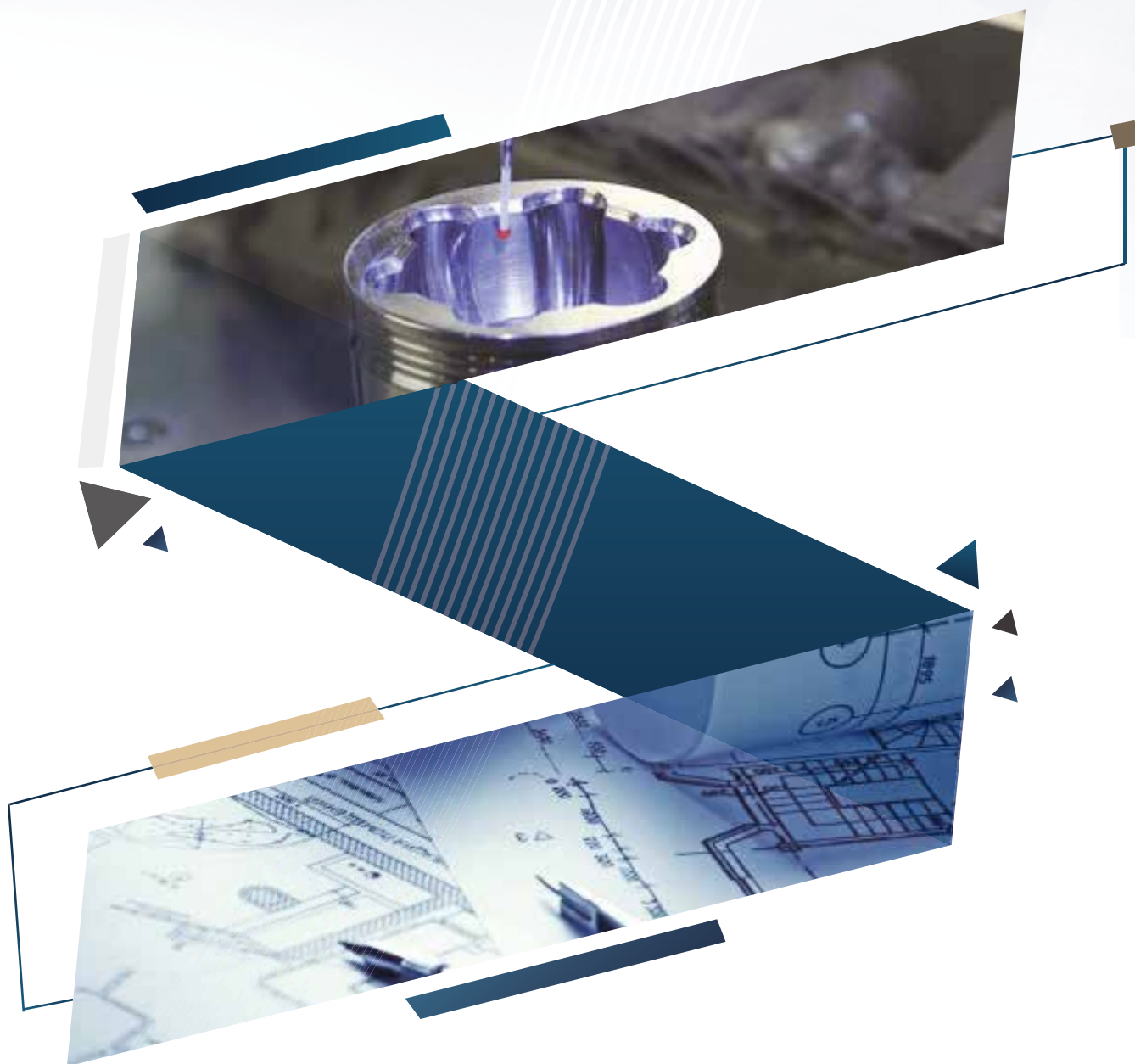




Sundi Precision Tools

A Professional High Precision Components and Mold Maker

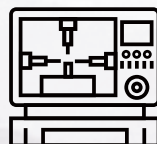
Precision Grinding



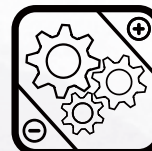
E.D.M Service



Metal CNC Service



Mold and Fixture



A PUNCH TOOLING



OVERVIEW

Punch components are the maintenance parts for metal stamping or machinery works. Are you looking for a reliable, quick-turn supplier offering precision punches with material tungsten carbide, ceramic, or tool steel?

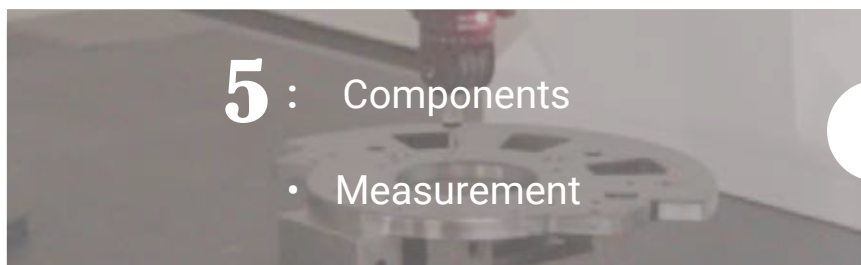
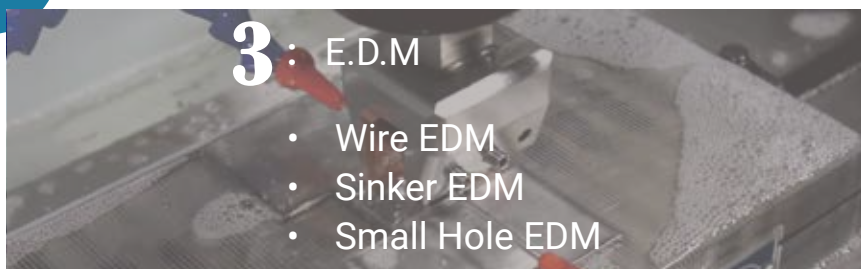
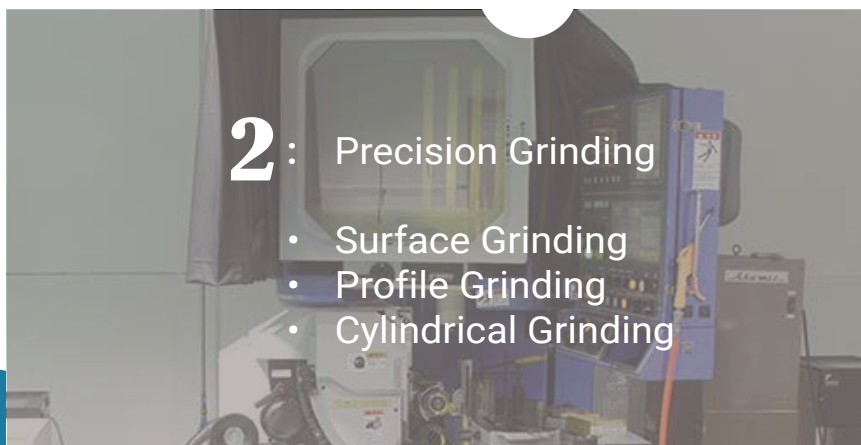
Our unmatched in-house capacity ensures your parts are delivered on time every single time.

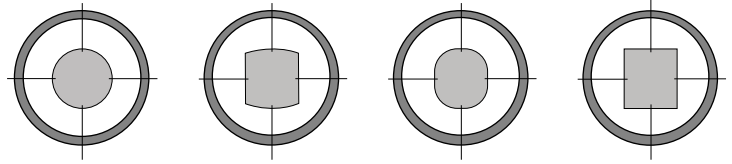
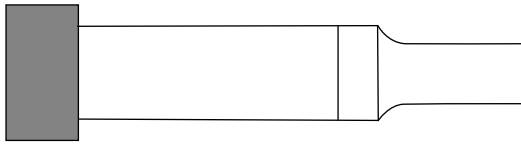
As for Sundi, Whatever low or mass-volume production you need, we will process the punch components production with a top-quality level.

FEATURE

- | | |
|---|---|
| ▪ Improve tooling life by 50-100% from the trim punch and die | ▪ Higher resistance for certain precision metal stamping operations |
| ▪ Reduce the maintenance of metal stamping | ▪ Less downtime when the spare parts need to be replaced |

WHAT WE CAN DO

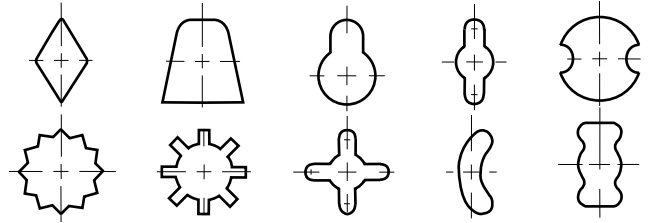




Round Punch

- Material: Carbide, HSS Rc60-63, Ceramic
- Tolerance: $\pm 0.002\text{mm}$
- Coating: DLC, TiCN, TiN
- Manufactured to ISO standards where applicable.

Special Shapes



	Material				Treatment			Outer Diameter		Description
	Ceramic	Carbide	SKD11	HSS	DLC	TiN	TiCN	Min	Max	
				●	●			8.220	15.970	» High-speed steel punch for punching SUS or copper » 3 times working life after coating
		●						13.000	18.000	» Special shape with Wire Cutting » Tight tolerance to be $\pm 0.002\text{mm}$
	●							10.000	13.550	» Wear and corrosion resistance » Suitable for high-speed stamping in the lead frame industry
		●			●			11.000	15.000	» Suitable for mass hole processing » High resistance to corrosion and high-temperature oxidation
			●					54.68	63.720	» No break after punching 1000 times » Polish surface and tight tolerance

Typical Application



Application

Hole Punching, Deep Drawing

Working Material

Copper, Iron, Aluminum, SUS

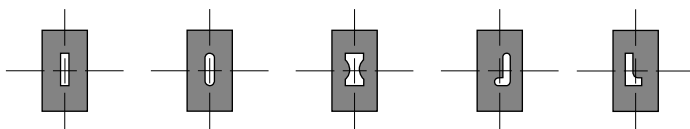
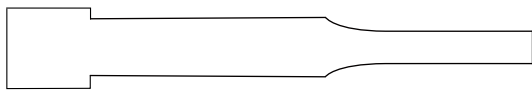
Surface Finish of workpiece

No Burrs

Tolerance of the Stamping Parts

$\pm 0.01\text{mm}$

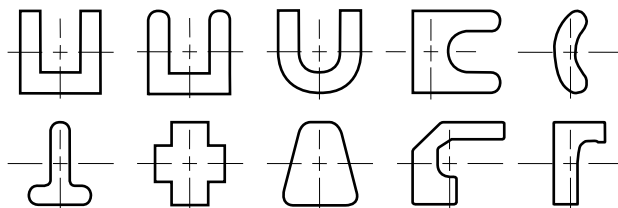
- The metal punch can be custom-made and machined according to clients' requirements.
- The workpieces have no burrs on the end face, flat head chamfering, parallel and vertical cut surfaces, bright appearance.
- Strictly control the punches' quality and inspected them before shipment.



Square Punch

- Material: Carbide, HSS Rc60-63, Ceramic
- Tolerance: $\pm 0.002\text{mm}$
- Coating: DLC, TiCN, TiN
- Manufactured to ISO standards where applicable

Special Shapes



Advantages Of Our Custom Metal Punches

High-quality material

Material from reliable suppliers, such as FUJILLOY, CERATIZIT, KENNA, and ASSAB.



Strong Preprocessing Experience

We have more than 20 years in service of metal stamping companies from home and abroad.



Technical Support

Our professional team will assist your project from inquiry to endproducts.



Steady Product Quality

The accuracy can be within $\pm 0.002\text{mm}$, greatly matching the punch die, saving the assembly cost, and improving the working efficiency.



1-Year Warranty

Quality assurance and after-sales without worries for as long as 12 months.

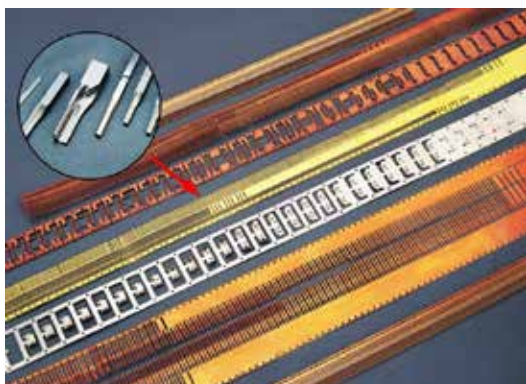


Custom-Made Service

Customization according to different demands.



Typical Application



Application

Bending, cutting

Working Material

Copper, Iron, Aluminum, SUS

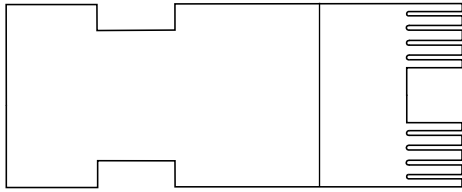
Surface Finish of workpiece

No Burrs

Max punching speed

Times/2500min

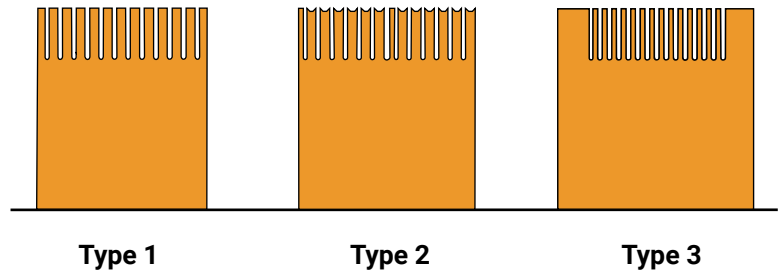
- The metal punches are the replacement parts of the progressive stamping tooling, which can process parts with a larger size range and more complex shapes.
- The size and accuracy of the metal punch will guarantee the quality of the stamping parts, and extend the mold life.



Bar Cut Punch

- Material: Carbide
- Tolerance: $\pm 0.002\text{mm}$
- Coating: DLC, TiCN, TiN
- Manufactured to ISO standards where applicable

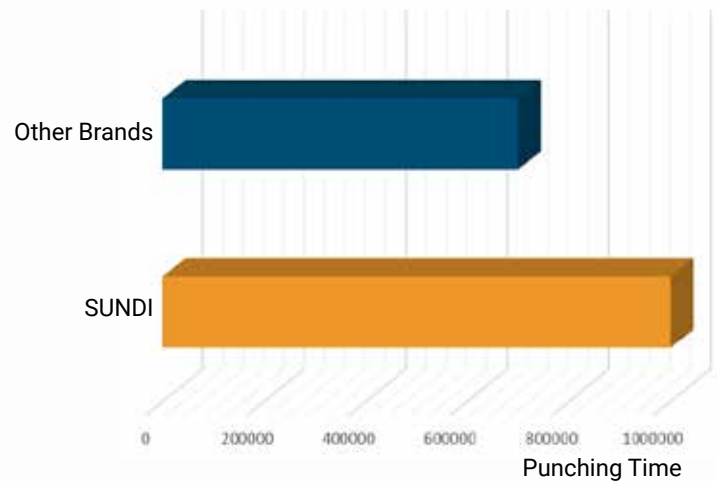
Special Shapes



Machining

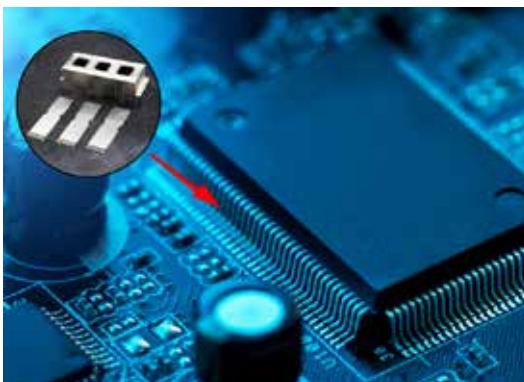


Comparison



- All slots are grind by profile grinding
- Qualified tungsten carbide from well-known brands, such as FUJILLOY, Kennametal, EVERLOY, CERATIZIT, etc
- Teeth with Min width of 0.2 and Max depth of 6mm

Typical Application



Application

Semiconductor Industry

Stamping Material

Brass with Tin Plating

Thickness

0.1-0.2mm

Speed

>500 tims /Min

- The cut punch coated with DLC coating will have longer working life and properties such as stable quality, good adhesion to the matrix, good wear resistance, low friction coefficient and good corrosion resistance.

Grade List

Series	Grade	Cobalt content Co%	Density [g/cm³]	Hardness [HRA]	TRS [MPa]	Compression Strength [MPa]	Yan´s Modulus [GPa]	Grain Size [µm]
GF	GF30T	12.0	14.25	90.0	3600	5000	580	0.8~1.8
	GF40H	12.5	14.20	89.5	3700	4700	570	1.0~2.0
	GF50H	14.0	14.00	88.5	3800	4600	550	1.5~3.0
	GF55HH	16.5	13.80	87.4	3500	4200	540	1.0~4.0
GA	GA10H	6.0	14.90	90.5	2950	5200	620	0.5~5.0
	GA18	12.0	14.17	89.5	3600	5500	580	1.0~2.0
	GA20	13.5	14.05	90.0	3700	5300	550	0.5~1.5
GU	GU20	10.3	14.40	91.5	3800	5600	600	0.8
	GU40	15.0	13.90	90.5	4000	5300	540	0.8
UF	GU25UF	12.0	14.05	92.2	4400	6000	570	0.5