMT**



**JIMTOF**



## Production infrastructure Insert Factory(Partial products)



## CBN/PCD Factory

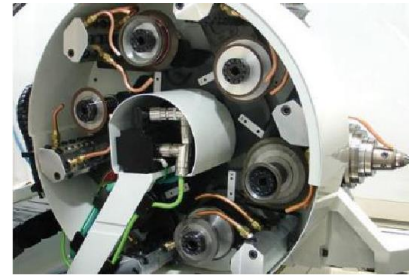
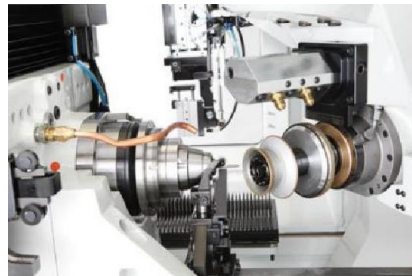


## Production infrastructure

### End Mill Factory



### Drill Factory



## Non-Rotating Tool Lines

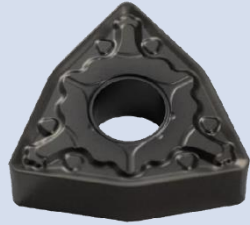
## Rotating Tool Lines





# Non-Rotating Tool Lines

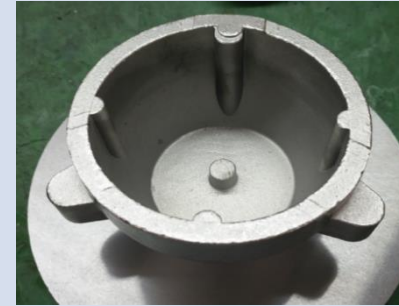
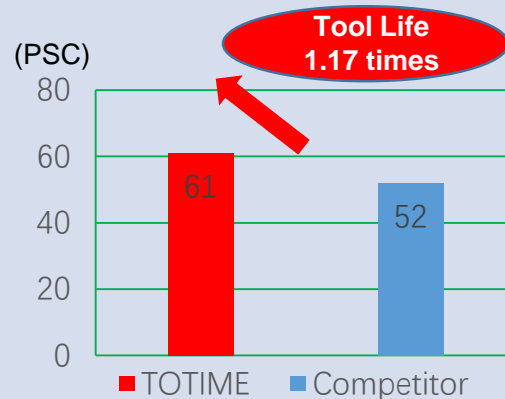
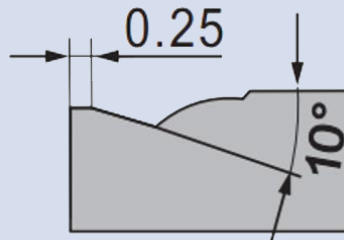
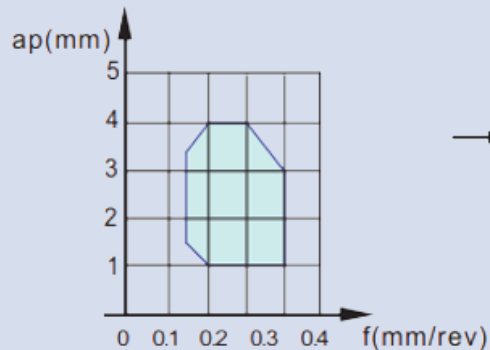
## 1. Coated PVD TM8220 Carbide **M**



- The new nanostructured TiAlN coating is combined with the sub fine grained cemented carbide matrix with high Co content, which has excellent anti scaling and anti chipping properties.
- Suitable for semi finish turning of stainless steel.

## 2. GM semi finish chipbreaker **M**

- For semi finishing of stainless steel and superalloy
- Two way guarantee of sharpness and strength
- Cardioid chipbreaker groove with good chip breaking effect



Before



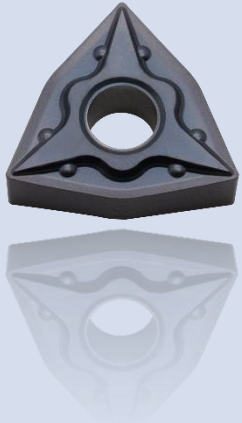
After

材料/Material	SUS316	
品牌/Manufacturer:	Competitor	<b>TOTIME</b>
工具型号/Tool:	WNMG080408-PS	<b>WNMG080404-GM</b>
材质/Grade:	PR1125	<b>TM8220</b>
切削速度Vc (m/min):	90	<b>90</b>
转速n (rev/min.):	300	<b>300</b>
每转进给f (mm/rev):	0.15	<b>0.15</b>
每分钟进给Vf (mm/min.):	45	<b>45</b>
切削深度ap (mm):	1	<b>1</b>
平均寿命(Average psc/c)	8.7	<b>10.2</b>



# 2

## Non-Rotating Tool Lines



### 1. Coated PVD TG4120 Carbide P M K

- Densified small-sized columnar crystal morphology.
- Less pores between crystals, the straight columnar boundary is blocked, and the fast channel is closed, thus showing strong high temperature oxidation resistance.
- Nano multilayer coating structure.
- Strong crack growth resistance.



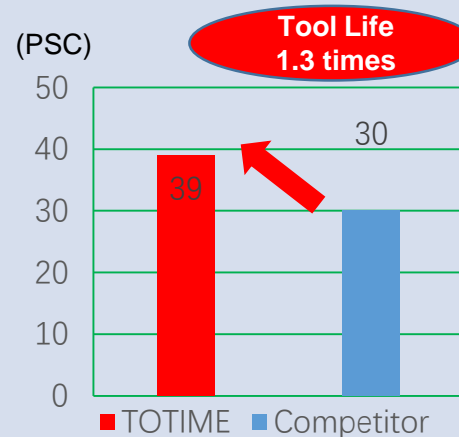
Before



After

### 2. QM semi finish chipbreaker P M K

- The unique groove design increases the impact resistance of the blade on the basis of ensuring the sharp edge, which can effectively avoid the accumulation of blade chips, and is suitable for semi finishing of steel, stainless steel and cast iron materials.



材料/Material	SUS304	
品牌/Manufacturer:	Competitor	TOTIME
工具型号/Tool:	WNMG080408-MA	WNMG080404-QM
材质/Grade:	VP15TF	TG4120
切削速度Vc (m/min):	143	143
每转进给f (mm/rev):	0.14	0.14
每分钟进给Vf (mm/min.):	42	42
切削深度ap (mm):	1.5	1.5
平均寿命(Average psc/c)	5	6.5

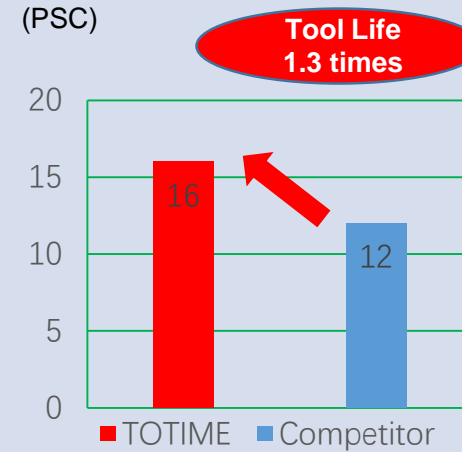
## 1.Coated CVD TK910 Carbide K

- High wear resistance fine grain matrix is combined with thick Al<sub>2</sub>O<sub>3</sub> coating, and after special coating post-processing technology, The surface is smooth, showing good wear resistance and anti chipping when machining ductile iron and gray iron.



## 2.MK semi finish chipbreaker K

- Highly reliable chipbreaker for medium cutting under a wide range of conditions from continuous to interrupted cutting. Recommended chipbreaker for cast iron turning.



After

材料/Material	FCD400	
品牌/Manufacturer:	Competitor	<b>TOTIME</b>
工具型号/Tool:	CNMG120408	<b>CNMG120408-MK</b>
材质/Grade:	UC5115	<b>TK910</b>
切削速度Vc ( m/min ):	240	<b>240</b>
每转进给f ( mm/rev):	0.25	<b>0.25</b>
每分钟进给Vf ( mm/min.):	125.7	<b>125.7</b>
切削深度ap ( mm ):	2.5	<b>2.5</b>
平均寿命(Average psc/c)	12	<b>16</b>

# 4

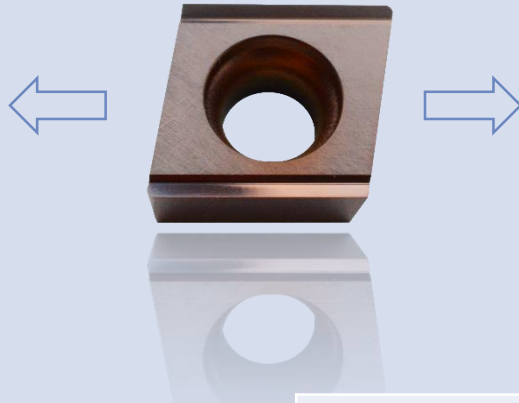
## Non-Rotating Tool Lines

### 1. Coated PVD TJ15 Carbide P M

- High performance G class insert
- The coating is mainly used for finishing high-precision shaft parts.

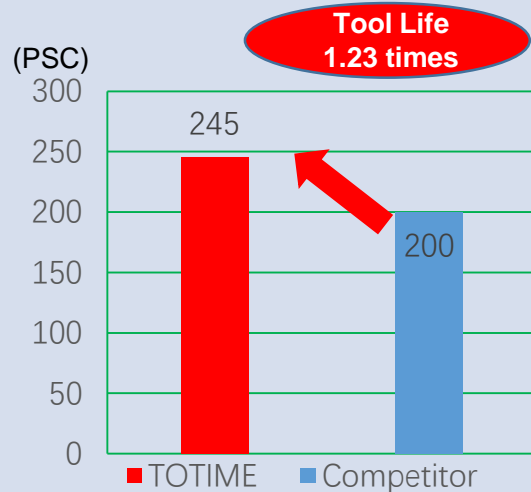


After Processing (Throttle shaft)



### 2. 15U semi finish chipbreaker P M

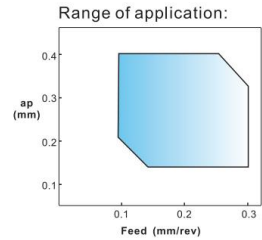
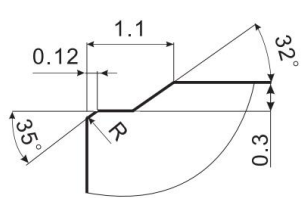
- Improved chip control makes tool life longer and better machining.



材料/Material	X46Cr13	
品牌/Manufacturer:	Competitor	<b>TOTIME</b>
工具型号/Tool:	CCGT09T301MN	<b>CCGT09T301R-15U</b>
材质/Grade:	AC530U	<b>TJ15</b>
切削速度Vc ( m/min ):	100	<b>100</b>
每转进给 ( mm/rev):	0.025	<b>0.025</b>
每分钟进给Vf ( mm/min.):	100	<b>100</b>
切削深度ap ( mm ):	1	<b>1</b>
平均寿命(Average psc/c)	200	<b>245</b>

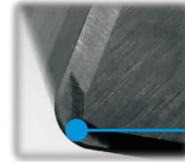
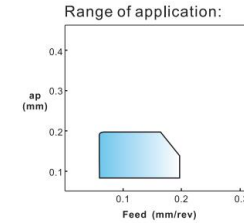
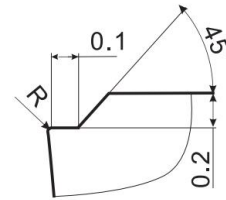
## CBN

### HM Chipbreaker HM Rough/Semi-finishing cutting



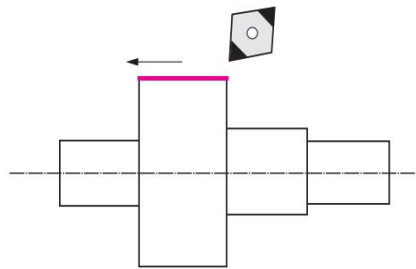
Providing ideal chip control in large cutting depth by the well designed chipbreaker. Suitable for medium cutting or roughing.

### HF Chipbreaker HF Finishing cutting

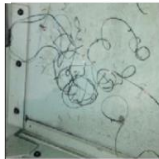


Excellent chip control in small cutting depth due to the high functional nose. Delivers exceptional surface finishes.

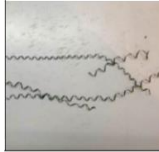
External Carburized Layer Removal



Without chip slot

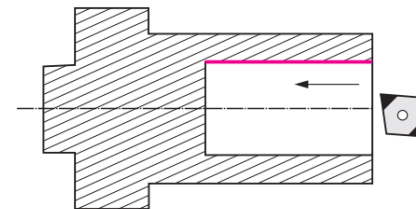


With chip slot



Work Material :SCr420 Carburised Steel  
 Tool No. :4-CNGG120408-HM  
 Cutting Conditions :Vc=150m/min, f=0.15mm/rev,  
 ap=0.5mm

Finishing of Hardened Steel



Without chip slot



With chip slot



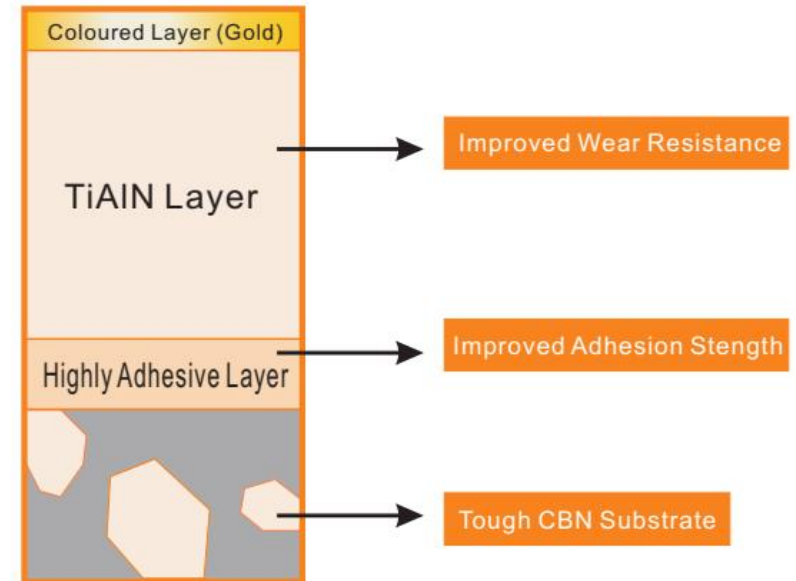
Work Material :Carburised Steel (60HRC Automotive Component)  
 Tool No. :2-CCGT060204-HF  
 Cutting Conditions :Vc=80m/min, f=0.08mm/rev  
 ap=0.15mm Wet



# – Non-Rotating Tool Lines

## Coated CBN

TCCH620 General-purpose Machining (Low to Medium speed, Unstable Cutting)



General-purpose grade suitable for typical hardened steel machining applications.

Achieves further stability in machining of a wide range of hardened steel components.



# – Non-Rotating Tool Lines

## PSC Toolholder



PSC interface is a 1:20 polygon short taper holder with bidirectional positioning, good rigidity and strong torque transmission ability

### Benefit

- Bidirectional positioning of shaft and diameter, obvious damping effect, to ensure the workpiece finish;
- Strong torque transmission ability, to realize heavy load cutting and save processing time.

External turning tool body



Internal turning tool body









# – Non-Rotating Tool Lines

## TNG Series Parting, Grooving

### Coated Grade TV3025

- Applied to difficult to cut materials high speed, continuous machining like HRSA( Ti alloy, Inconel) Stainless steel Increase tool life and prevent defects with NANO composite powder.
- Excellent wear resistance and toughness in high temperature with NANO composite powder
- High speed continuous machining available Increase productivity
- Lower coefficient of friction Better surface roughness and decrease machining stress
- Nano multi coating layer High hardness and toughness

Workpiece name	Aerospace parts (COMP AFT INNER)	Workpiece material	Inconel 718
Machining type	Ring shape/Vertical lathe(O.D deep grooving)/Wet		
Cutting condition	Max.dia=542mm Vc=40m/min fn=0.15mm/rev ap=0.7mm		
Item	TNG50R25M-TR(TV3025)		
Division	TOTIME	Competitor(T)	
Tool life/ Wear image (7min)			
Status comparison	Normal wear	Lots of chipping at edge	
Result	Wear and damage comparison → Better wear resistance performance than competitor		

Workpiece name	Automobile parts (turbocharger housing)	Workpiece material	1.4837
Machining type	Turbocharger housing/Horizontal lathe(Shouldering, Grooving)/Wet		
Cutting condition	Max.dia=99mm Vc=150m/min fn=0.05-0.2mm/rev ap=3.0mm		
Item	TNG30N04M-TJ (TV3025)		
Division	TOTIME	Competitor(T)	
Tool life/ Wear image			
Status comparison	After 10pcs machining:normal wear	After 5pcs machining:partial chipping, large wear	
Result	Wear and damage comparison at limit → 2 times better wear, chipping resistance performance than competitor		



# Rotating Tool Lines

## 1. Manufacturing Solutions for Automotive Industry ★ Brake Caliper

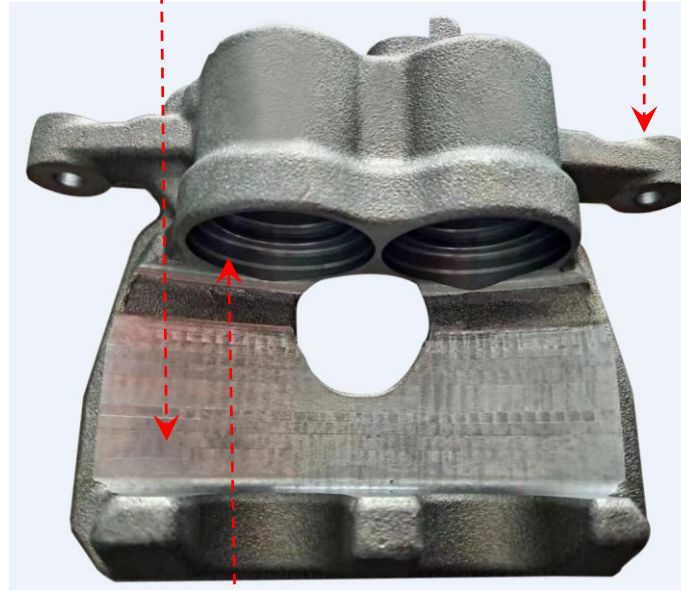
### Tailor-made Slot Milling



LXGU1107



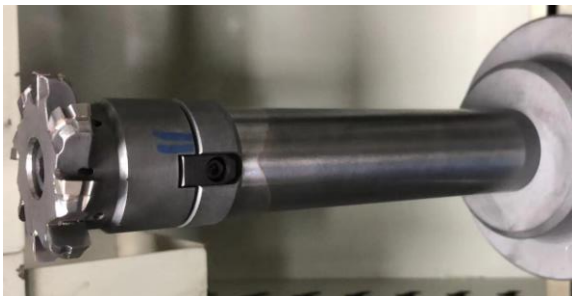
LXGU1208



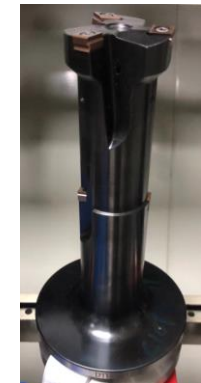
### Tailor-made Slot Milling



### High Precision Tailor-made Slot Milling



### Tailor-made Combination Tool







# Rotating Tool Lines

## 1. Manufacturing Solutions for Automotive Industry ★ Bracket

Face Milling



Carbide Tools



PAD Groove Milling



T-Groove Cutter Milling





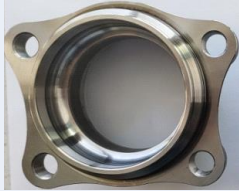

# Rotating Tool Lines

## 1. Manufacturing Solutions for Automotive Industry

### ★ Automotive wheel bearing

The main function of the wheel bearing is to load-bearing and provide precise guidance for the rotation of the wheel, it bears both axial and radial loads, is an important part.



材料/Material	Bearing Steel (SUJ2)	
品牌/Manufacturer:	TOTIME	
工具型号/Tool:	M12X1.5	M14X1.5
材质/Grade:	CPM	CPM
切削速度Vc ( m/min ):	30	30
每转进给f ( mm/rev):	1.5	1.5
每分钟进给Vf ( mm/min.):	1195	1024
切削深度ap ( mm ):	10.5	10.5
平均寿命(Average m)	20	31.5
图例/Picture		

1. The product is made of CPM.
2. Special helix angle and unique cutting edge design greatly improve product performance.
3. Corresponding coating design according to different material characteristics, which greatly provides the wear resistance of the tap.



# Rotating Tool Lines

## 2. Manufacturing Solutions for Mould Industry ★ Plastic Mould

### Semi-finishing

TTP Series  
3 Cutting Edges Shoulder Milling



TPKT150508



### Drilling

U Drill Series



SPMX060204



### Finishing

C-ABPF Series  
High-precision Profile Milling



SP1W160

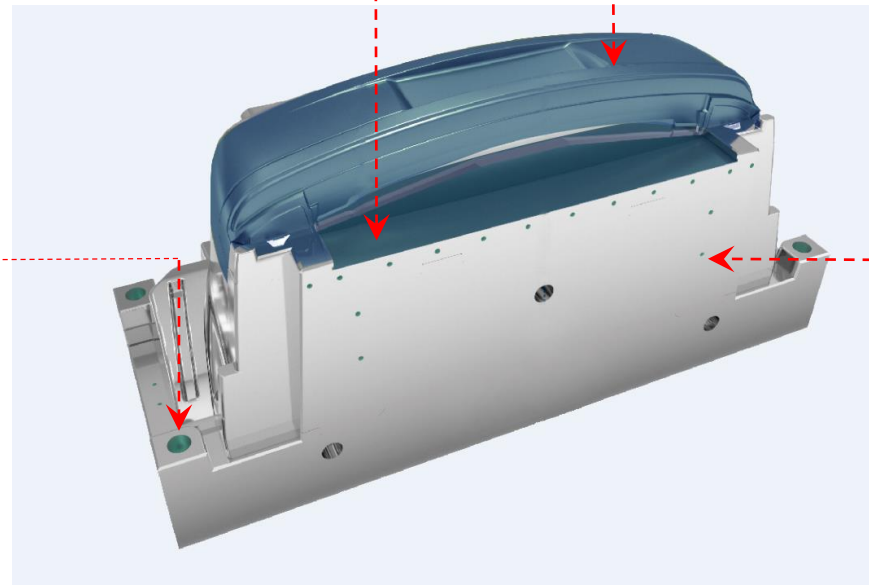


TOTIME48-B Series  
High-speed finishing Milling



### Deep-hole Machining

TTS Series (12XD-30XD)  
Deep-hole Internal Cooling Drill





# Rotating Tool Lines

## 2. Manufacturing Solutions for Mould Industry ★ Plastic Mould

### Cost-effective Face Milling

**TSON45 Series**  
8/16 Cutting Edges Face Milling



SNMU1305



ONMU0505

### Rough Milling

**TRD Series**  
Universal Profile Milling



RDKT10T3M0



### External Surface Milling

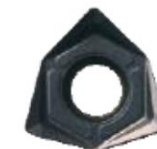
**TAN90 Series**  
High-efficiency External Surface Milling



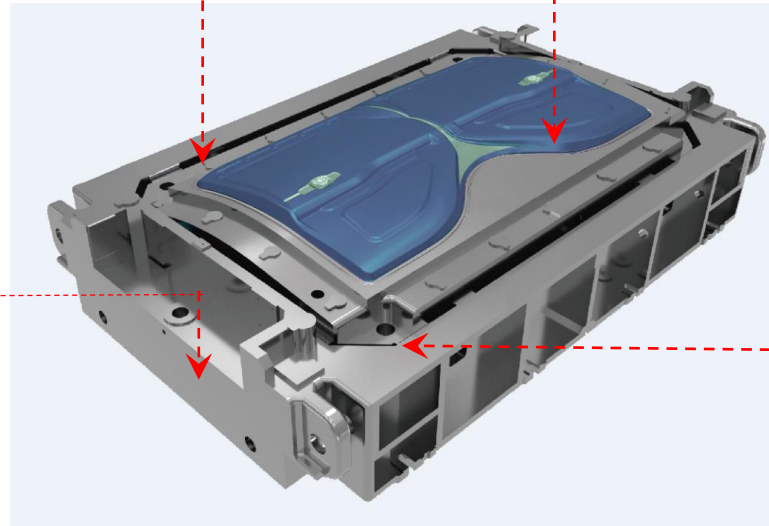
ANKT0904

### Step and Side Milling

**TWN90 Series**  
Cost Effective Step and Side Milling



WNMU0806





# Rotating Tool Lines

## 2. Manufacturing Solutions for Mould Industry ★ Plastic Mould

### Cost-effective Face Milling

MFPN66 Series  
10 Cutting Edges Face Milling



PNMU0905

### High-feed Rough Milling

MRH Series  
High-feed Milling



SOMT1405

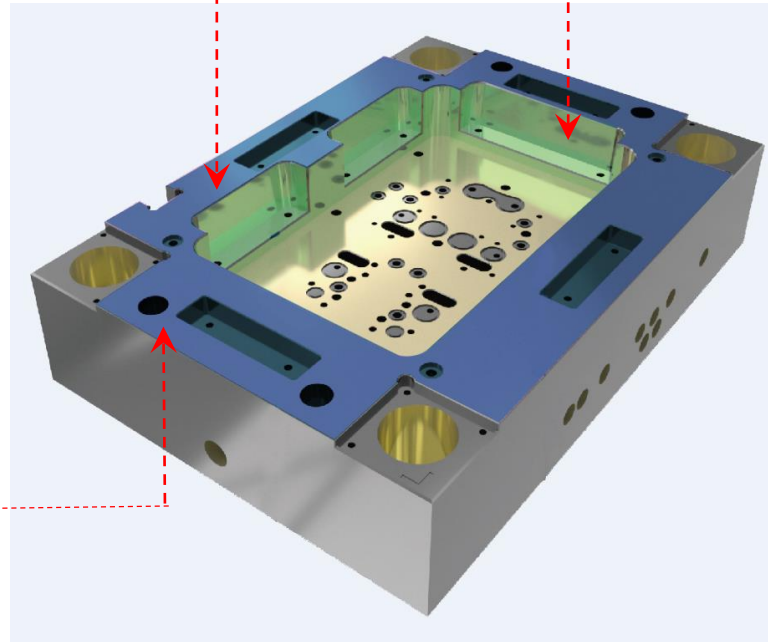
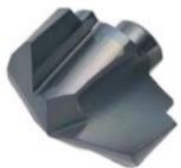


LOGU0303



### Drilling

DTTC Series



### Pocket Milling

Multi-functional Series  
End Mills with Exchangeable Heads

Tungsten Milling Holder



MFT Series



HHD Series



HSB Series



HRTA Series



# Rotating Tool Lines

## 2. Manufacturing Solutions for Tube Sheet of Heat Exchanger

### ★ Tube Sheet



Workpiece	Tube Sheet			
Material	16MnIII	20MnMoIV	09MnNiD	S30408IV
Tool No.	BTA-D1928-CT-3	BTA-D1610-CT-3	BTA-D1925-CT-3	BTA-D1550-CT-3
Vc m/min	78.7	80.87	75.5	63.3
N rev/min	1300	1600	1250	1300
F mm/min	110	90	120	60
Tool life m	40	30	42	25

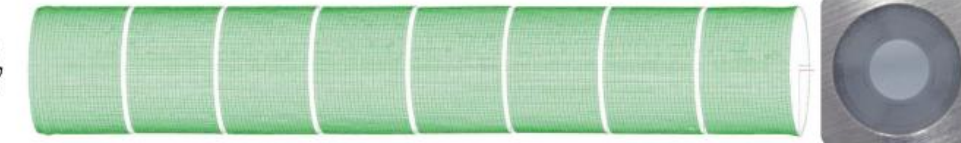
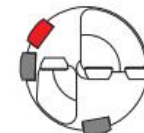
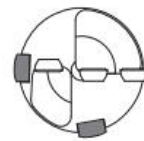
Patented and Original Design of Three Guide Pad



Restrain Drilling Vibration

Verticality Contrast

Circularity Contrast





# – Intelligent Plant

## Intelligent Tool Cabinet



## Warehouse dispatch terminal



## Software service

The platform is a tool life cycle management solution tailored for customers in the process of tool use in precision manufacturing enterprises.

It helps users to use tools more concisely, and the tool use management process is more standardized, effective, traceable. Thus improving production efficiency and reducing tool management costs during the tool use.

# THANK YOU



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[www.totimetool.net](http://www.totimetool.net)