

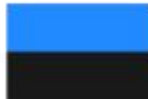


创可激光 CKLASER

Flashing
Technology

3D Fiber Laser Marker

CKLASER



Introduction

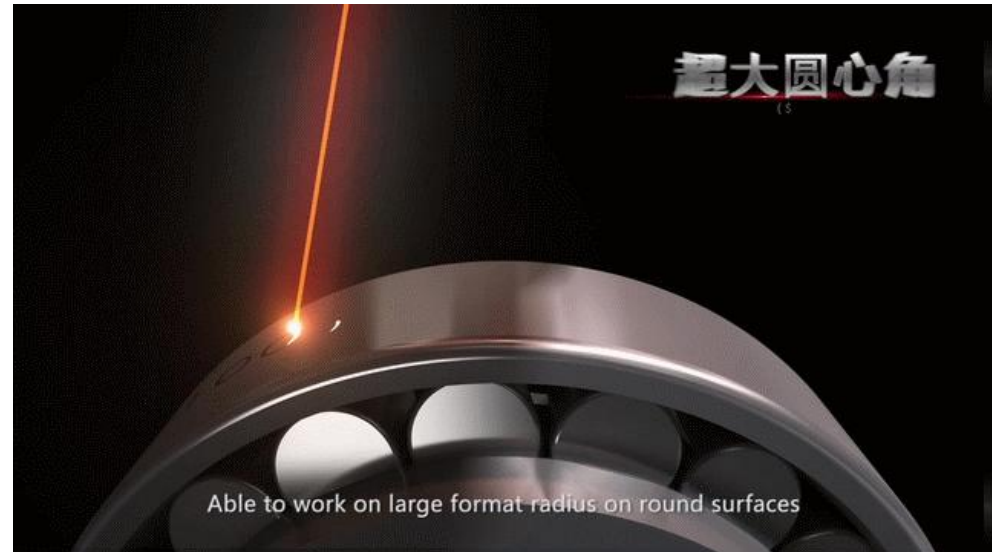


We will introduce the evolving process of 2-Axis Marking to 3-Axis Marking for you---the revolutionary design of CK-FB30W can mark in XYZ Axis and realize the ultra high quality, high precise marking to any shapes and different size of product

Advanced 3D control technology-40mm vari-focal



40mm vari-focal



Advanced 3D control technology--engrave on different height surface.



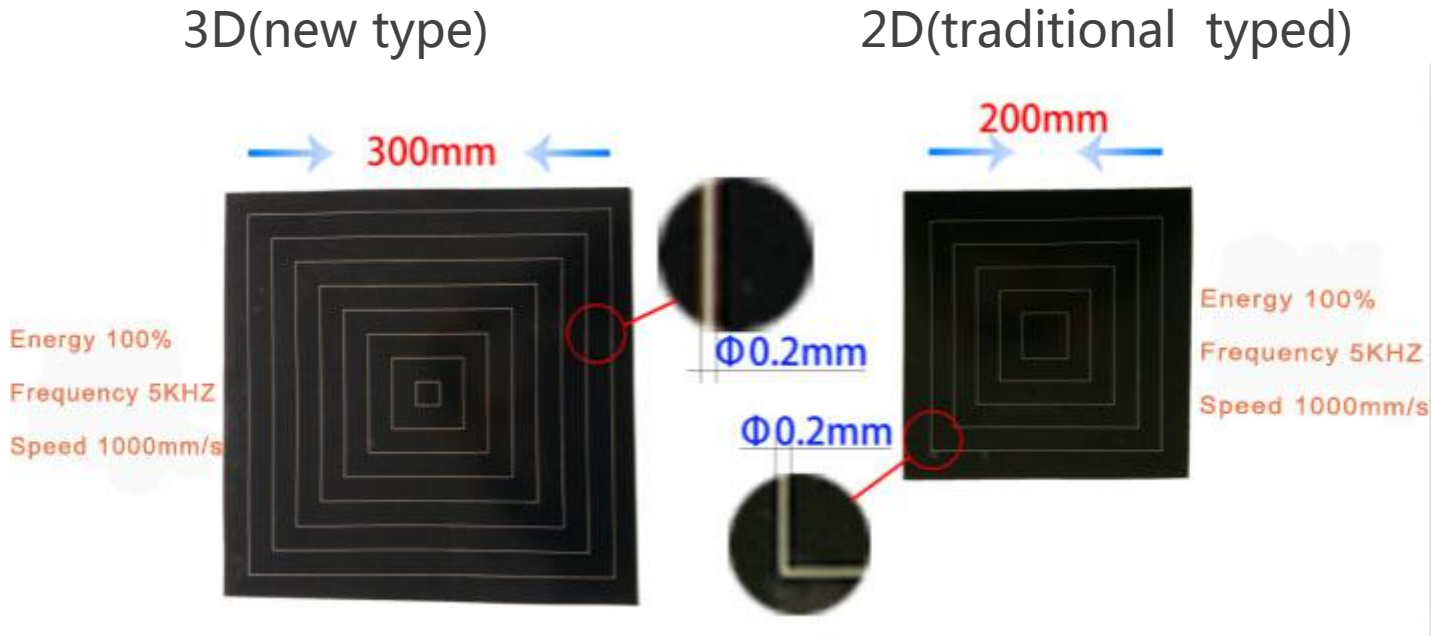
2D marking mode



3D dynamic focus mode

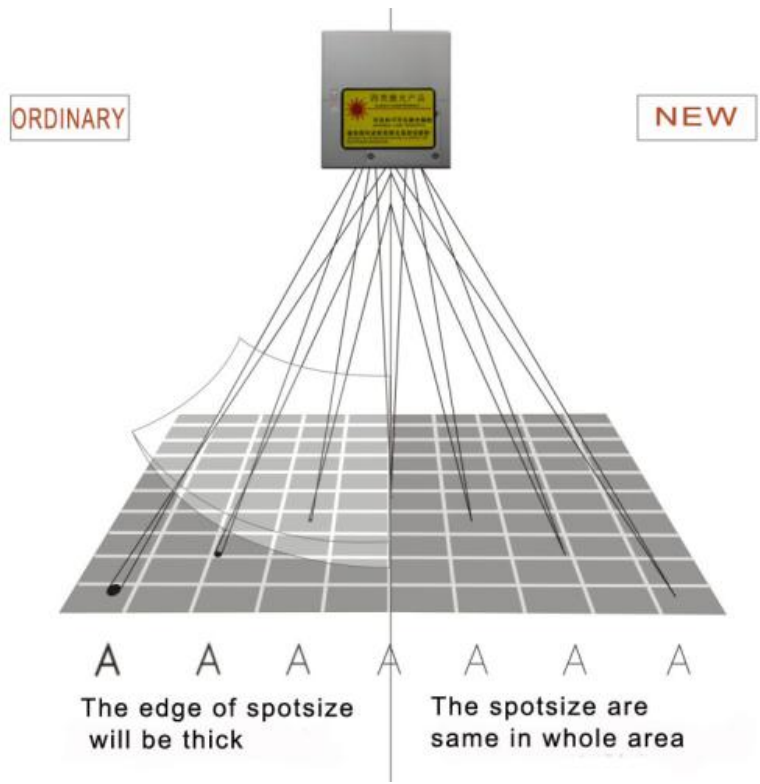
By the characteristics of 3D laser marking machine, molding marking by one time can be realized, even the work pieces have height gap. Besides, we can also keep the process consistent in the incline and slope surface.

Advanced 3D control technology -engrave in a large format



the width of engraving line with 300mm by 3D=the width of engraving line with 200mm by 2D

Advanced 3D control technology--- focousing compensation of Z Axis

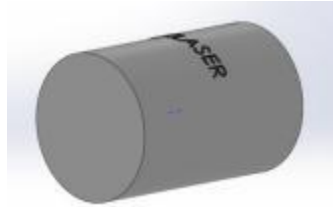


	Ordinary equipment	New equipment
Centre	A	A
	X	
Edge	A	A

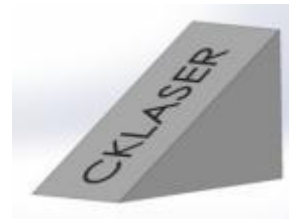
Precise 3-Axis marking

CK-FB3D series of 3-Axis control can mark clearly on the surface that always has problem by traditional 2D laser marking machine. The clear font can be marked on step surface, slope, cylinder, cone and so on. 3-Axis engraving has solved the problem of font's distortion, missing and fuzzy .

Advanced 3D control technology -- the focus compensation of Z Axis



mark in cylinder



mark in slope

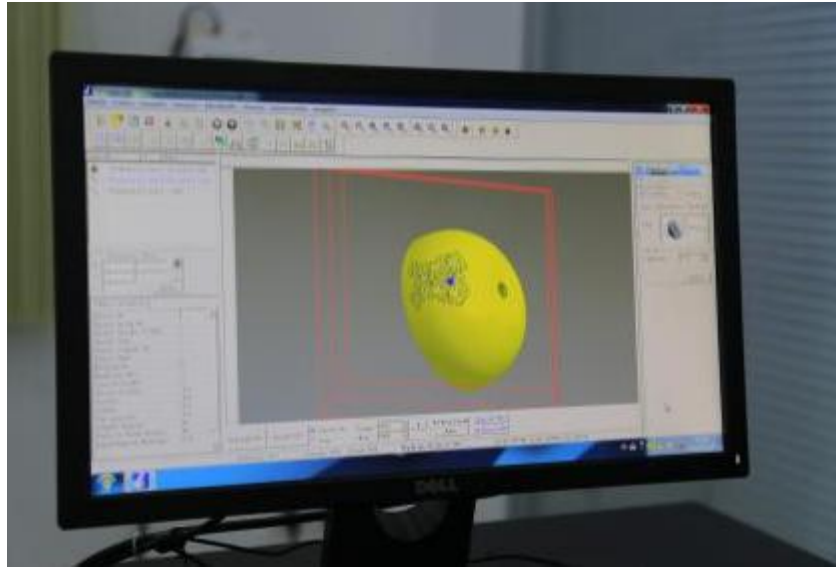


mark in deifferent height surface



mark in cone

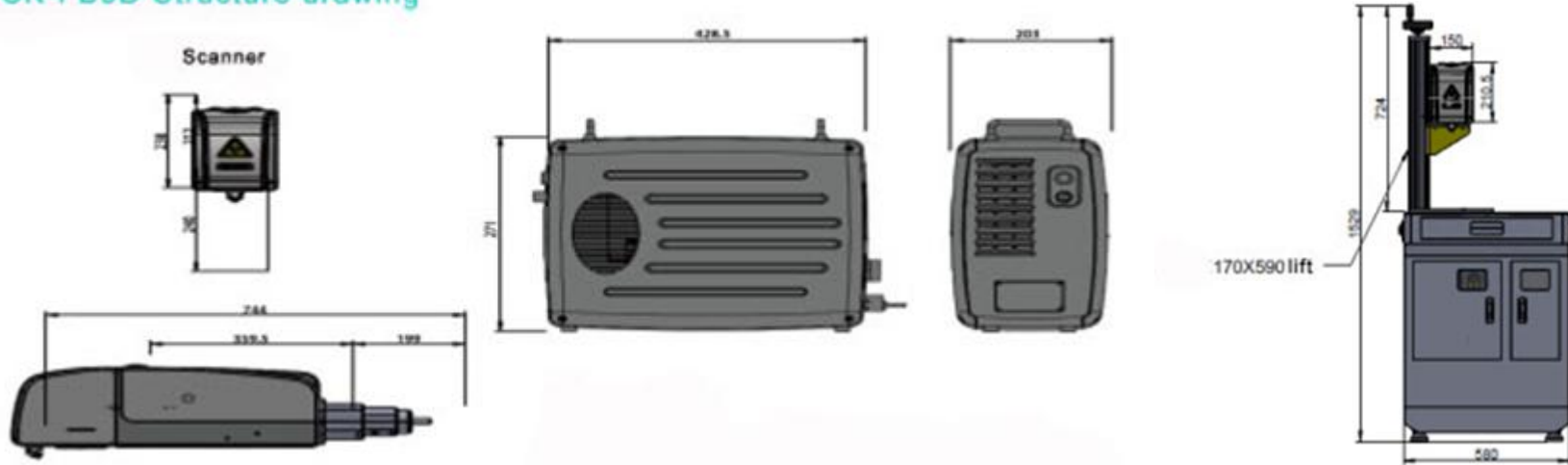
Advanced 3D control technology--3D software



Exclusive 3D software technology, use import function, can make STL format changed 3DLASER special format. after change, the mapping function can make design pasted on the surface of model.

Unique design ---Ergonomically designed

CK-FB3D Structure drawing

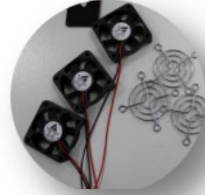


The design of machine is according to the requirement of Mechanical Aesthetics and Ergonomics, with fashionable and nice appearance , reasonable structure, lighter weight .This kind of design will reduce the inconvenience of install process.

Unique design----- mold manufacture



the hull of device adopts mold technology, integrated structure that can make use of space more reasonable and the seal is better.





Unique design---Imported opticals



**the reflectivity of imported
optical lens $\leq 0.2\%$**



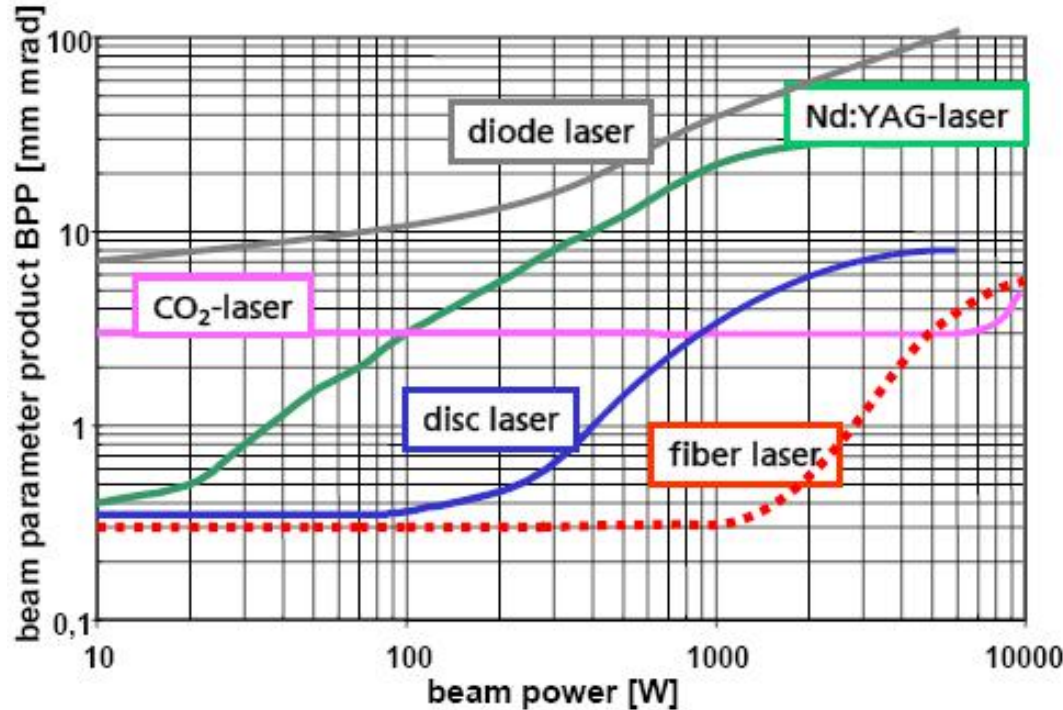
**the reflectivity of domestic
optical lens $\leq 0.5\%$**

**the smaller the reflectivity, the less the laser loss,
the bigger the output power is.**

Unique design - ultra precise marking

the contrast of all kinds of laser marking machine's light beam quality

Comparison of laser systems

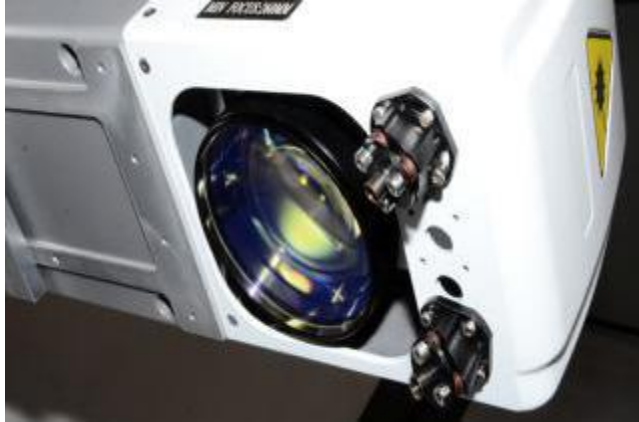


the best light beam quality of fiber laser marking machine is the power below 100W

$$M^2 < 1.3$$

the output power of laser

Unique design---- ample auxiliary indicating function



three red light location system

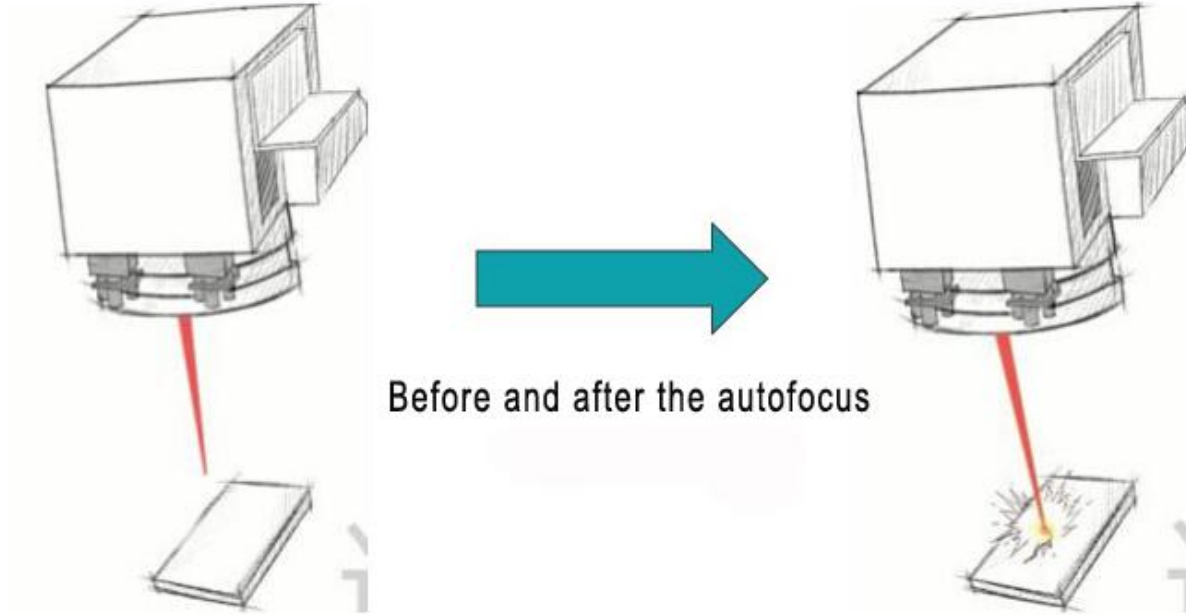
two outside focusing red light
one inside locating red light



three color indication light

green light: regular work
yellow light: standing by
red light : fault condition

Creation---- auto focus function



with unique auto-induction foci system, it can recognize the place of work surface and focus rapidly and automatically, which will improve the processing efficiency.

Manufacturing Standard--working environment



Sound manufacturing system, more stable equipment and better safety performance.

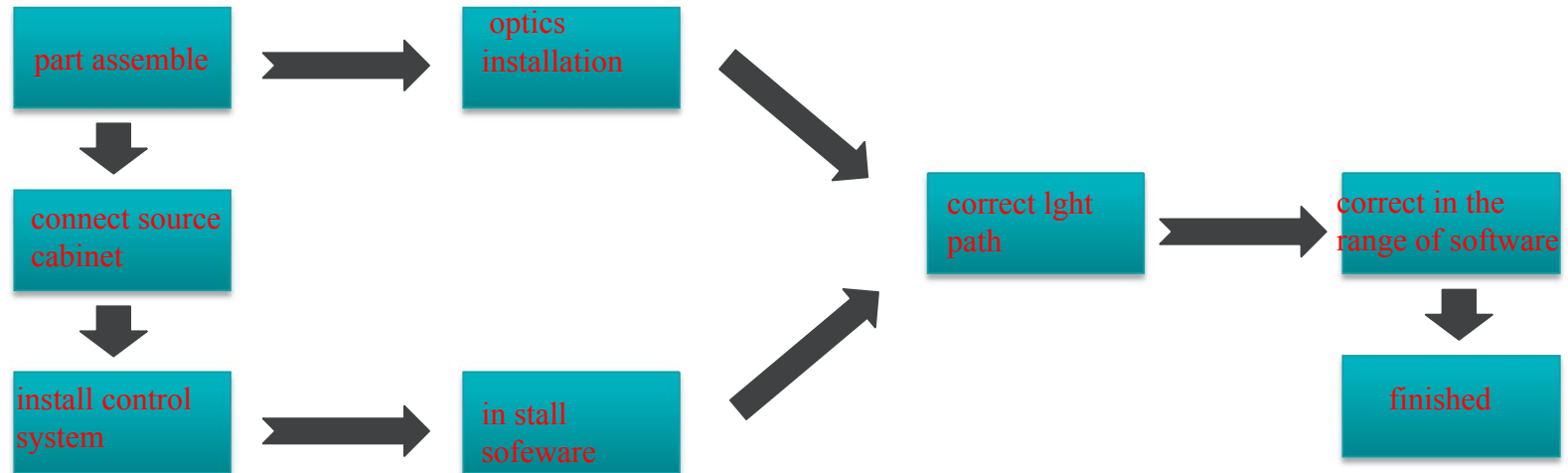
Manufacturing standard--- process flow



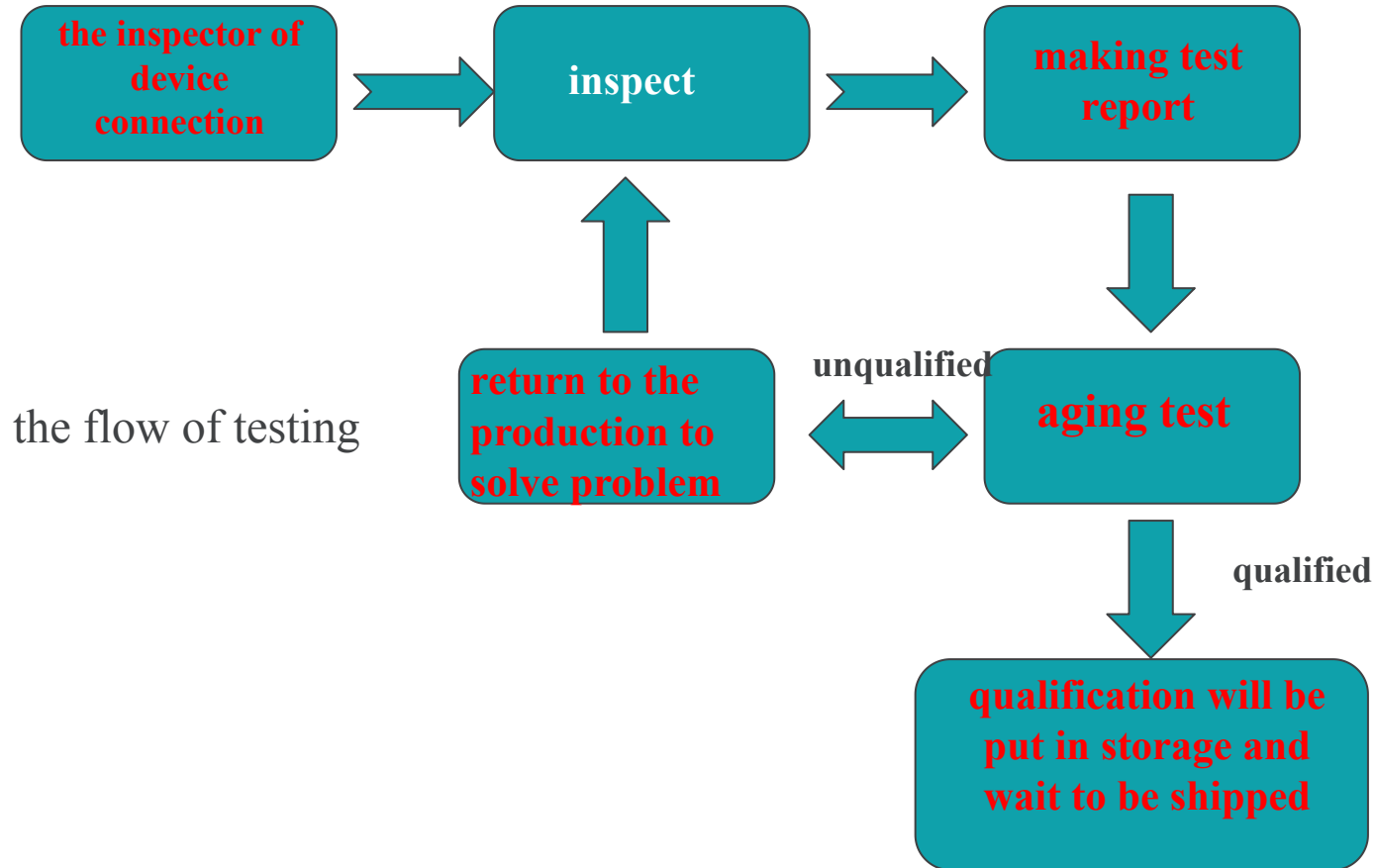
the production process flow of power supply cabinet



The production process flow of machine assembled



Manufacturing standard-- testing flow



Manufacturing standard--- certification



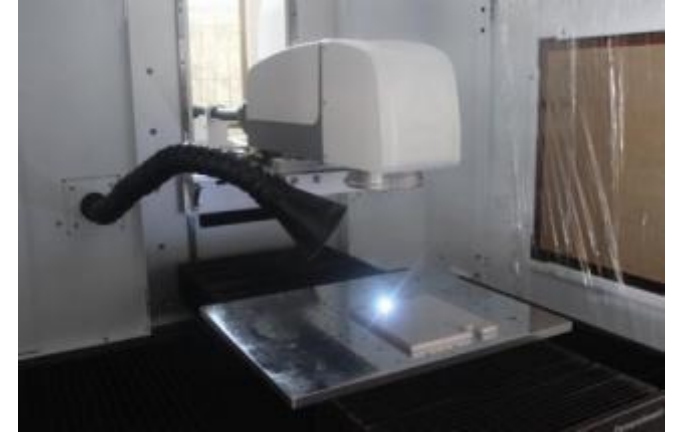
Expansibility---rotate,X-Y work platform



Disk rotation



Blub rotation



XY moving platform

Typical appliaction---mark in the surface of mouse



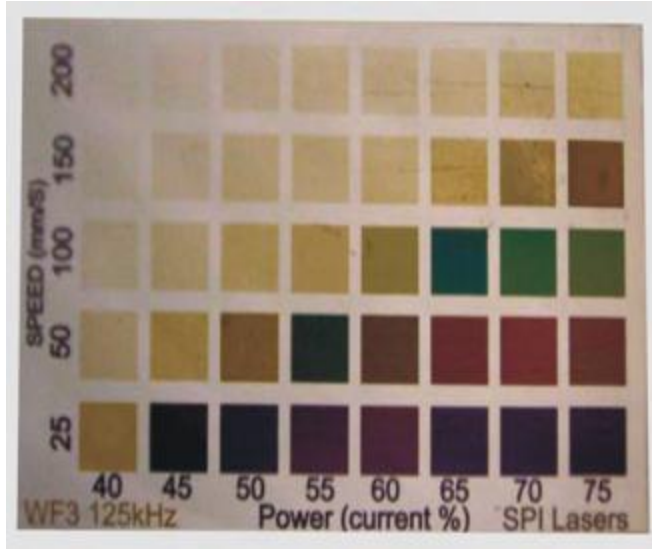
Processs requirement: engrave in the surface of mouse, strip paint in the surface.

Typical application---the description text in lamp-socket



Process requirement: the shape of lamp-socket is cone, the common 2D laser marking machine couldn't mark by one time, it need to install a rotation

Typical application---color engraving on metal



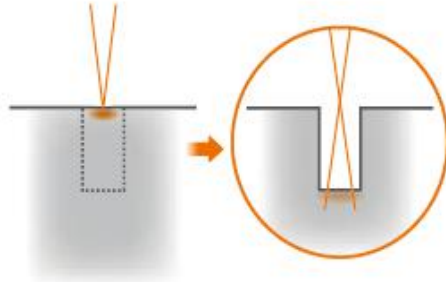
Process requirement: make use of the characteristic that 3D laser marking machine can adjust the foci, which shows different color in the oxide layer of metal surface and make the colorful engraving become possible.

Typical application---- mark in different height



Process requirement: the pwer switch always require to mark minimal sign in different places, 3D firber 's auto zoom function can solve this problem

Typical application---deep engraving on metal



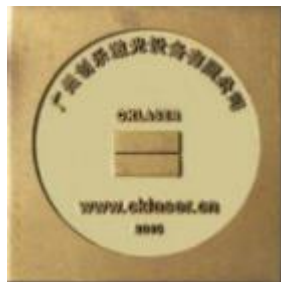
2D fixed foci mode



3D auto focus mode

process requirement: metal deep engraving needs laser power higher and energy more focus. Using 3D laser marking machine can make the focus always in work pieces, will reduce energy lose and improve the efficiency of deep engraving.

Typical application---deep engraving on metal





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Thank for your watching