



JIANN SHENG
MACHINERY & ELECTRIC INDUSTRIAL CO., LTD.

H No.8, 12th Rd., Industrial Park, Xitun Dist,
Taichung City 40755, Taiwan

T +886-4-2359-3717

W www.jsedm.com

F +886-4-2359-0920

E jsedm@ms11.hinet.net



High CP
High Cost Performance

Efficient Controlling System Plus User-friendly Interface



Manual Mode

The specific interactive platform makes the operation fast and smooth.



Maintenance

Clearly shows all information and allows user to notice the time to do maintenance and replace consumables.



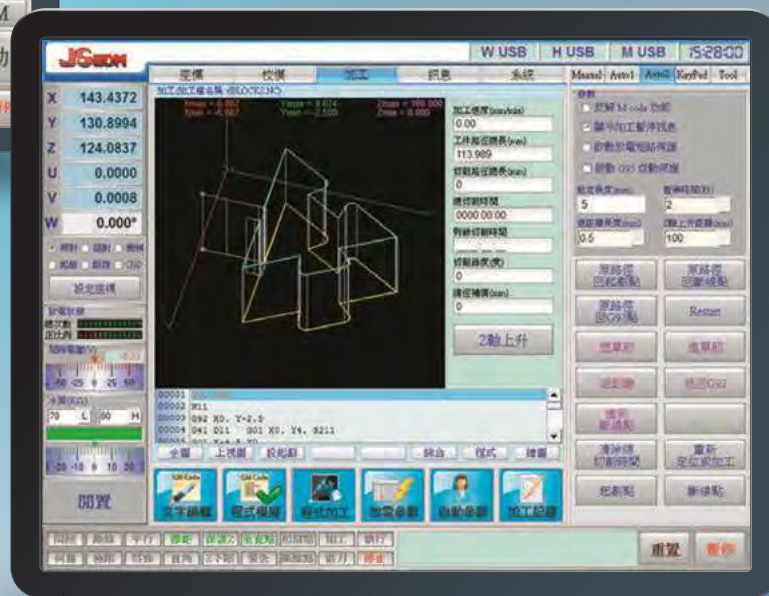
Program Selection

Using drawing and file name to choose the program.



Automatic Parameters

System will generate suitable cutting parameters based on the input factors such as workpiece material, thickness and number of cutting pass.



Machining Interface

The Utilization of 3D simulation with zooming function increases the convenience during tracking.



Multi-functional Touch Screen

Capable of selecting anywhere during the operation which makes the system more convenient for users.

The Flexible Machine Head Design

Fulfill the needs on taper cutting and vertical cutting with different thicknesses

Advanced Precision Machining Technology

Unique Features Circular, Corner and Vertical Control Functions

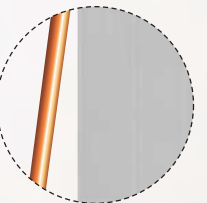
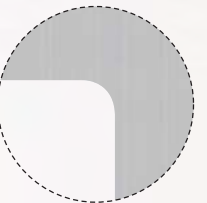
Corner Comp

System compensates the drawing automatically to avoid over cut.



Circular Comp

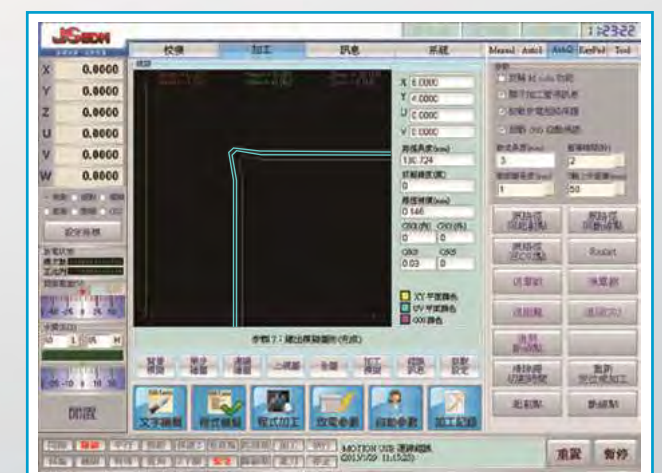
The auxiliary function ensures the accuracy of the radian.



Wire Comp

U, V axes taper in a certain angle during cutting which avoid the workpiece tolerance causes by wire consumption. This can be activated without modifying the program.

For raising the accuracy, users may activate the compensation of circular, corner and wire consumption by adjusting the compensation value (D-Value) accordingly without further addition of G code.



High Rigidity Structure

Machine Design Analysis and Error Compensation

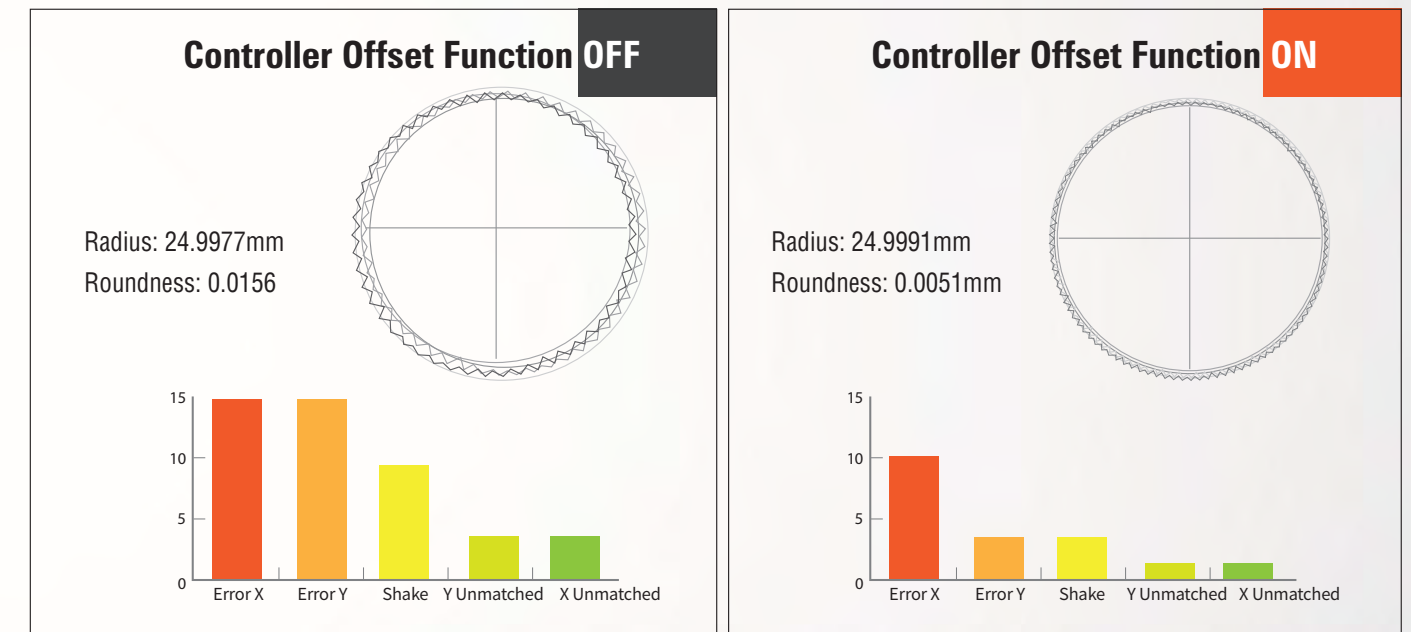


Functional U,V Axis & High Rigidity Spindle

U, V, Z axis strategically placed on the upper column enhances rigidity and ensures stability under high water pressure during rough cut as well as high precision operation.

High Accurate Linear Guide Way, Servo & Transmission System

We use high accurate linear guide ways and couple with our patented linear and block design. For the X, Y axis we adopt a spacious and strong machine structure design.



Circuit Function Verification Result: (Diameter 50mm, Speed: 400mm/min)

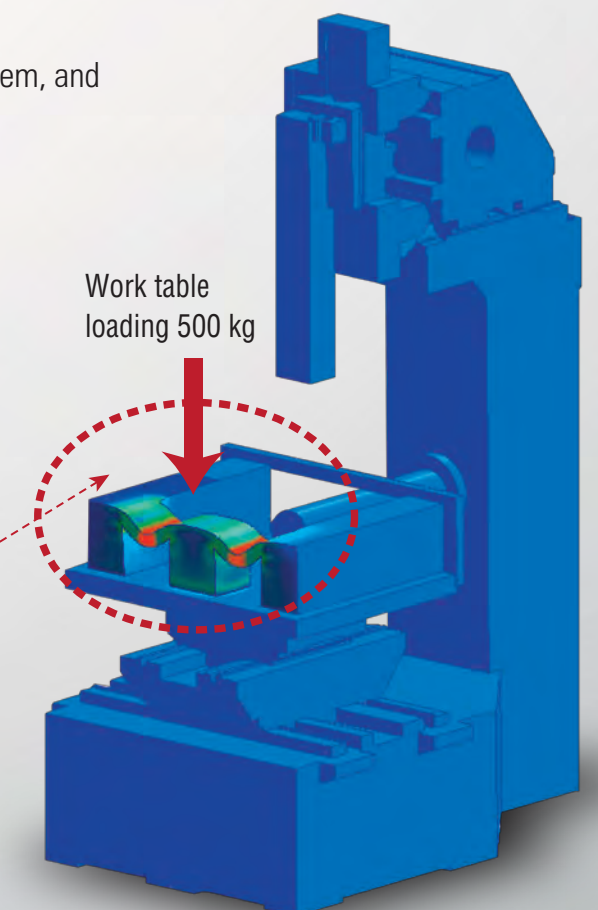
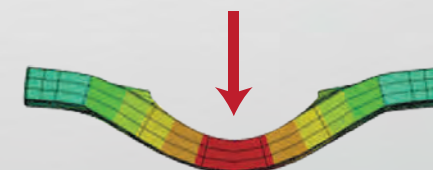
Work table loading and Speed change

The machine structure is designed and analyzed with CAE system, and simulation is carried out for all axis actions in this structure.

Work table loading (kg)		Max. Work table transformation (m)
1	100	0.832e-7
2	300	2.91e-7
3	500	4.16e-7
4	1000	8.32e-7

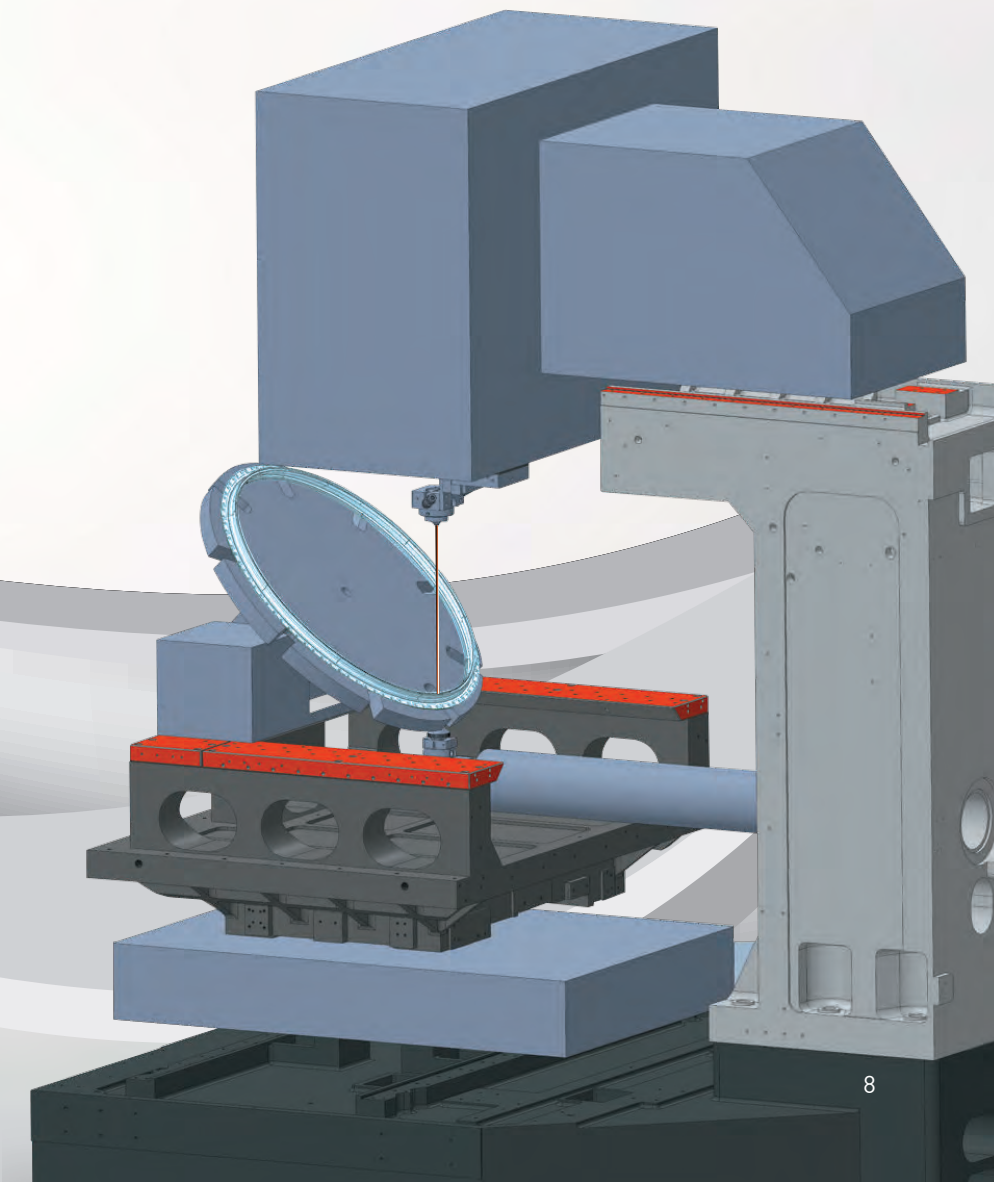
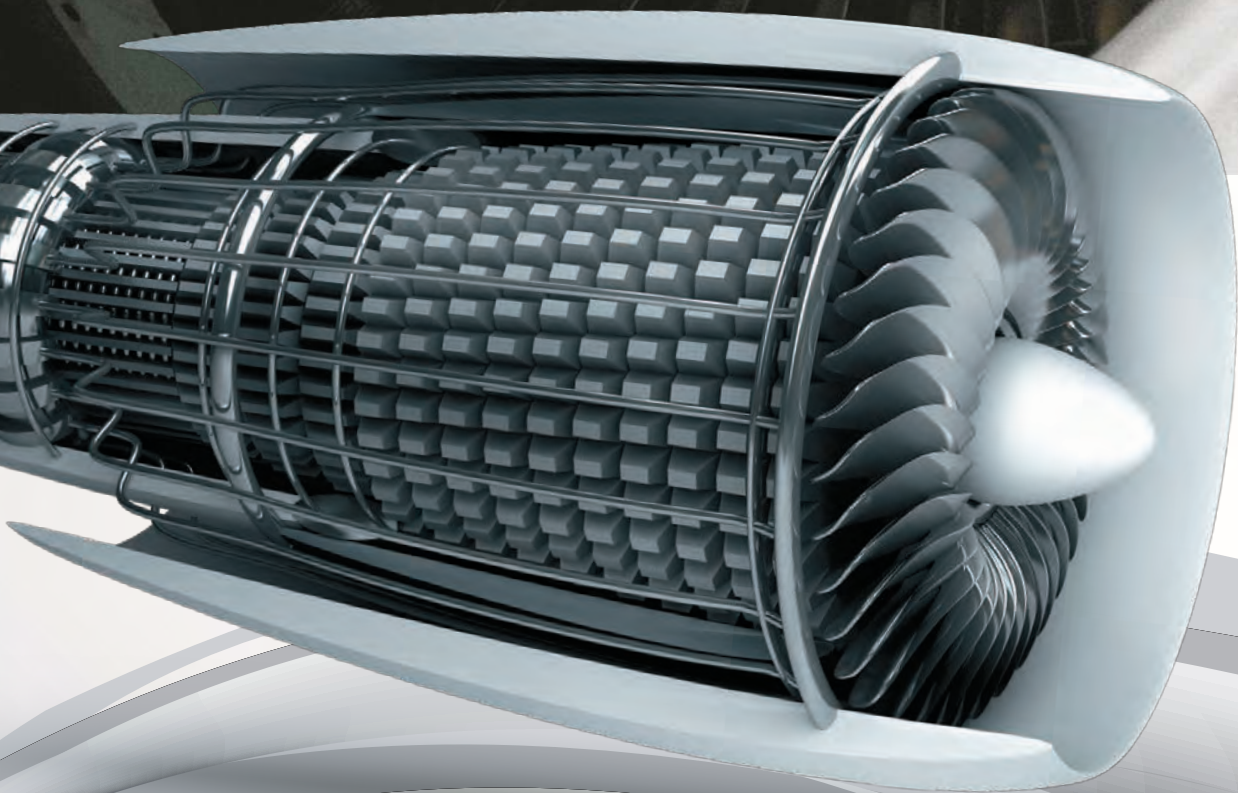
Max. Work table loading transformation is designed at 0.42 μm

Maximum deformation position



High Precision Aerospace Component machining

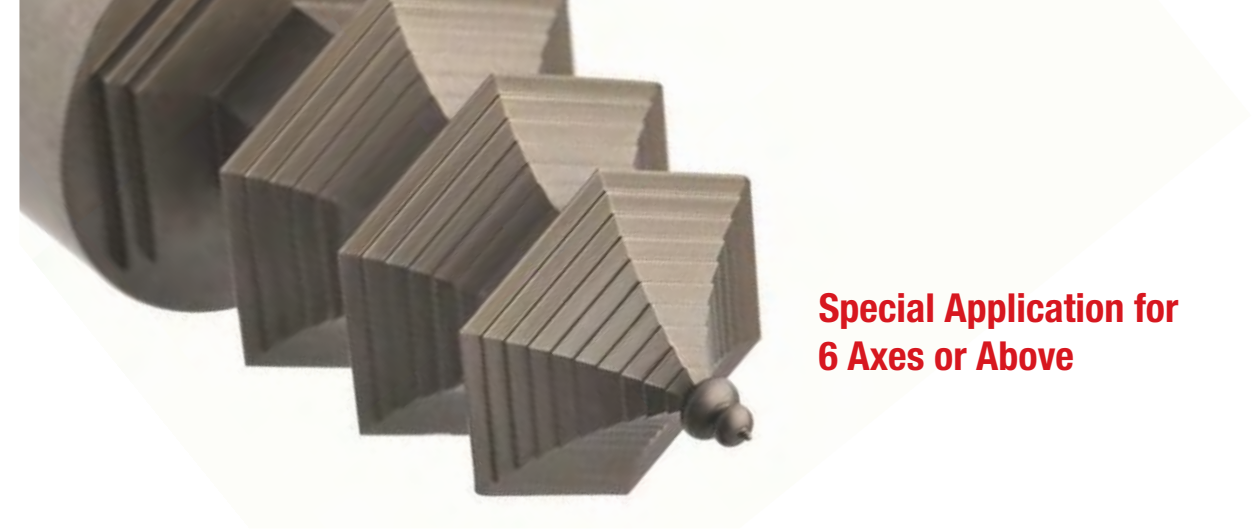
7 Axis Servo control: Reduce man power and increase productivity



- ✓ Focusing on groove and bore machining for Ring components.
- ✓ The 6th axis rotates the component to specific angles that allows the machine to cut multiple holes.
- ✓ The features of the 7th axis is capable of tilting in different angles during cutting.
- ✓ The stable power control engages with servo movement ensure the tolerance when cutting composites.

High Precision Mold Machining

For Aerospace Technology, IC Electronics and
Medical high technology applications



**Special Application for
6 Axes or Above**

Taper Cutting



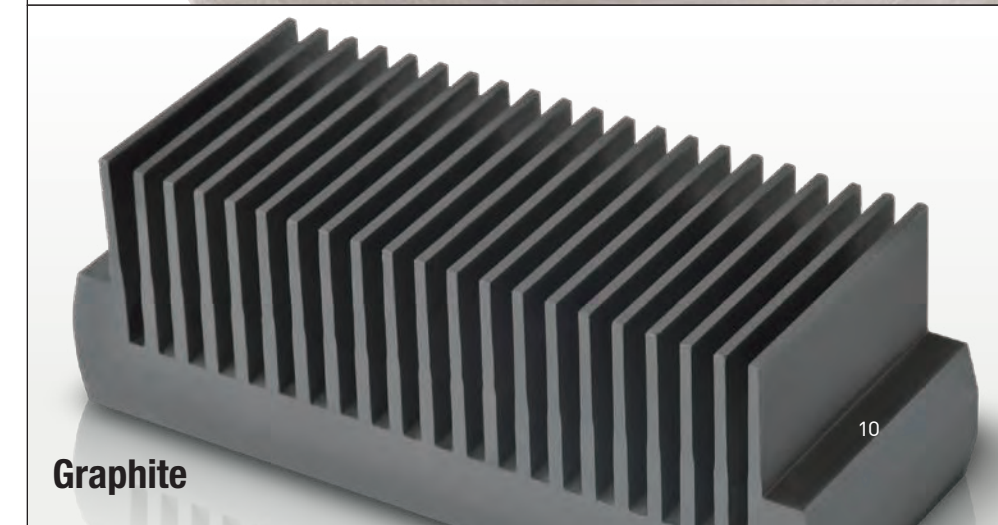
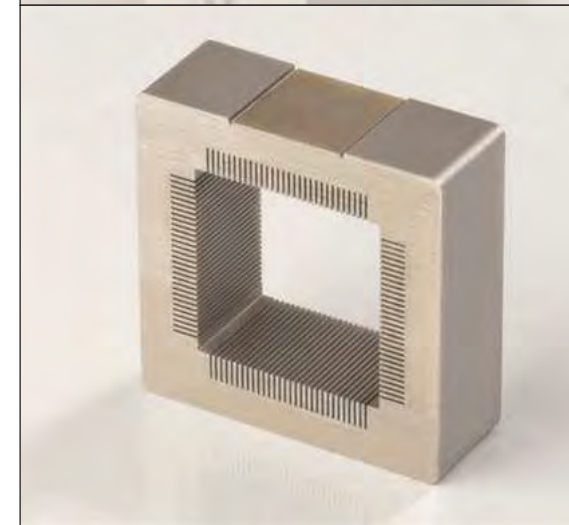
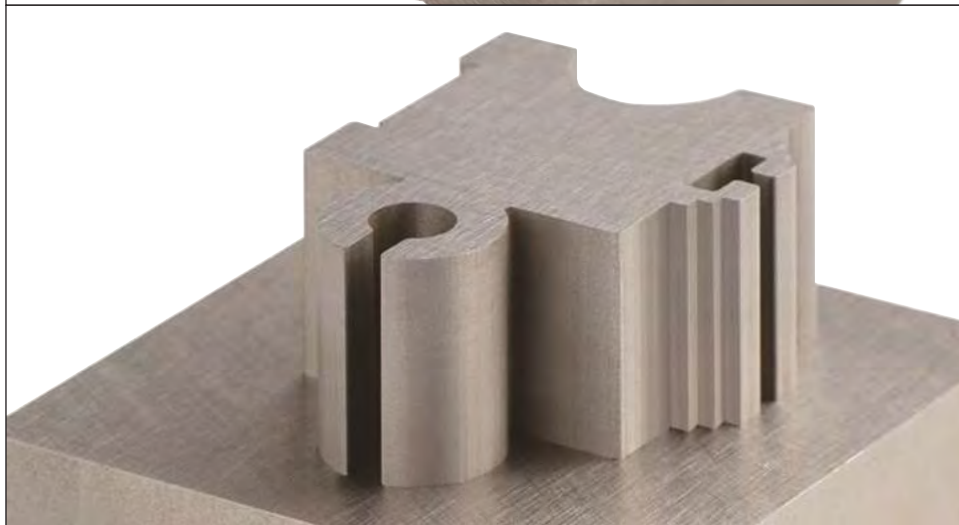
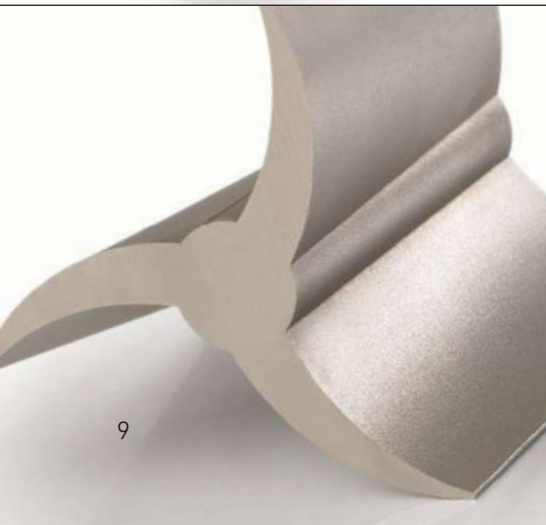
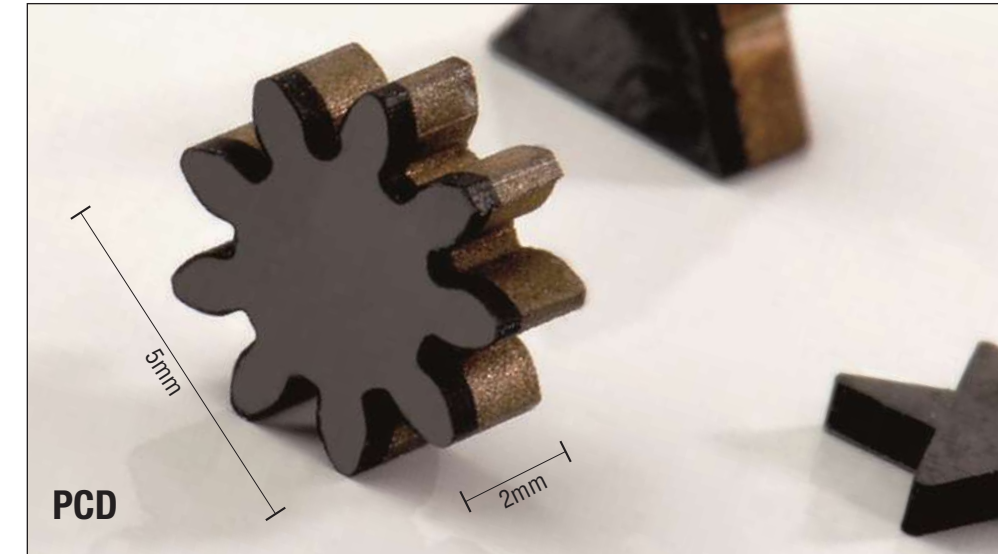
High Tolerance fitting



Ultra Thin Wire



Special Material



Tungsten Carbide

Graphite

Specification



Flushing Type: Wi-30E | Wi-50E | Wi-60E | Wi-70E | Wi-90E

Model		Wi-30E	Wi-50E	Wi-60E	Wi-70E	Wi-90E
Max. Workpiece Size L x W x H	mm	760 x 520 x 295	870 x 520 x 295	1100 x 650 x 340	1170 x 680 x 295	1380 x 760 x 295
Work Table Size	mm	640 x 500	740 x 500	870 x 680	970 x 730	1120 x 730
Max. Working Load	kgs	500	700	1000	1000	1300
X / Y / Z Axis Travel	mm	400 / 300 / 300	500 / 300 / 300	600 / 450 / 350	750 / 500 / 300	900 / 500 / 300
U / V Axis Travel	mm	100 / 100	100 / 100	120 / 120	100 / 100	100 / 100
Wire Diameter Range	mm	Ø 0.1 ~ 0.3	Ø 0.1 ~ 0.3	Ø 0.1 ~ 0.3	Ø 0.15 ~ 0.3	Ø 0.15 ~ 0.3
Max. Taper Angle / Workpiece Thickness	° / mm	± 22.5 / 100	± 22.5 / 100	± 22.5 / 130	± 22.5 / 100	± 22.5 / 100
Max. Wire Load	kgs	10	10	10	10	10
Water Tank Capacity	L	270	270	300	360	360
Net Weight	kgs	1950	2300	3400	4000	5200
Machine Layout W x D x H	mm	2300 x 2200 x 2150	2600 x 2200 x 2150	3000 x 2650 x 2250	3200 x 2700 x 2250	3600 x 2900 x 2300

Submerge Type: Wi-200S | Wi-430S | Wi-530S | Wi-640S

Model		Wi-200S
Max. Workpiece Size L x W x H	mm	550 x 470 x 150
Work Table Size	mm	450 x 400
Max. Working Load	kgs	300
X / Y / Z Axis Travel	mm	210 / 200 / 155
U / V Axis Travel	mm	40 / 40
Wire Diameter Range	mm	Ø 0.1 ~ 0.3
Max. Taper Angle / Workpiece Thickness	° / mm	± 15 / 70
Max. Wire Load	kgs	6
Water Tank Capacity	L	450
Net Weight	kgs	1700
Machine Layout W x D x H	mm	1800 x 1900 x 1850

Model		Wi-430S	Wi-530S
Max. Workpiece Size L x W x H	mm	700 x 540 x 295	870 x 540 x 295
Work Table Size	mm	640 x 500	740 x 500
Max. Working Load	kgs	500	700
X / Y / Z Axis Travel	mm	400 / 300 / 300	500 / 300 / 300
U / V Axis Travel	mm	100 / 100	100 / 100
Wire Diameter Range	mm	Ø 0.1 ~ 0.3	Ø 0.1 ~ 0.3
Max. Taper Angle / Workpiece Thickness	° / mm	± 22.5 / 100	± 22.5 / 100
Max. Wire Load	kgs	10	10
Water Tank Capacity	L	570	570
Net Weight	kgs	2100	2450
Machine Layout W x D x H	mm	3100 x 2200 x 2150	3250 x 2200 x 2150

Model		Wi-640S
Max. Workpiece Size L x W x H	mm	1000 x 720 x 345
Work Table Size	mm	870 x 680
Max. Working Load	kgs	1000
X / Y / Z Axis Travel	mm	600 / 450 / 350
U / V Axis Travel	mm	120 / 120
Wire Diameter Range	mm	Ø 0.1 ~ 0.3
Max. Taper Angle / Workpiece Thickness	° / mm	± 22.5 / 130
Max. Wire Load	kgs	10
Water Tank Capacity	L	940
Net Weight	kgs	3500
Machine Layout W x D x H	mm	3550 x 2650 x 2300



Specification



Column Movement: Wi-1065SA

Model		Wi-1065SA
Max. Workpiece Size L x W x H	mm	1550 x 1050 x 515
Work Table Size	mm	1345 x 855
Max. Working Load	kgs	4500
X / Y / Z Axis Travel	mm	1000 / 600 / 520
U / V Axis Travel	mm	160 / 160
Wire Diameter Range	mm	Ø 0.15 ~ 0.3
Max. Taper Angle/ Workpiece Thickness	°/ mm	± 22.5 / 160
Max. Wire Load	kgs	16 (Can be Customized)
Water Tank Capacity	L	2400
Net Weight	kgs	8000
Machine Layout W x D x H	mm	4200 x 4350 x 3250

Installation Requirements:

- Input Voltage : AC 380V 3 Ph / 50 HZ / 60 HZ
- Power Consumption: 15 KVA (Without Water Chiller)
- Environment: To insulate noise, electric wave and easy maintenance access
- Ground: Machine has to be ground to avoid abnormal inference voltage and stabilize machining condition ground of value > 10 Ω
- Temperature Control: 20 ±1 c
- Humidity Control: Under 75% RH
- Vibration: Under 0.6mm/ S2



Linear Motor: Wi-L400S | Wi-L500S | Wi-L600S

Model		Wi-L400S	Wi-L500S	Wi-L600S
Max. Workpiece Size L x W x H	mm	700 x 540 x 295	870 x 540 x 295	1000 x 720 x 345
Work Table Size	mm	640 x 500	740 x 500	870 x 680
Max. Working Load	kgs	300	500	700
X / Y / Z Axis Travel	mm	400 / 300 / 300	500 / 300 / 300	600 / 450 / 350
U / V Axis Travel	mm	100 / 100	100 / 100	120 / 120
Wire Diameter Range	mm	Ø 0.1 ~ 0.3	Ø 0.1 ~ 0.3	Ø 0.1 ~ 0.3
Max. Taper Angle/ Workpiece Thickness	°/ mm	± 22.5 / 100	± 22.5 / 100	± 22.5 / 130
Max. Wire Load	kgs	10	10	10
Water Tank Capacity	L	570	570	940
Net Weight	kgs	2100	2450	3500
Machine Layout W x D x H	mm	2850 x 2200 x 2150	2950 x 2200 x 2150	3550 x 2650 x 2300

All series Standard Accessories

- Automatic Vertical Alignment Jig: 1 Set
- Power Feed Contact: 2 Pcs
- Filter: 2 Pcs
- Clamping Tool: 1 Set
- Wire Guide (Ø 0.25 mm): 1 Set
- Brass Wire (Ø 0.25 mm / 5kg): 1 Roll
- Ionic Exchange Resin (5L / 10L)
- Tool Box: 1 Set
- X, Y axes linear scale are included in Wi-640S & Wi-1065SA
- Wi-1065SA contains A.W.T System

All Series Optional Accessories

- Wire Guide (Ø 0.1 ~ 0.2 mm)
- 22.5° Nozzle
- 3R/EROWA Clamping Tool
- Parallel Bar
- Water Chiller
- Power Regulator
- X, Y Axes Linear Scale
- Auto Wire Threading System
- Auto Wire Cutting System
- CAD/CAM Software
- PCD Professional Electric Circuit
- 6 Axes Or Above Control
- Wire Speed Meter
- Wire Tension Meter
- Water Resistance Meter

Note: No.13 ~15 Are Calibration Equipments