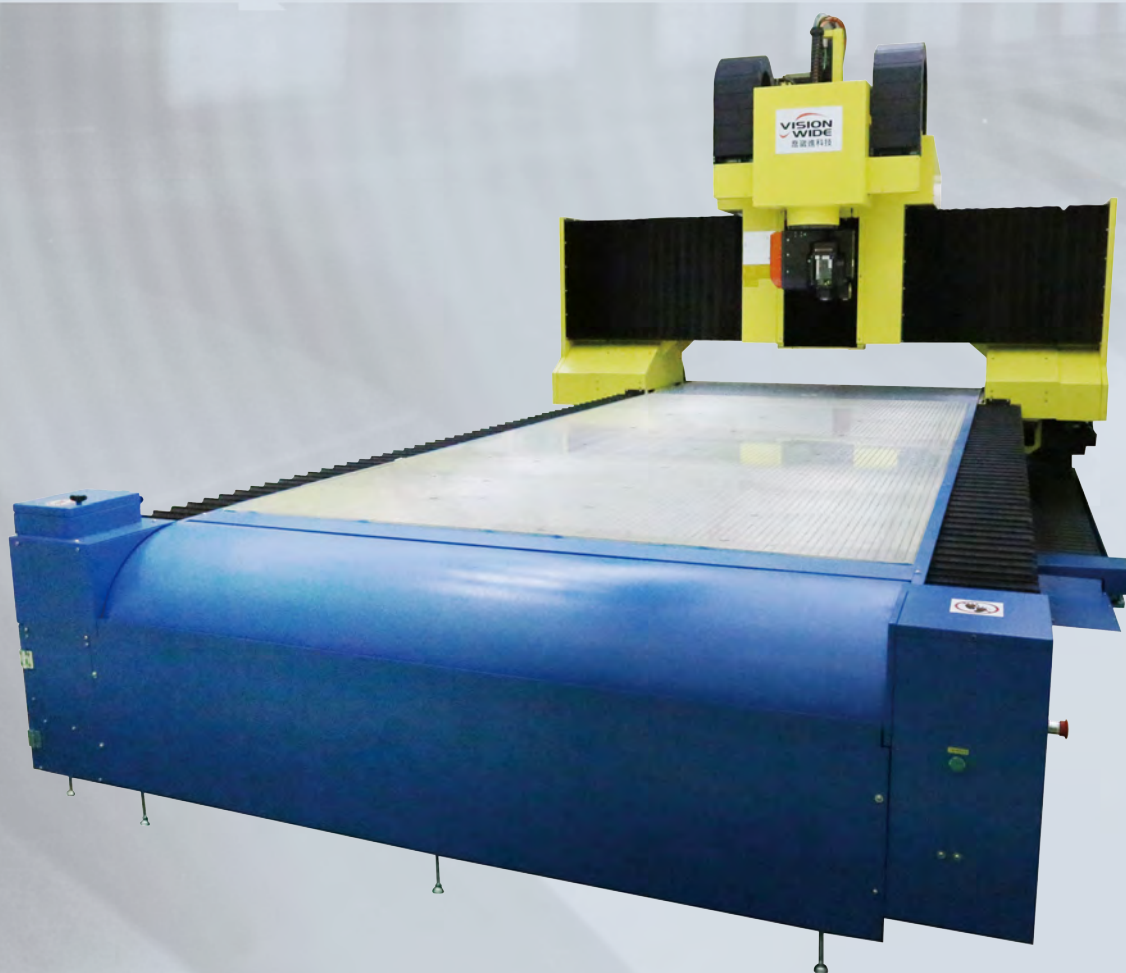
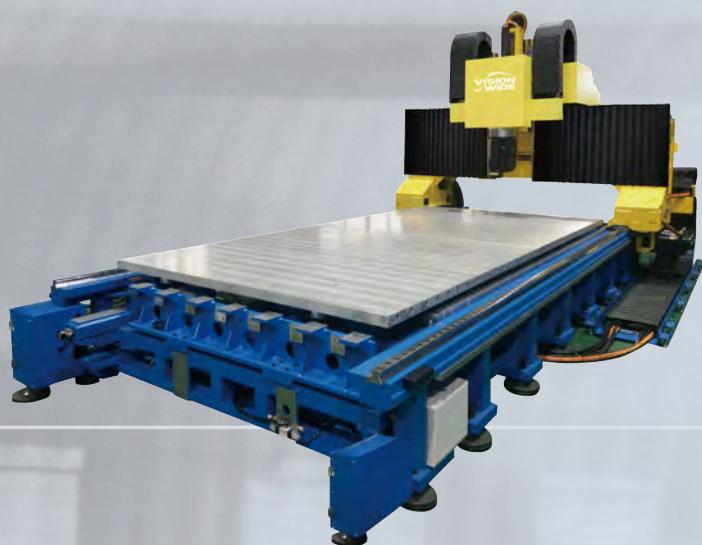




Ultrasonic Machining Center



Aerospace Parts- Honeycombs Structure Machining

- Auto frequency modulation ultrasonic machining system.
- Vacuum working table.
- Oil free cutting-No pollution workpiece.
- Fixed angle cutting-Spindle sixth axis positioning.
- Flat tool magazine.
- Cutting tool angle measurement and orientation.

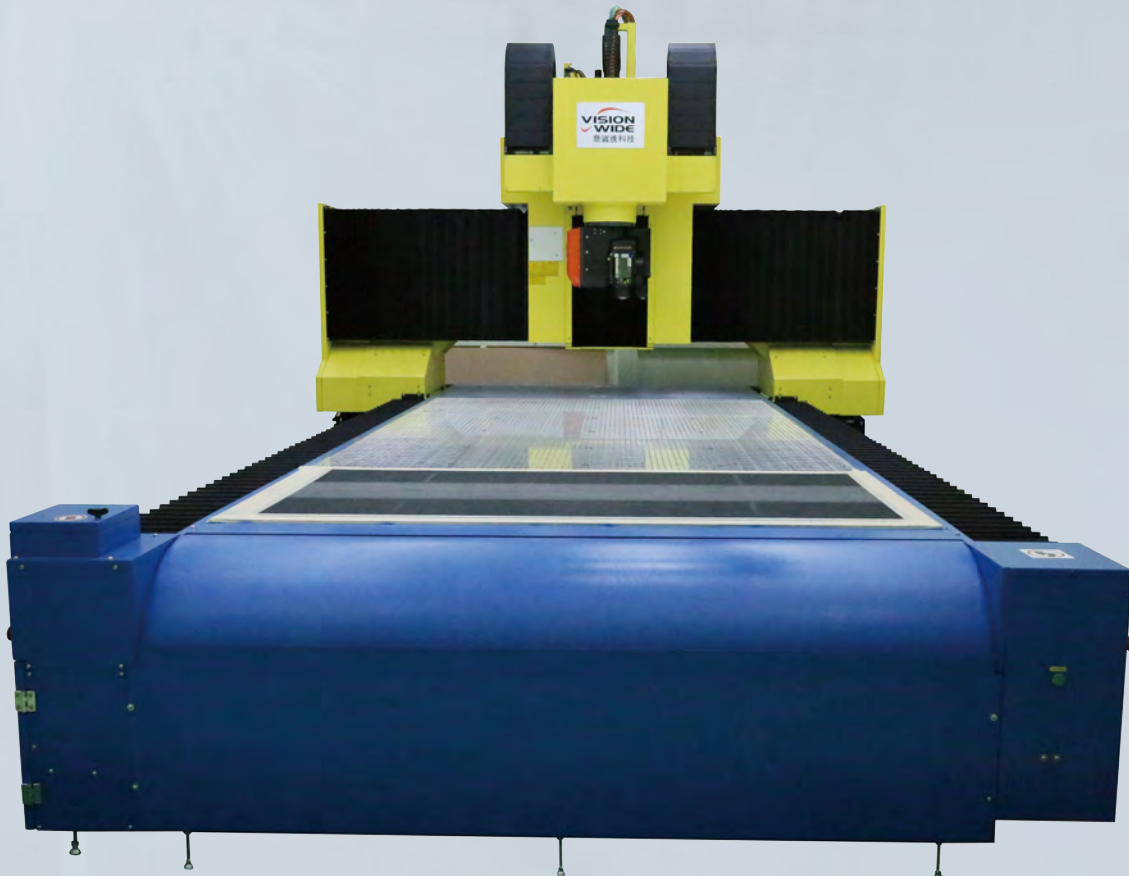


Wing Diversion Cover

- The inner layer structure is a honeycomb material, which is used as an internal component to increase the overall structural rigidity.
- The outer layer is Carbon Fiber-Reinforced Plastics. (CFRP)

Honeycomb material advantages

- Low structural density and light weight.
- High compressive strength.
- A lightweight, high-rigidity composite structure is available.



UC-4020 Series

No.	Model	Unit	UC-4020
1	Travel		
1-1	X travel	mm	4,000
1-2	Y travel	mm	2,000
1-3	Z travel	mm	550
1-4	Distance from spindle nose to table	mm	66- 616
2	Table		
2-1	Dimension	mm	4,000 x 2,000
2-3	Workbench trench matrix	mm	20 x 20
2-4	Sealing strip diameter	mm	Ø3.5
3	Spindle(HSD)		
3-1	Spindle speed	rpm	24,000
3-2	Spindle power(S ₁ /S ₆)	kW(HP)	22 / 25
3-3	Spindle taper	-	HSK A63
3-4	B axis rotation angle	°	± 120
3-5	C axis rotation angle	°	± 360
3-6	Two axis head+ Spindle weight	kg	100
4	Ultrasonic Oscillator		
4-1	Maximum output power	W	600
4-2	Frequency	Hz	20k±0.3K
5	Feed		
5-1	Rapid feed rate	mm/min	X,Y:24,000 Z:12,000
5-2	Cutting feed rate	mm/min	X,Y,Z:12,000
5-3	X,Y,Z Servo motor (Power / quantity)	kW	X:6.5/4(pcs) Y:2.18/2(pcs) Z:1.30/1(pcs)
6	ATC		
6-1	Tool magazine	-	Flat type
6-2	Tool taper	-	HSK-A63 Ultrasonic Tool
6-3	Capacity	pcs	7
6-4	Ultrasonic-Blade Tool (Shared GFM machine with the same specification blade)	mm	40
6-5	Ultrasonic-Disc Tool (Shared GFM machine with the same specification blade)	mm	Ø50
6-6	Max tool weight	kg	15
7	Accuracy		
7-1	Positioning accuracy(VDI3441)	mm	X: P0.06 Y: P0.06 Z: P0.06
7-2	Repeatability(VDI3441)	mm	X: Ps0.02 Y: Ps0.02 Z: Ps0.02
8	Other		
8-1	Power requirement (Note 1)	kVA	90
8-2	Pneumatic requirement	bar	6
8-3	Machine net weight	kg	8,000
8-4	Space dimension (L*W*H)	m	10 x 6 x 3

* For details, please refer to Machine Specification.

* The manufacture reserves the right to modify the design, specifications mechanism, etc.