PCD LASER

5-axis Laser Precision Machines

Ganzhou Power Creative Development Tools Co.,Ltd.

Basic Info of Company

- **Company Name**: Power Creative Development(for short PCD);
- **The meaning of company na mes**: Polycrystalline Cube Diamond
- **Founding Time**: Sept. of 2017
- **Investment**: 50 Million RMB
- **Company Area**: More than 13,000 ㎡
- **Employees**: More than 60
- **Company Mission**: Providing High quality laser machines for cutting tools industry

Core products and technological advantages

Core Products

- 5-axis Laser Precision Machines
- Specially for cutting tools making, replacing traditional grinding process
- Self-developed software and OS, Easy Operation
- Super precise 5-axis micro-nano machining equipment
- Applicabletoaerospace,auto,3Celectronics,moldmanufacturing,andmedicalindustries
- Specific solutions covering all model requirements from basic-level to high-quanlity

SINCE 2013

History

2013

Prototype machine

2017

Company founding

2021

Commercial selling

2025

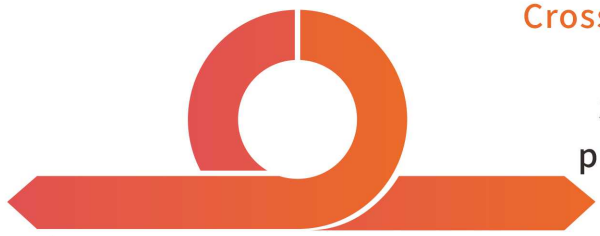
Upgraded new design

Breakthrough

- R&D center established in Lithuania;
- China's first laser machine for cutting tools (launched in 2013),8 years testing in lab
- more than 8 years for internal testing, keeping innovation and new developments
- Efficiency first：Redesign of mechanical structure and software algorithm, highest efficiency

Industry solutions and market coverage

Core Applications:
PCD Tools:
Laser processing of ultra-hard materials, Overcoming the limits of conventional grinding.;



Cross-Industry Applications:
Future Micro CNC:
Supports multi-material processing (PCD, carbide, molds, medical and semiconductor parts).

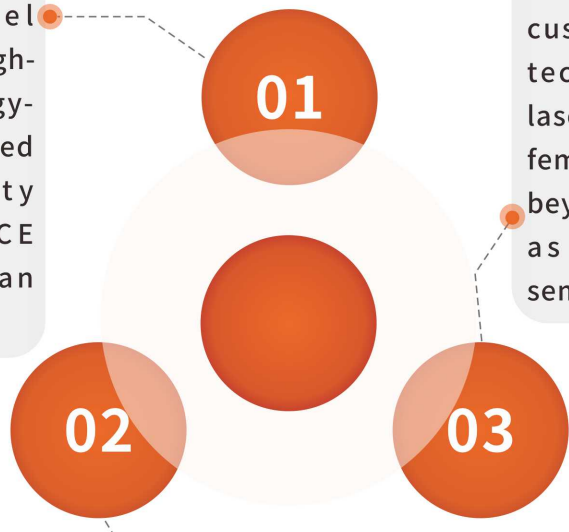
Differentiated competitiveness

Independent Innovation

More than 20 utility model patents.Certified as a National High-Tech Enterprise and Technology-Based SME.Products are certified under the ISO9001 Quality Management System and CE certification for the European market.

Cost Efficiency & Flexibility

A wide range of models with optimized cost performance, supporting customers in maintaining long-term technological leadership.Universal laser processing centers (with optional femtosecond laser) extend applications beyond cutting tools to industries such as molds, medical devices, and semiconductors.



Professional Service Experience

Engineering teams with an average of more than 5 years of experience, providing service support throughout and beyond the equipment lifecycle.Fast and accurate response to help customers solve production challenges efficientl

Business philosophy and vision

Core Values	Integrity • Sharing • Cooperation • Win-Win
Business Principle	Service and credibility come first, empowering customers through innovative technology.
Vision	To become a global benchmark in intelligent manufacturing and promote Chinese advanced equipment worldwide.

Company Positioning

PCD Laser Co., Ltd. is a technology-driven company supported by strong industrial resources and serving the global market. We are committed to becoming a leader in laser processing for superhard materials, providing customers with efficient, intelligent, and customized equipment solutions.

Company Concept & Solution

PCD Laser, as an innovative pioneer in laser processing for superhard cutting tools, always focuses on customer needs.Our Future Solution breaks the traditional business model of simply selling machines.We focus on the real needs throughout the entire tool production process and provide one-stop comprehensive solutions.From process optimization and equipment maintenance to production management, PCD Laser provides precise and efficient solutions based on deep technical expertise and extensive industry experience.Choosing PCD Laser means partnering with a professional team that helps customers manage complex tool production challenges, improve core competitiveness, and achieve sustainable profitability.

Enterprise Qualifications and Honors

Application of Pushide Laser

Main applications: PCD/CBN tools and micro-size tools.

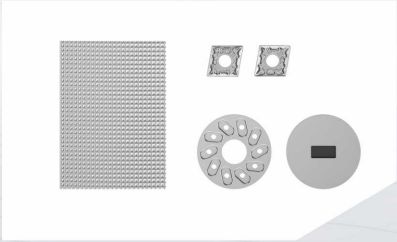
Nanosecond Laser Machine: applied for PCD/MCD tools.

Femtosecond Laser Machine: for all kinds of tool materials like carbide, CBN, PCD and so on.

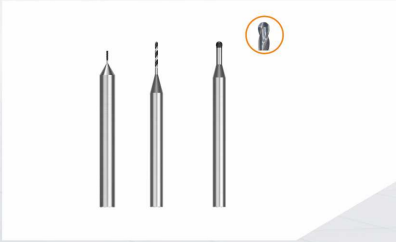
Integral Ultra-hard tools

Rod-shaped Ultra-hard Tool

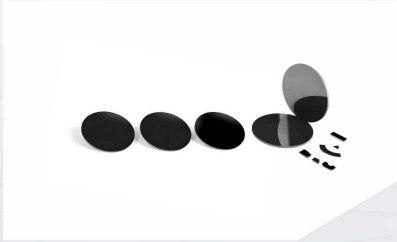
Crown cutter



Mold engraving



Micro-size tools

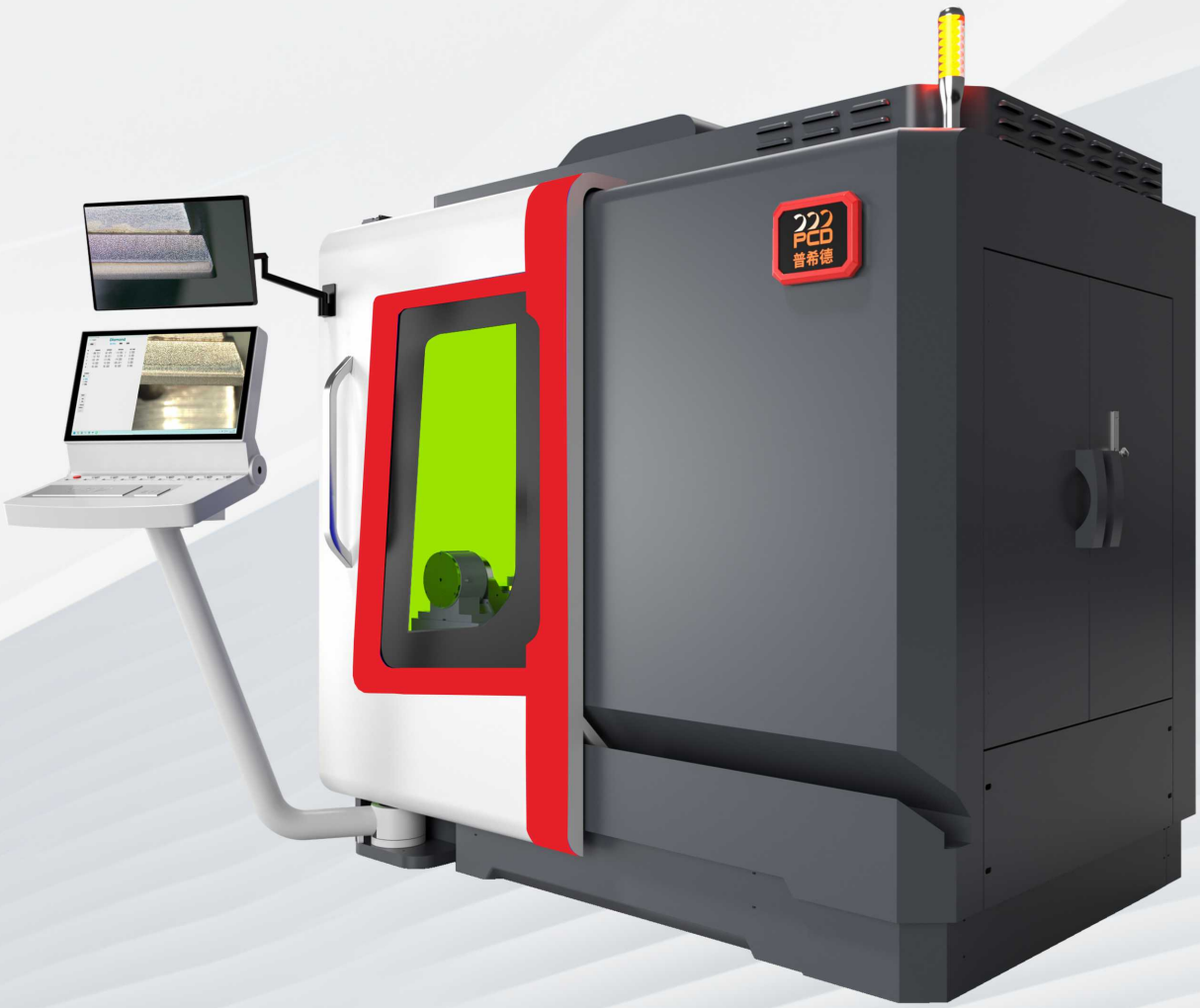


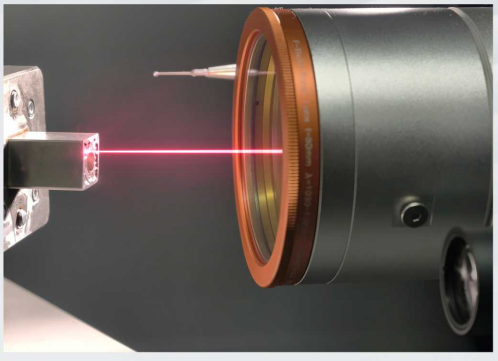
Laser blanking

Advantages

+Pioneer in Laser Material Processing, 12 Years of Laser Technology Experience.
+Laser Processing Can Replace the Traditional Machining Process Wire Cutting and Grinding.
+non-contact machining, green machining with low electricity consuming.
+Natural Marble Bed, Linear Motor, Closed-Loop Control.
+Simple operation, convenient maintenance, and significantly reduced usage barriers.
+Intelligent System: Intuitive Interface with Smart Functions for Easy Complex Machining Tasks.

Focus on tools ,Focus on LaserTec



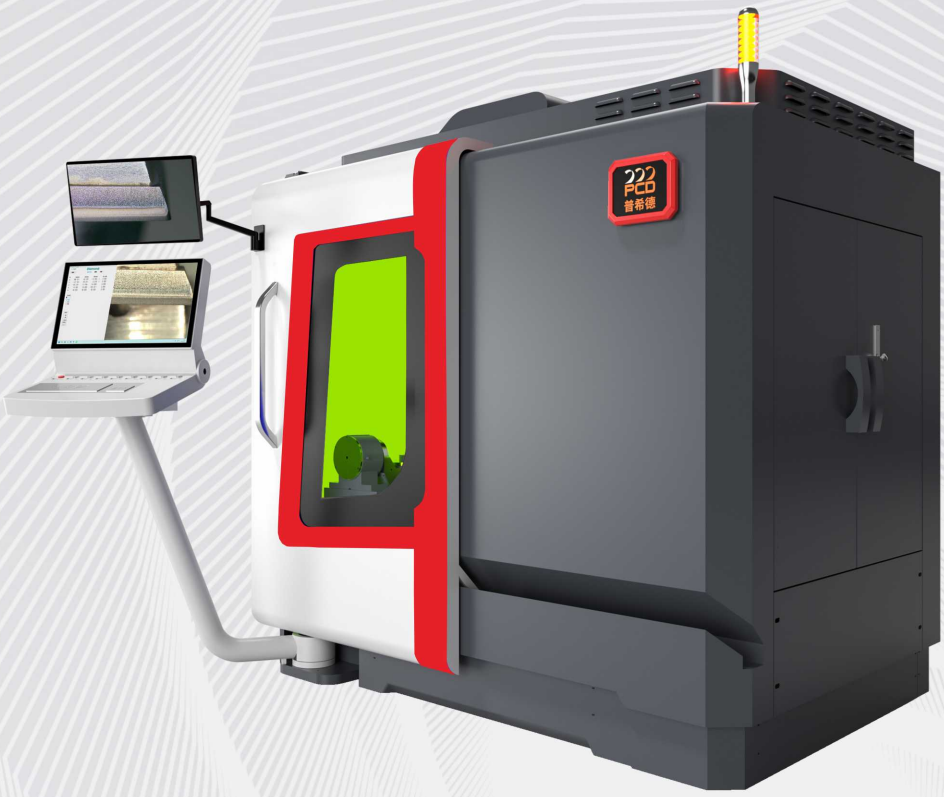


Product Information - Configuration Parameters

Item	Parameters				
Model	FUTURE LINEAR III	FUTURE UNIVERSAL II	FUTURE CUTTING II	FUTURE COMFORT II	FUTURE MICROII
X / Y / Z	380-380-380mm	360-320- 350mm	320-270- 320mm	380-380- 380mm	380-380- 380mm
rotating table	A-axis :0-360 ° B-axis: ±45 °	A-axis :0-360° B-axis: + 92° , -25°	A-axis :0-360 ° B-axis: ±40 °	A-axis :0-360° B-axis: + 92° , -25°	A-axis :0-360° B-axis: + 92° , -25°
Laser Type	1064 Nanosecond Laser			1064 picosecond laser	1064 femtosecond laser
Main Functions	ultra-hard tools cutting edge process;tool flute making	ultra-hard tools cutting edge process;tool flute making; Integral Ultra-hard tools	Rod-shaped Ultra-hard Tool	ultra-hard tools cutting edge process;tool flute making; Integral Ultra-hard tools	micro ultra-hard cuttingtools edge process;tool flute making;engraving on any kind of material
linear axis positioning accuracy	positioning accuracy : ±0. 003mm, repeated positioning accuracy: 0. 003mm		positioning accuracy: ±0. 004mm, repeated positioning accuracy:0 . 004mm	positioning accuracy : ±0. 002mm, repeated positioning accuracy: 0. 002mm	
A/B axis swivel table positioning accuracy	positioning accuracy : ±3 arc-second, repeated positioning accuracy: 3 arc-second		positioning accuracy: ±4 arc-second, repeated positioning accuracy: 4 arc-second	positioning accuracy : ±2.5 arc-second, repeated positioning accuracy: 3 arc-second	
maximum workpiece weight	30KG	10KG	5KG	10KG	
workpiece mounting interface	HSK-A63 or BT50	HSK-A63	D20 flange clamp interface	HSK-A63	
Maximum tool size	Dia: D300mm Length: L430mm	Dia: D180mm Length: L260mm	Dia: D120mm Length: L180mm	Dia: D180mm Length: L260mm	
Machine dimensions	(length,width, height):2280 × 2950× 2235 mm				
Total weight	5tons				

Applications

FUTURE LINEAR III



FUTURE LINEARIII is vertical structure, interface can be HSK-A63 or BT50.

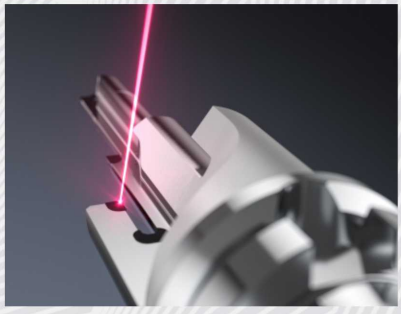
1.the first type laser machine of PCD company, very good reputation.

2.It integrates 12 years of laser technology expertise with In-house software innovations, delivering both high-efficiency processing and convenient operation.

3.First choice for cutting tool s in EV industry , max tool dia is 300mm, max tool length is 460mm, max tool weight is 30kg.

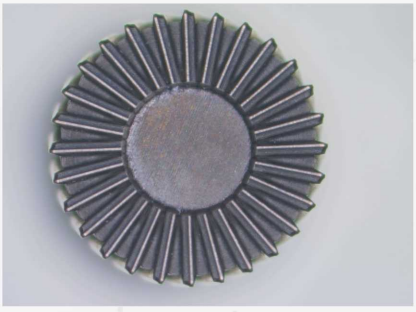
4.Flexible processing methods, for finishing OP, both rake of rake surface and major flank are OK.

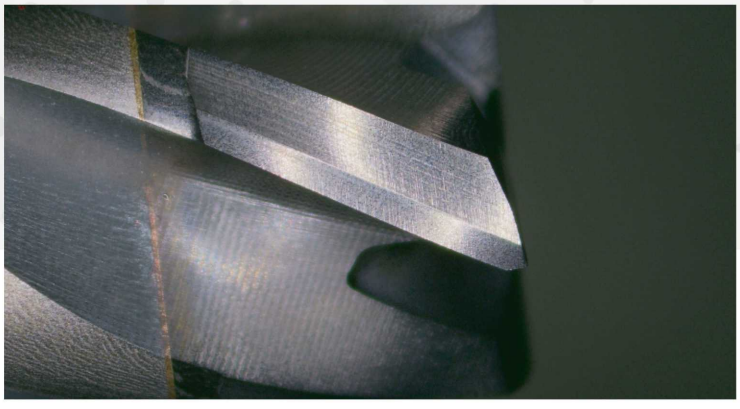
5.It covers 95% of the market for cutting tools.



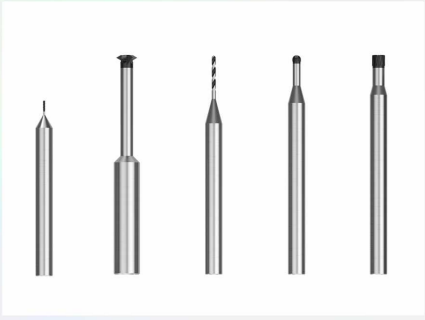
FUTURE UNIVERSAL II

1.It is horizontal structure, flagship model.
2.Full funcion -High flexibility.
3.machining strategy：rfom rake surface or majorflank.
4.Covering 98% of the market for ultra-hard materials (PCD, CBN, MCD, etc.), the range includes all types of rotary tools and tipped tools such as milling cutters, reamers, profile cutters, and engraving cutters forwelding sheets, as well as solid milling cutters and drills.
5.Considering the applications, FUTURE UNIVERSALII is good supplement for FUTURE LINEAR III.It is specially designed forsmall-sized tools. It demonstrates excellent performance in terms of precision, efficiency, and stability intool processing. besidesof thefunctionsof FUTURE LINEAR III,it hasanewfunctionforsolidtool machining. It enables customers to produce more complicatedtools.

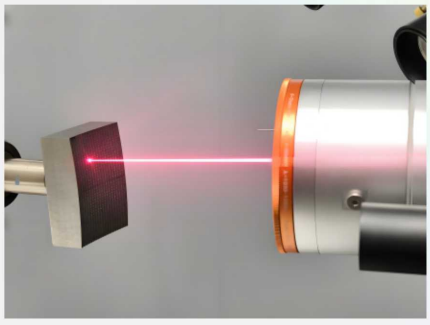




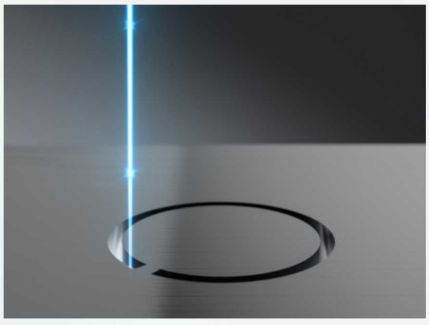
High-precision five-axis laser machine-Femtosecond laser



1. D0.1 micro tools



2.engraving on mould



3.Trepanning

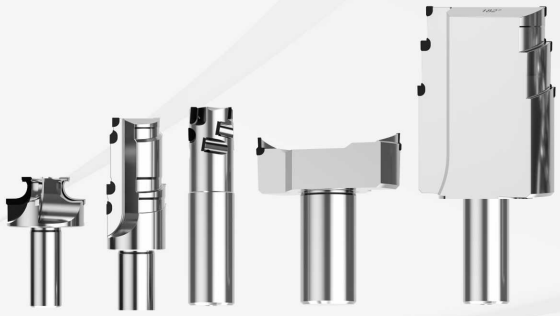
1.horizontal structure+femto laser，specially for micro tools (carbide , PCD and so on)、Chip breaker, tool edge honing with micro-size tolerance, surface polishing and so on.
2.Advantages：non-contact machining, no wheel/electrode usage, no mechanical stress, femto laser can be called cold machining which means little thermal effect on the work piece .
3. Five-axis machine is suitable for various applications, capable of machining complex curved surfaces, internal right angle and narrow grooves etc.
4.with full of range of tool materials like carbide, PCD, CBN, CVD and natural diamond etc.

4.surface treatment

1.**Unique Vertical Design :** Specially engineered for rod-shaped straight-shank tools. It perfectly adapts to over 80% of common tool blanks, making it the ideal solution for high-volume mass production.。

2.Delivers excellent **material removal efficiency** in **pre-machining;** significantly boosts overall productivity when paired with other machines.

3.Key advantages: **high efficiency and easy operation.**



Future Cutting II——ertical Structure | Rod-Type Tool Specialist>>>>>>

Future Comfort II

1. Equipped with a **picosecond laser**, working in combination with Cutting II as a **high-value alternative to femtosecond systems.**

2 .Enables stable **cold machining of various materials** and high-precision finishing of PCD profile tools.

3 . **Cutting II for roughing** + **Comfort II for finishing** delivers performance comparable to femtosecond systems, without product limitations。

4 . Specially developed for **3C industry appearance tools**, offering precise and efficient solutions.

Five axis laser processing machine for woodworking

Parameter

Item	Parameter /Description	
Model	WEALTHY WOOD II	WEALTHY SAW II
Linear Axis Travel	310-320-320mm	270-270-220mm
Turntable Travel	A: 0-360° B: ±45°	A: 0-360° B: ±25° C: ±95°
Machine Dimen.		
Main Function	Woodworking tool, super-hard tool edge machining	6-axis machining for super-hard saw blade edges
Mounting Interfac	HSK-A63	
Linear Axis Positioning Accuracy	Pos: ±0.004mm Rep: 0 .004mm	
Turntable Accuracy	Pos: ±4 arcsec Rep:4 arcsec	
Max Workpiece Weight	30KG	
Max Tool Size	2150 × 2760 × 2080 mm	
Laser Type	Nanosecond Laser	
Machine Weight	4ton	

Wealthy Wood

High-efficiency machining of **PCD pre-milling cutters, end mills (flat & ball nose), spiral cutters, routers, trimming cutters, and profile tools.**

Wealthy Saw

Dedicated 6-axis laser system for PCD saw blades. Standard configuration supports Ø600 mm, with custom solutions up to Ø1200 mm

Automation (optional robotic arm)

Equip ment Configuration & Installation Re uirements

Power	220V/380V 50-60HZ-3KW	Installation	No vibration or impact- Temperature: 23² 2 C - Humidity: <50%RH (no condensation) - Fog-free and dust-free
Requirement	0.6-0.8MPa	Grounding Requirement	Comply with Class C standards for electrical equipment; separate construction(independent from other machines)

Research and Service

Ganzhou Power Creative Development Tools Co.,Ltd

PCD Machines, Longlin Electric Info
Industrial Park,Nankang District, Ganzhou City
Jiangxi Province, China

Shenzhen Power Creative Development Tools Co.,Ltd.

Building 18, No.10 Xingye 2nd Road, 1st
Industrial Fenghuang Park Baoan District
Shenzhen City, Guangdong Province, China

Kunshan Power Creative Development East China Training School

No. 789 Xintang Road, Yushan Town, Kunshan City
Suzhou City, Jinagsu Province, China