



Precision Meets Perfection,  
Economical Solutions.



2024

# KETEC KU SERIES THICK TURRET

Visit us: [www.ketecooling.com](http://www.ketecooling.com)



“  
Precision  
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Economical  
Solutions.  
”

# About Us

## Innovative Solutions for Fabrication Challenges

Founded in 1998, KETEC Precision Tooling is the **largest manufacturer of Punch Press and Press Brake tooling in China and Asia.**

With over 25 years of unremitting efforts in product innovation and development, as well as manufacturing refinement - In 2010, our Punch Press and Press Brake tools were appointed by the government as the industrial standard in China. As the leader of CNC tooling for the sheet metal fabrication industry. Our products have always been well-known **high-quality, customer-centric, and cost-effective.**

## Empowering Metal Fabricators with Top-notch Tooling Solutions

Staying competitive in the manufacturing industry means having better flexibility, quality and efficiency while maintaining a sustainable profit.

That's why many manufacturers choose us. Through our unwavering commitment to quality control, refined manufacturing processes, and consultative customer service, we partner with our customers to minimize costs, boost revenue, and sustain their competitive edge.



# Milestones

## 2004

### Obtained Certifications

KETEC®'s trademark was registered as an international trademark and obtained ISO certification - **ISO9000:2000**.



## 2008

### Equipped with High Capacity

Experienced tremendous growth and built our current manufacturing facilities **encompassing a total of 13 acres** in Conghua, Guangzhou, China.



## 2010

### Became National Standard

The National Standardization Committee of China **commissioned KETEC to draft the standard** for "Tooling for CNC Turret Punch Machine." In July of the same year, the Ministry of Industry and IT of China issued and implemented the standard **JB/T10928-2010** for "CNC Turret Punch Press Tooling."



## 2012

### Largest in Asia

KETEC became the **largest exporter by volume** and manufacturer of CNC sheet metal tooling in Asia with an annual revenue of **\$45 Million USD**.



## 2020

### Customer Centric

Implemented both **ERP and CRM software** company-wide to better serve our customers.



## Official OEMS Partners



## Customer Highlight







# Facilities Gallery

## Ordering Workshop



## Heat-Treatment Center



## Standard Production Line



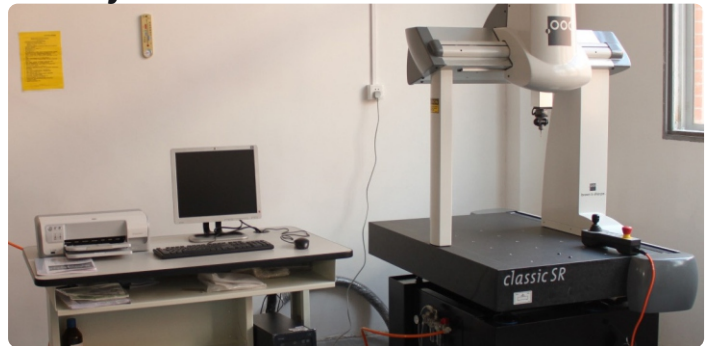
## Customized Line



## Tooling Test Center



## Quality Control Lab



# Product Offerings

We specialize in sheet metal fabrication tooling, including **Punch Press, Press Brake, Stamping tools and related machines.**

## Punch Press Tooling

- Thick Turret Tooling
- Thin Turret Tooling
- TRUMPF® Style Tooling
- Salvagnini®
- Muratec-Wiedemann®



## Stamping Tools

- Automotive
- Thick Plate
- Copper Plate



## Press Brake Tooling

- Euro-Amada® Style
- Wila®-Trumpf® Style



## Machines

- Tool Grinding Machine
- 2D Inspection Machine



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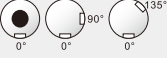
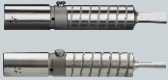
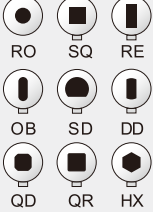

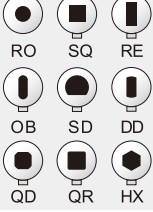

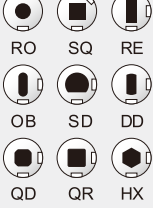
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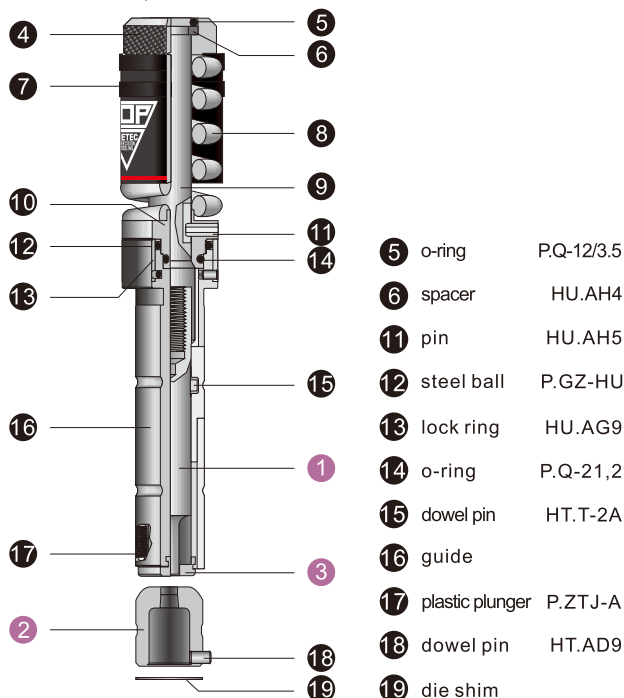
# Thick Turret KU Series


## Thick Turret KU Series

Ketec's 90 series is one of our best-selling product lines, due to its reliability and popularity. Our KU series can be equipped with TiCN, Standard and other industry common features. Categories come in station A ( $\frac{1}{2}$ " ), B ( $1\frac{1}{4}$ " ) and offer full interchangeability with other mainstream tooling manufacturers.

Product	Angle	Shape	STD. Materil	+ TiCN	KPM + TiCN
<b>Punch Ass'y</b> 		single groove (0°)	HU.AA1RO.	HU.AA1TRO.	HU.AA1MRO.
		double grooves (0°, 90°)	HU.AA2**.	HU.AA2T**.	HU.AA2M**.
<b>1 Punch</b> 	standard slot position 	round	HU.AP1RO.	HU.AP1TRO.	HU.AP1MRO.
		square	HU.AP1SQ.	HU.AP2TSQ.	HU.AP2MSQ.
<b>2 Die</b>  standard: slugfree options: slugbugger vaccum	standard slot position 	rectangle	HU.AP1RE.	HU.AP2TRE.	HU.AP2MRE.
		oblong	HU.AP1OB.	HU.AP2TOB.	HU.AP2MOB.
<b>3 Stripper</b> 	standard slot position 	single D	HU.AP1SD.	HU.AP2TSD.	HU.AP2MSD.
		double D	HU.AP1DD.	HU.AP2TDD.	HU.AP2MDD.
		quad D	HU.AP1QD.	HU.AP2TQD.	HU.AP2MQD.
		quad R	HU.AP1QR.	HU.AP2TQR.	HU.AP2MQR.
		hexagon	HU.AP1HX.	HU.AP2THX.	HU.AP2MHX.
		other shape	HU.AP1**.	HU.AP2T**.	HU.AP2M**.
		round	HT.AD1RO.	SKH51	HT.AD1HRO.
		square	HT.AD2SQ.		HT.AD2HSQ.
		rectangle	HT.AD2RE.		HT.AD2HRE.
		oblong	HT.AD2OB.		HT.AD2HOB.
		single D	HT.AD2SD.		HT.AD2HSD.
		double D	HT.AD2DD.		HT.AD2HDD.
		quad D	HT.AD2QD.		HT.AD2HQD.
		quad R	HT.AD2QR.		HT.AD2HQR.
		hexagon	HT.AD2HX.		HT.AD2HHX.
		other shape	HT.AD2**.		HT.AD2H**.
		round	HU.AS1RO.	SKH51	HU.AS1MRO.
		square	HU.AS1SQ.		HU.AS1MSQ.
		rectangle	HU.AS1RE.		HU.AS1MRE.
		oblong	HU.AS1OB.		HU.AS1MOB.
		single D	HU.AS1SD.		HU.AS1MSD.
		double D	HU.AS1DD.		HU.AS1MDD.
		quad D	HU.AS1QD.		HU.AS1MQD.
		quad R	HU.AS1QR.		HU.AS1MQR.
		hexagon	HU.AS1HX.		HU.AS1MHX.
		other shape	HU.AS1**.		HU.AS1M**.

The positive direction of guide, punch and die is the anti-clockwise direction by overlook at the work position.



	punch head ass'y 4 punch head 7 canister 8 spring 9 driver 10 adjusting ring	HU.AH9 HU.AH1 P.ZST_TOP-A P.TH-H9A HU.AH2 HU.AH3
	open guide single groove (0°) double grooves (0°, 90°) double grooves (0°, 135°) others	HU.AG1 HU.AG2 HU.AG3

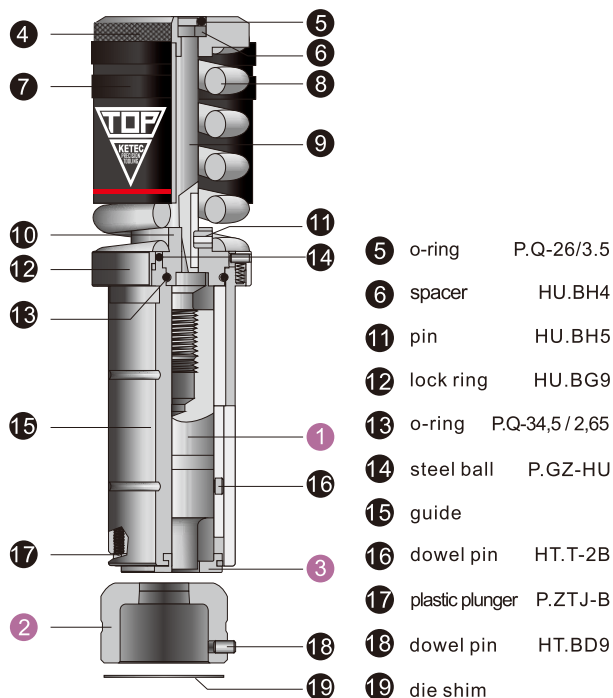
#### Advantages:

- ① Nitriding guide with compressive, wear and rusty resisting
- ② High speed steel punch with hardness HRC 63°±1
- ③ High precise and interchangeable with main brands
- ④ General use for punch head ass'y without assembling
- ⑤ Punch grind life is 6.0mm [0.24"], improves triple life time
- ⑥ Adjusting time will be shorten cut by a half
- ⑦ ABS oil mist lubrication, deburring, anti-adhension, long life
- ⑧ Maximum thickness is 3.8mm [0.15"] MS



Product	Angle	Shape	STD. Material	+ TiCN	KPM + TiCN
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The positive direction of guide, punch and die is the anti-clockwise direction by overlook at the work position.



- 5 o-ring P.Q-26/3.5
- 6 spacer HU.BH4
- 11 pin HU.BH5
- 12 lock ring HU.BG9
- 13 o-ring P.Q-34,5 / 2,65
- 14 steel ball P.GZ-HU
- 15 guide
- 16 dowel pin HT.T-2B
- 17 plastic plunger P.ZTJ-B
- 18 dowel pin HT.BD9
- 19 die shim

	1 punch head ass'y	HU.BH9
	4 punch head	HU.BH1
	7 canister	P.ZST_TOP-B
	8 spring	P.TH-HTB
	9 driver	HU.BH2
	10 adjusting ring	HU.BH3
	guide	
	single groove (0°)	HU.BG1
	double grooves (0°, 90°)	HU.BG2
	double grooves (0°, 135°)	HU.BG3
	others	

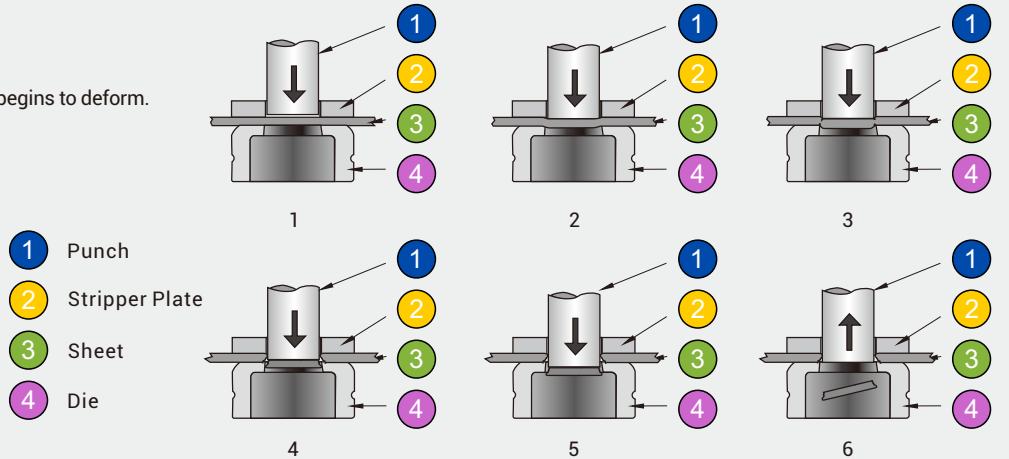
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- ④ General use for punch head ass'y without assembling
- ⑤ Punch grind life is 6.0mm [0.24"], improves triple life time
- ⑥ Adjusting time will be shorten cut by a half, change stripper
- ⑦ Maximum thickness is 6.0mm [0.24"] MS
- ⑧ ABS oil mist lubrication, deburring, anti-adhesion, long life

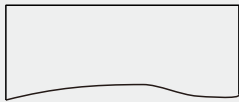


## PUNCHING PROCESS

1. The stripper plate presses the sheet tightly.
2. The punch contacts the sheet, and the sheet begins to deform.
3. The punch and die begin to shear the sheet.
4. The sheet begins to tear.
5. The punch reaches the bottom.
6. The punch retracts, and the slug falls freely.



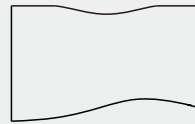
## PUNCH SHEAR



Horizontal Shear



Rooftop Shear

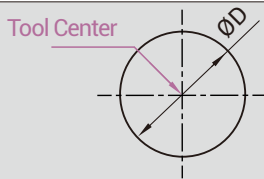


Quad Concave Shear

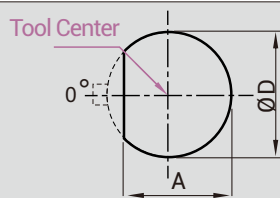


Double Concave Shear

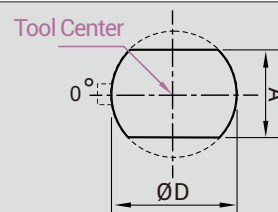
## STANDARD SHAPE DIMENSION



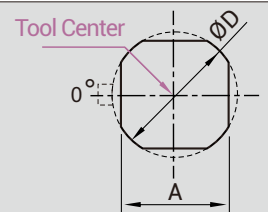
Code: RO  
Size: ØD



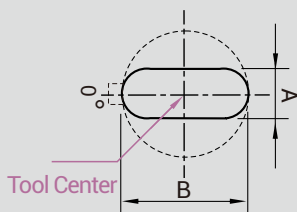
Code: SD  
Size: ØD\*A



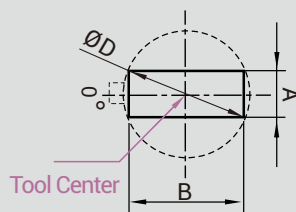
Code: DD  
Size: ØD\*A



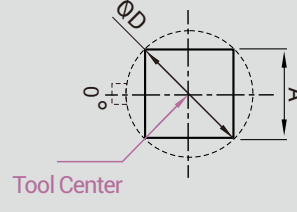
Code: QD  
Size: ØD\*A



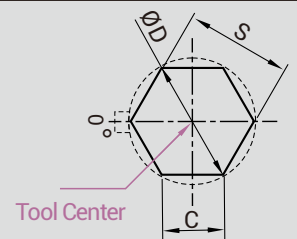
Code: OB  
Size: ØA\*B



Code: RE  
Size: A\*B



Code: SQ  
Size: A\*A



Code: HX  
Size: S

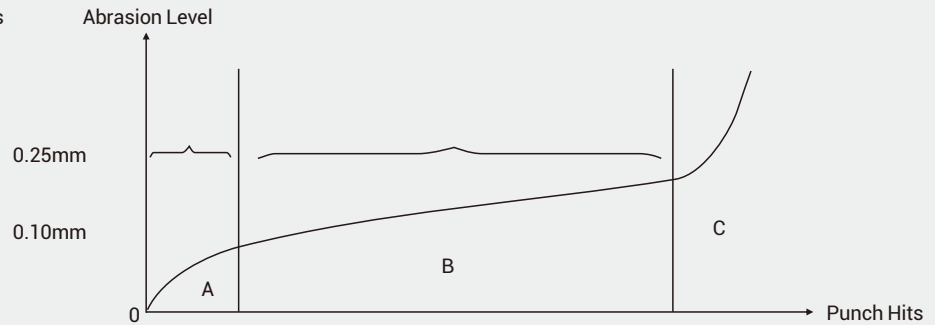
## ABRASION LEVEL & PUNCH HITS

The relationship of Abrasion Level & Punch Hits

A: Initial abrasion stage

B: Normal abrasion stage

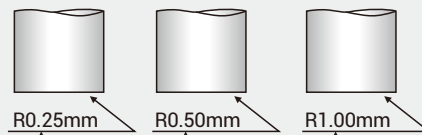
C: Abnormal abrasion stage



## TOOLING REGRINDING INSTRUCTION

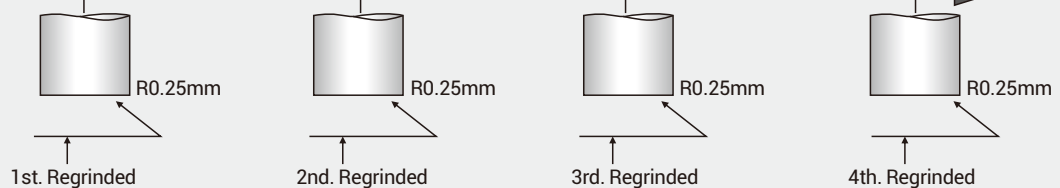
Following the correct instruction to regrind the punch, the tooling life will be extended to double.

Without regrinding

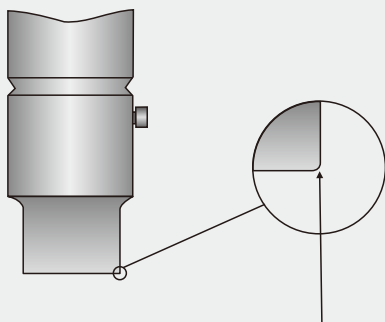


Cumulative punching times

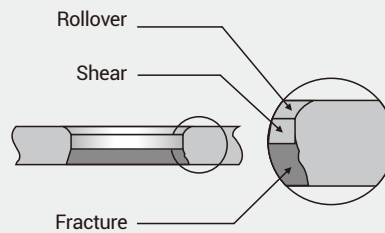
Correct regrinding



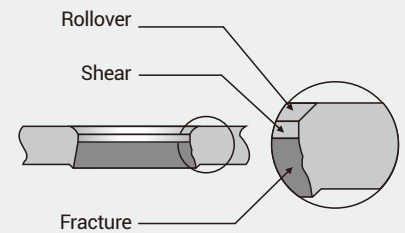
## TIMING FOR REGRINDING



Corner radius less than 0.25mm, tooling needs regrinding.



An ideal punched hole



A flawed punched hole





# Precision Meets Perfection, Economical Solutions.

## < Phone number

North America  
+1 (339) 233-4347 (Charlie Qi)

China  
+86 (20) 37965500 (Christy Wen)  
+86 188-1981-5253 (Simon Tam)

## < WhatsApp

+1 518-837-1464 (North America)  
+86 188-1981-5253 (International)

## < Address

North America  
154 Wells Ave, Newton, MA, 02459, USA.

China  
No.7 Lifeng Road, Mingzhu Industrial Park, Conghua  
Guangzhou, China. 510931.

## < Email

North America  
Charlie.q@ketectooling.com

China  
International@ketectool.com  
Simon.t@ketectooling.com

## < Fax

+86 (20) 3796 5393

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