

# MM3D

## Laser Marking Kit

**Easily leading 2D laser marking into 3D new era**

Hi-lo position marking • Curved surfaces marking  
Glass interior engraving • Large field marking  
Engrave/Relief • Cutting





# Product Application

## HI-LO Position marking

Within the focal length range, multiple workpieces of different heights can be marked at one time.



## Curved surfaces marking

For regular surfaces such as inclined planes and curved surfaces, can mark directly.



## Glass interior engraving

The 3D laser generates pulses in a very short time, and its energy instantly causes the crystal to heat up and crack, thereby producing tiny white dots and carving out a predetermined shape inside the glass.



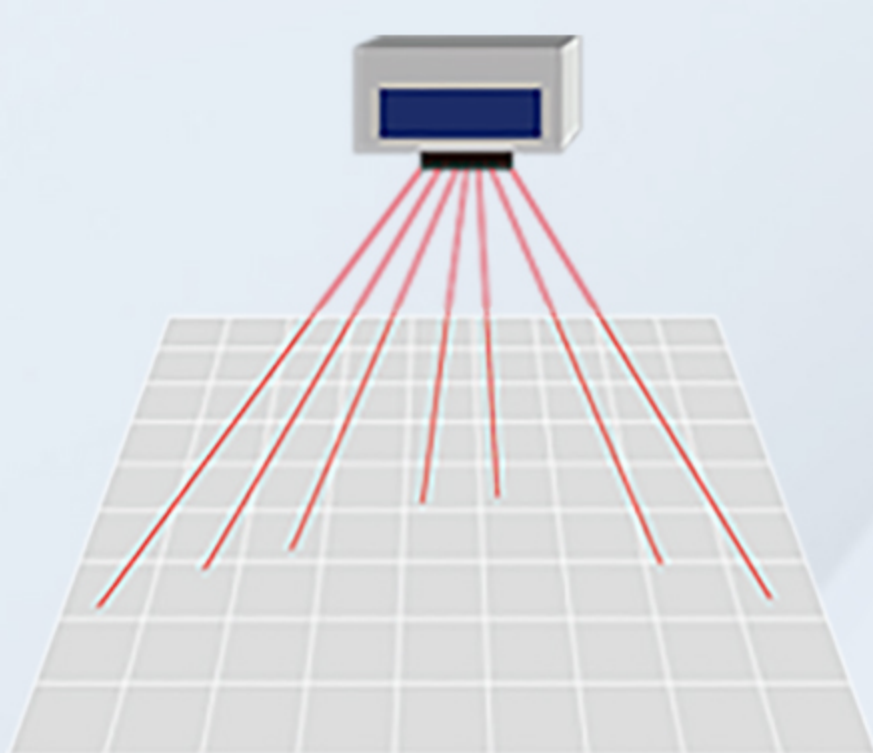
## Relief

The 3D scan head has a built-in three-axis lens, which directly controls the focal length change, and can complete the marking process in one go.



## Large Range Marking

Controlled by 3 axis, can mark 300-1700mm



Max marking range: 1700\*1700mm



## Cutting

CO2-30mm large range marking, tiny spot. Have splendid performance in cutting and scribing

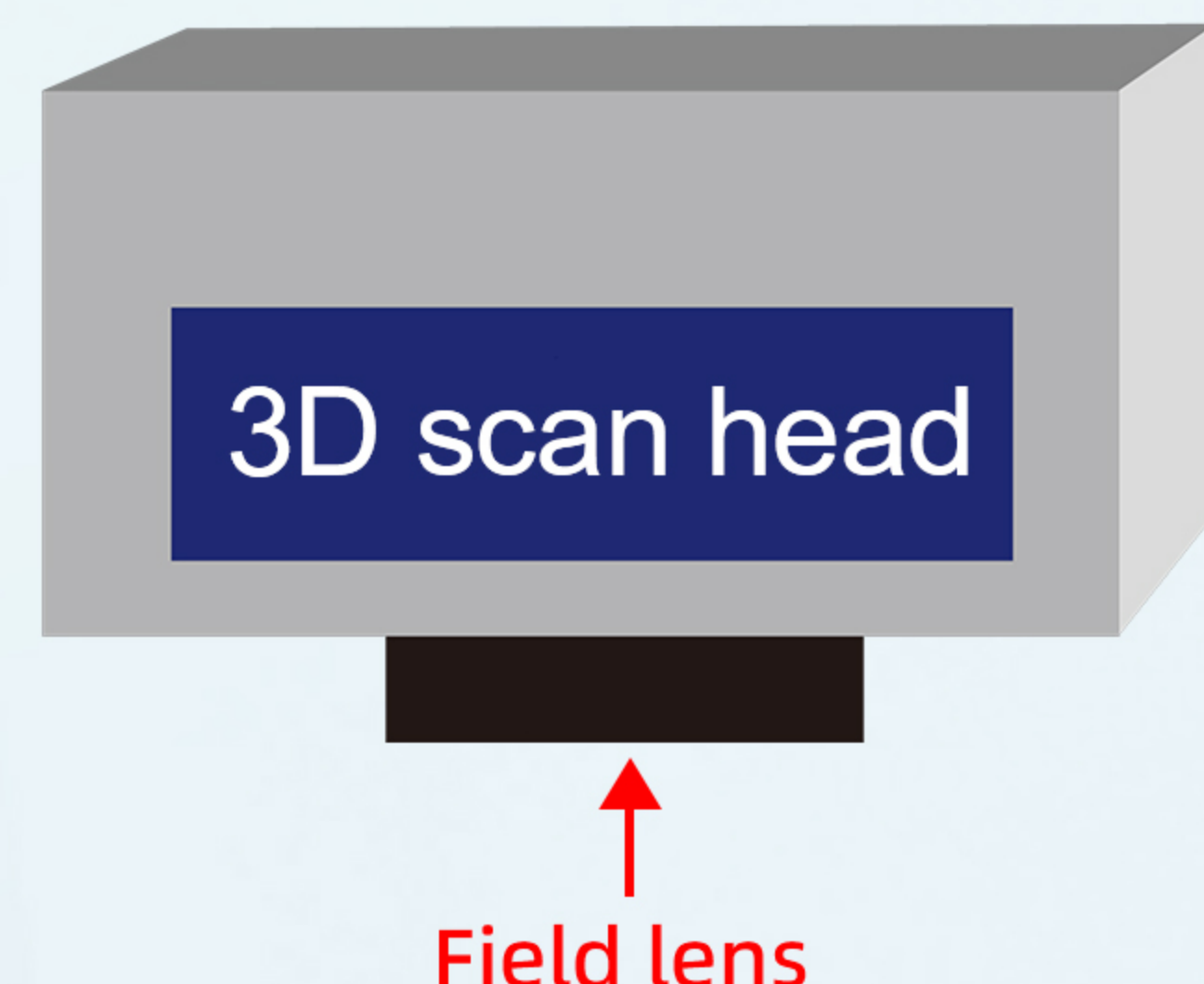




# Category

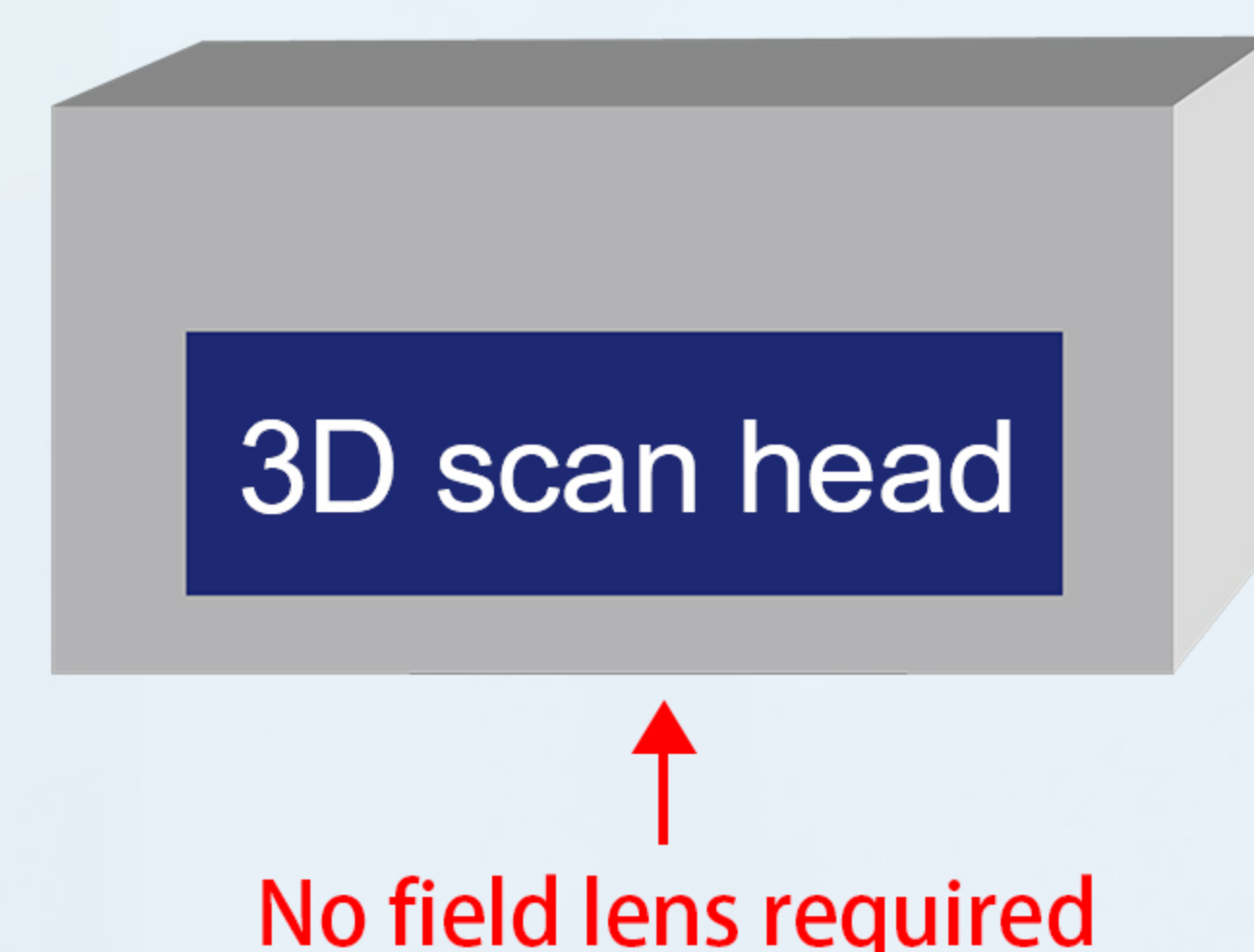
## ***3D focus after dynamic scan head***

- ✓ **Need field lens, better focus mode**
- ✓ Focal length variation is determined by dynamic Z axis & Field
- ✓ Better light spot, more suitable for deep carving, cutting
- ✓ Marking range determined by the field Lens
- ✓ Max. Range: 600 x 600mm



## ***3D focus Front dynamic scan head***

- ✓ **No field lens required**
- ✓ Focal length variation is determined by the dynamic Z axis.
- ✓ Good spot dispersion is more suitable for large format marking
- ✓ Max. marking range: 1700\*1700mm



## **Match MM3D software**

- ✓ Support for importing STL model
- ✓ Draw in 2D Graphic
- ✓ Built in several frequently used models
- ✓ Support importing 3D.dxf path
- ✓ Real time preview, what you can see is what you can get
- ✓ Graphic Coated or projection mapping to curved surface
- ✓ Automated Process Control
- ✓ **Scalable XYZ axis control**





# Function & Application

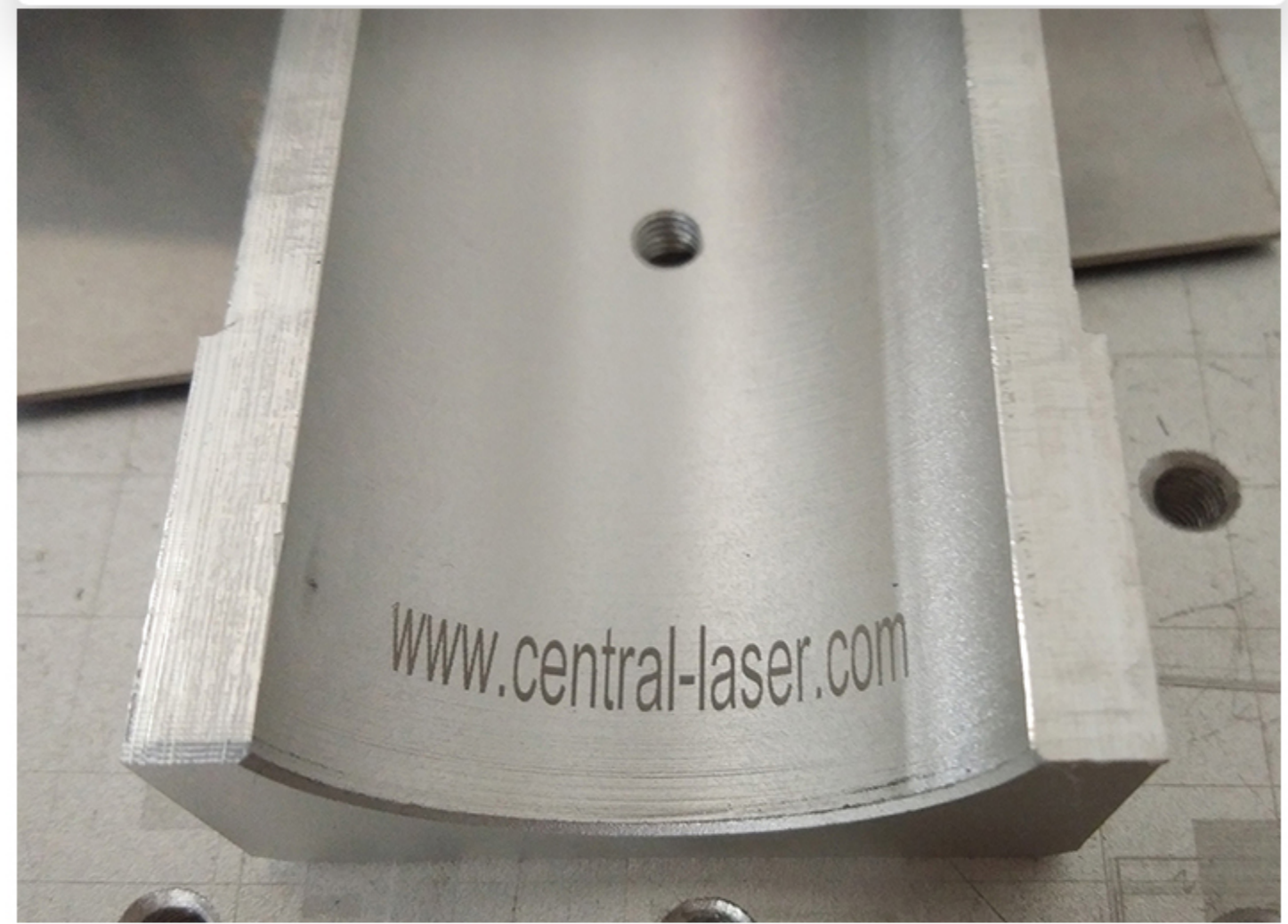
## Function

Engraving



Play Video

Curved surface marking



Play Video

Multi-height marking



Play Video

Continuous rotary marking



Play Video

## Application

Bevel marking



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Sphere marking



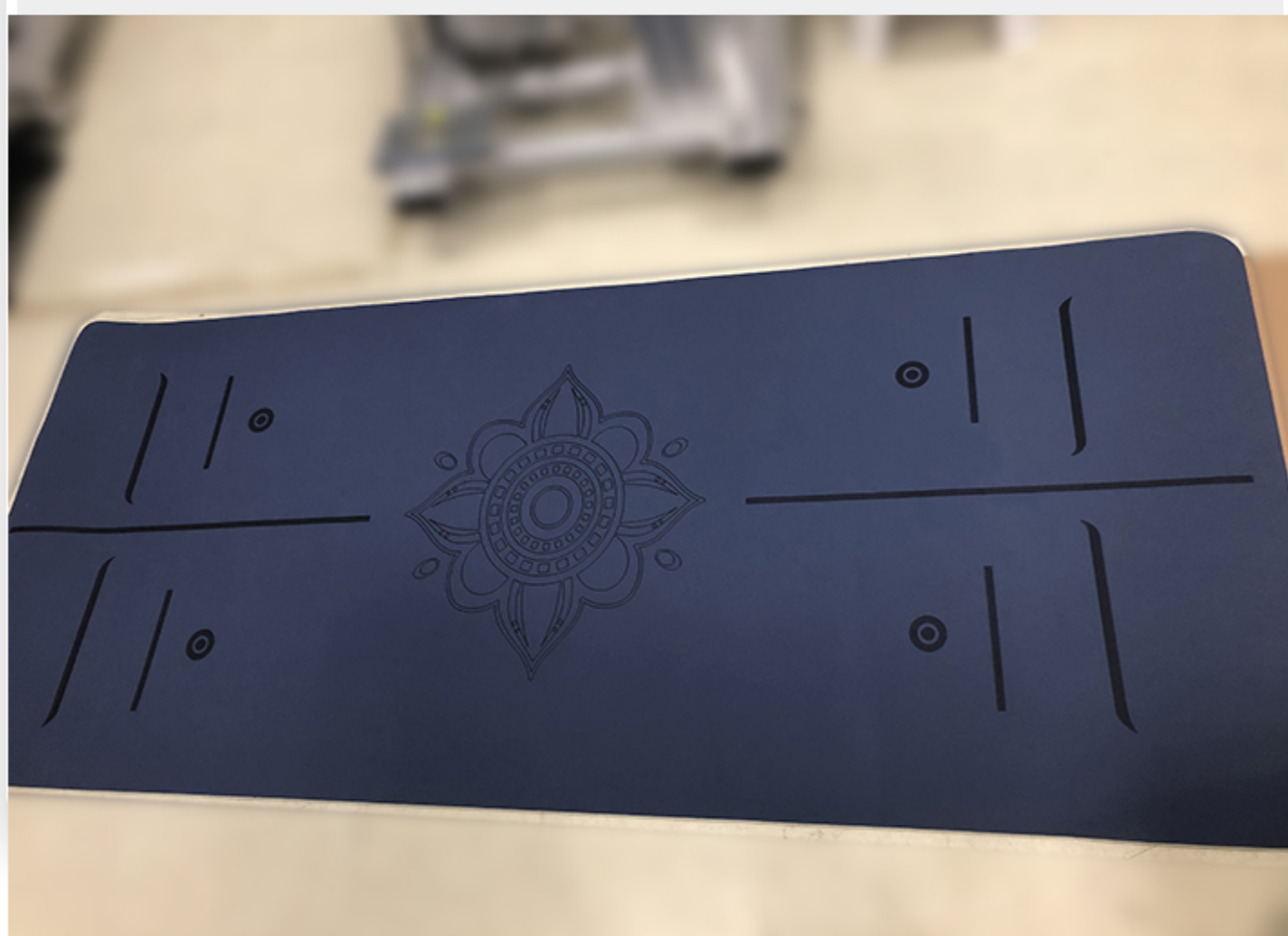
Play Video

Irregular surface



Play Video

Large format marking



Play Video

Inner-carving



Play Video

Glass drill



Play Video

Thin paper cutting



Play Video

Paint removal



Play Video

Wood carving



Play Video



# MM3D Laser Marking Kit

Component		MM3D software+ UMC4/PMC2E control card+ 3D scan head + field lens(optional)											
3D Glavo	Laser source	Fiber					UV		Green		CO <sub>2</sub>		
	Wavelength	1064nm					355nm		532nm		10640nm		
	Focus mode	Focus after		Focus front			Focus after	Focus front	Focus after		Focus front		
	Aperture	FB-P10 <small>(Air/Water cooling)</small>	FB-P14	FB-PR10	FB-PR20	FB-PR30	UV-P10 <small>(Air/Water cooling)</small>	UV-PR10	GR-P10 <small>(Air/Water cooling)</small>	GR-P14	CO <sub>2</sub> -PR16	CO <sub>2</sub> -PR30	
	Type	10mm	14mm	10mm	20mm	30mm	10mm	10mm	10mm	14mm	16mm	30mm	
	XY-axis speed (mm/s)	≤7000	≤2000	≤7000	≤1200	≤800	≤7000	≤7000	≤7000	≤2000	≤2800	≤600	
	X-axis speed (mm/s)	≤3000	≤2000	≤3000	≤2000	≤1200	≤3000	≤3000	≤3000	≤2000	≤3000	≤1500	
	Provide precise calibration file of marking and focal length												
	Append function		XYZ axis motion control										
Field lens range		70~600mm (Replaceable)											
Marking range		Max: 1700*1700mm											
Power		Suitable power: Standard≤200W; Higher power customizable											
User operation	User system	Windows PC											
	Software	MM3D / Markingmate + Large Format											
	Control card	PMC2e / UMC4											
	Interface	Standard USB, PCLE											
	Language	International language version											
General protocol		XY2-100 General protocol											
Electricity demand		110~220V, 50~60HZ											
Temperature		0~45℃											