

Micro Design and Manufacturing | Custom Solutions



Walthy Precision is a design and subcontract manufacturing company for all kinds of micro and precision works, apply to medical, electronics, semiconductors, automotive, and all kinds of R&D cases.

Based on the precision CNC, ultrasonic, chemical etching, laser, lithography, and other methods for micro features manufacturing, we are always promising to customers' requirements, and we also provide the complete solutions, from the materials, designs to final results, we transfer your ideas to real products. Beside micro manufacturing process and know-how, we are also experienced in applications, for example, the flow control and dispensing system, such as injectors, precise valve, micro fluids chip, we work with the customers together to achieve their desired results.

We are open to all kinds of industries and needs, we always make the key parts of your products with a reasonable cost in short time, from prototyping to mass production

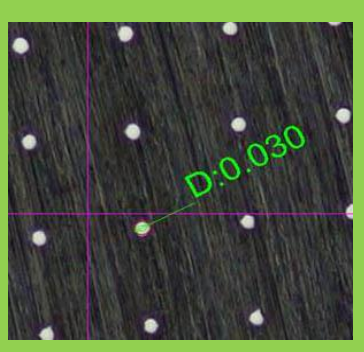
Please contact us to find more interesting and inspiring solutions



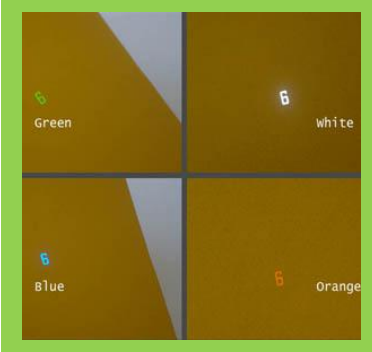
Custom your logo
Highlight your products

Invisible
Light off

Light on



Aluminum with anodizing and sandblasting

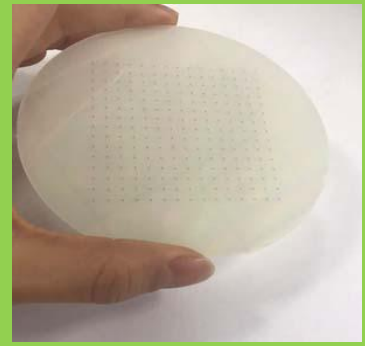


LED light emitting

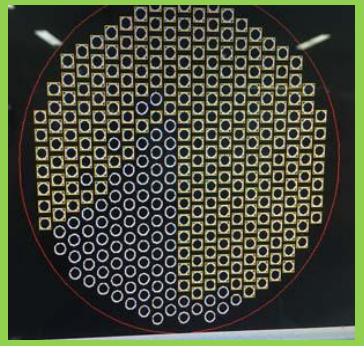
The LED light emitting is a solution that let the LED light leak from the micro holes, and it could be a spot or any pattern. The pattern is invisible with naked eye when the light is off, this technology inspires your designs and let your products much different from others'. We provide complete solutions of this application including material selection, housing designs, emitting patterns, hole size, finishes etc.



Flexible to material
Glass/quartz
Sapphire
Ceramics
Silicon
Metals



Turn-key solutions of Vacuum chuck



Custom
Matrix distribution
Hole size & Pitch
Squares and Slots

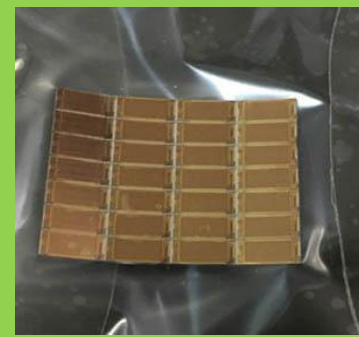
Micro Plates / Vacuum Chuck

We provide microplate of matrix holes, slots or any customized shape or patterns. And the substrate material could cover all kinds of material, from metal to silicon, glass, sapphire, ceramics and so on. A typical application for these microplates is vacuum chuck, used for high end industries such as semiconductors, solar cell. With custom material and design, there will be more feasibilities in chuck design, such as bottom light/CCD solution with transparent material plates, thermal dissipation with ceramics plates

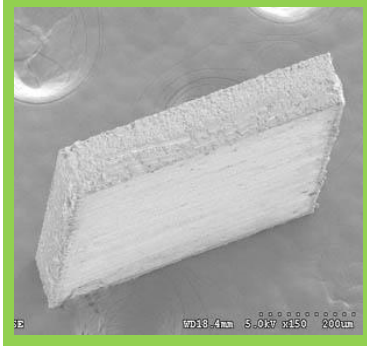


Semiconductor class Packaging

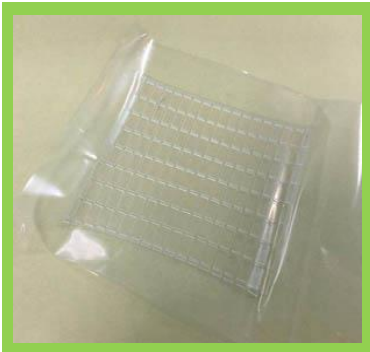
Glass | Metal
Ceramics | Silicon



Burr-free

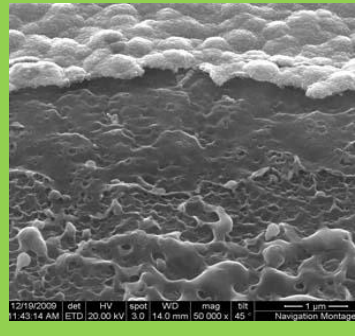


Custom size and shape



Package substrate

Nowadays, more and more different materials are applied to semiconductor packaging, beside traditional silicon and semiconductor materials. We are experienced to provide customized substrate for this application, customized size and thickness of different material such as glass, quartz for MEMS, ceramics for membrane circuits, and all kinds of metal for new packaging methods.



Remove one layer as required patterns and remain the substrate

Selective etching

ITO patterning

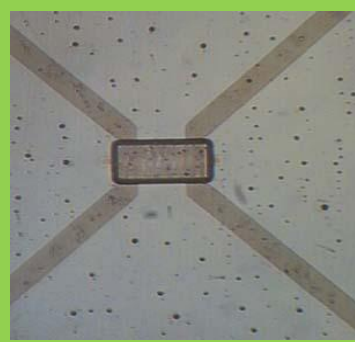
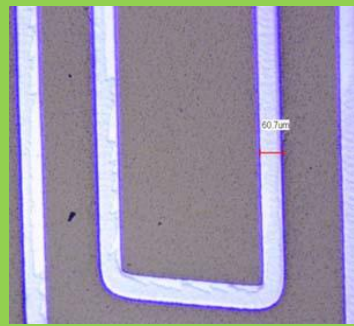
ITO is a typical transparent conductive material which is normally coated on glass or PET substrate, it was widely used in touch panel industry before, but nowadays, it is used in many other industries such as OLED, medical, solar cell, consumer electronics, and many R&D cases. And the TCO(transparent conducting film) material is also diversified beside ITO. With our dry ablation technologies, the designer could make any circuits and electrodes on glass or PET which is invisible and completely transparent to bottom image, so it applied more and more new applications and industries

Multi TCO materials

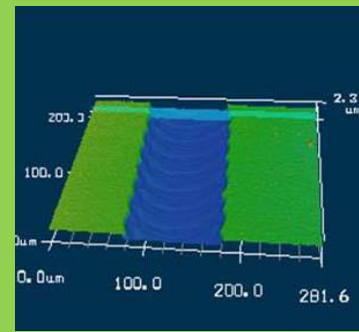
ITO, FTO, CNB, CNT, a-Si, nano-Ag, Graphene, Ag, Al, Au, SiO₂, etc

Multi Substrates

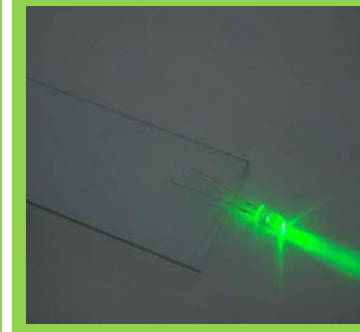
Glass, ceramics, PET, plastic, sapphire



Resistance: 10~ 100 Ohm
or any specially required
Transparent rate (ITO):
>80%

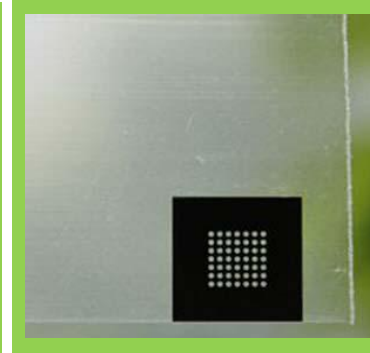


10/10um
Min line width /Pitch
Any pattern
in 600*600mm
+/-5um precision

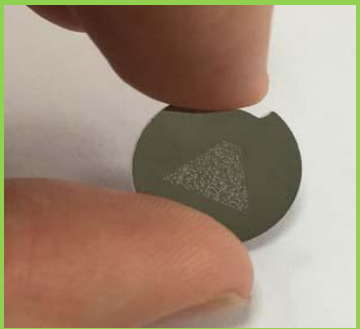
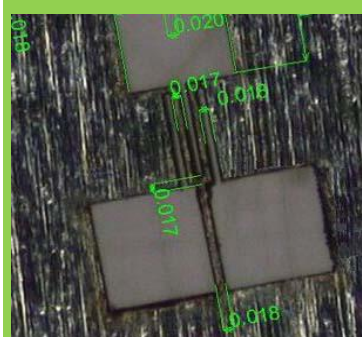




Any Material
requires features from
10micron to 1000
micron, with a
tolerance of several
micron.



Cutting
Drilling
Milling
Scribing
Etching



**<1mm
Thickness**
Except glass & quartz

Custom Micro Parts

As a company focusing on micro parts designing and manufacturing, we are experienced of all kinds of materials and requirements, widely used for all kinds of industries, are most of these parts are key components of the final products, their precision and quality are critical to your products performance.

Thank You!

Stay connected with us



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