About CHMER

Established in 1975, CHMER is the largest EDM manufacturer in Taiwan, exporting over 55 countries. Product lines include Die Sinking EDMs, Wire Cut EDMs, Small Hole Drilling EDMs, High Speed Milling Machines, and Laser Machines. A comprehensive technical support completes our services.

Environmental Requirements

1. Ideal temperature-controlled room: 23 ± 0.5°C; Humidity: below 75% RH
2. Avoid placing the machine near vibrating sources or sources of impact energy, such as floors with heavy machinery
3. Avoid placing the machine under direct sunlight
4. Avoid placing the machine near heat processing equipment or magnetic fields, as the controller's sensitive electronic components may be affected
5. Avoid placing the machine in dusty environments, which may impact the machine structure and components

Space Requirements

Ensure sufficient space around the machine for maintenance access and operational movement.

Grounding Work

1. To prevent electromagnetic interference and leakage, follow Class 3 grounding regulations (ground resistance below 10Ω) as specified in the electrical equipment standards, and connect to other machines' grounding points
2. Use an independent grounding wire of 14 mm²

Air Pressure Requirements

1. Only machines equipped with AWT (Auto Wire Threading) or immersion-type models require air pressure: 6 kg/cm²

CHMER
Non-traditional Machining Solution Provider

UA Green and Compact Linear Motor Drive Wire Cut EDM

INTELLIGENCE × FUTURE

TAIWAN EXCELLENCE
GOLD AWARD 2025
Everyday Excellence

UA432L

UA Series Wire Cut EDM

UA SERIES

Smart Manufacturing, Smarter Future
Boosting Productivity Through Efficiency and Sustainability

Towards a Green Future

Automotive	Medical	Energy	Aerospace
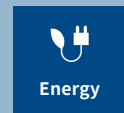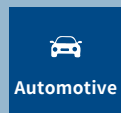
The newly launched UA series demonstrates a breakthrough in energy-saving technologies, engineered for high-precision molds and components in aerospace, automotive, energy, and green energy sectors. Combining precision with user-friendly operation, it reinforces CHMER's leadership in intelligent manufacturing.

With upgraded computing power and advanced discharge circuits, the UA series boosts equipment performance, reduces part wear, and extends product lifespan. Continuous process optimization enhances consumable efficiency and lowers production costs—meeting today's demands for both productivity and sustainability.

CHMER prioritizes ergonomics and safety in every design, ensuring operator protection while advancing toward net-zero emissions. We are dedicated to developing innovative, eco-friendly manufacturing solutions that support a greener future.

The UA series is more than a technological achievement—it is a promise of efficiency, economy, and sustainability delivered to our customers.

UA432L

Machine Design

The entire series features an integrated machine design that saves space and shortens installation time. Combining aesthetics with ergonomic design, it reduces footprint by 20% and speeds up setup by 25%, enabling smart, efficient machining with minimal manpower.
With a high-rigidity structure and one-touch tank door, it ensures stable and high-performance operation even with fewer operators.

01 Integrated Design

The machine base, power supply, and water tank are integrated into a streamlined, minimalist design, reducing transportation costs, floor space requirements, and installation time.Combined with aesthetic design elements, the exterior is sleek and modern, delivering a professional and high-tech operational experience.

02 High-Rigidity Moving Column Structure
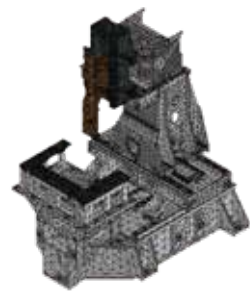
Utilizing FEA (Finite Element Analysis) to optimize the moving column structure, this design enhances rigidity and stability. The reinforced base and slideways ensure exceptional precision even during simultaneous XY-axis movement. Long-term machining performance is consistently outstanding.

03 Automatic Rise-and-Fall Door

With just a single press or a programmed command, the tank door quickly rises or lowers. Equipped with an automatic lock function to ensure safety during machining, it significantly improves work efficiency and saves space.

04 Compact & Efficient

20 % DOWN

❙ Occupies 20% less floor space compared to standard models.
❙ Installation time is reduced by 25% compared to standard models.

6th Gen AWT

5th vs. 6th Gen AWT System

Item	Unit	AWT 5.5	AWT 6th	Diff. %
Threading Time	sec	12	9	-25%
Wire Cutting Time	sec	4.5	2.5	-44%
Heater Lifetime	mo	4	8	100%
Heater Power Consumption	W	5.5	4.5	-18%
Circuit Board Count	pcs	7	5	-28%
AWT System Power Usage	W	320	165	-48%

Backed by years of automation experience, CHMER introduces the enhanced 6th Gen AWT system. It shortens wire threading and cutting time by over 20%, extends consumable lifespan by more than 100%, and reduces overall power consumption by 48%.

❙ Compact yet highly reliable design for easier maintenance and lower cost.

❙ EC tension control ensures up to 100% threading success for smart unmanned machining.

❙ Broken wire point water immersion reduces retries and flushing time.

❙ Flexible threading mode settings help resolve issues for continuous machining.

❙ Auto threading assistant enables easy threading for thick wires.

❙ Integrated fluid level control for full automation and higher productivity.

❙ Multi-step hole threading made easy with precision and clarity.

❙ Stable high-speed threading across multiple holes, unmatched performance.

01 Intuitive Parameter Adjustment Interface

Offers 50 copper wire parameter sets. Simply select the suitable one for different wire brands and diameters to ensure excellent threading performance.
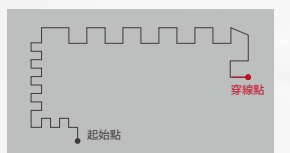
02 3999 Programmable Hole Machining Records

Capable of storing up to 3999 hole machining records for easy access to multi-hole data.

03 Break point Re-threading Function

After a cutting interruption, threading resumes at the break point for immediate machining—no need to return to the start, reducing idle travel time.

04 Auto Threading Assistant Device

Enhances threading success for high thickness through Auto Threading Assistant Device
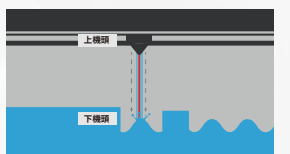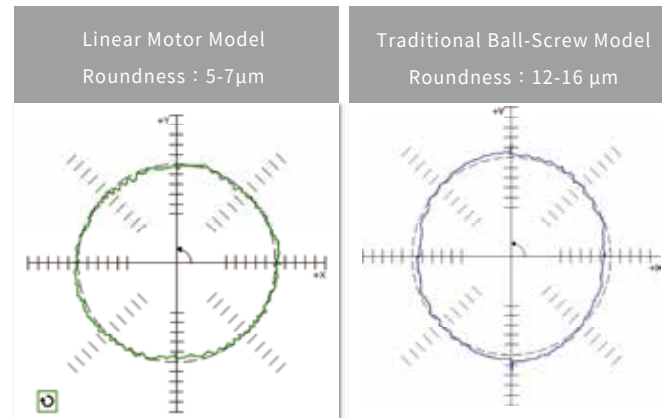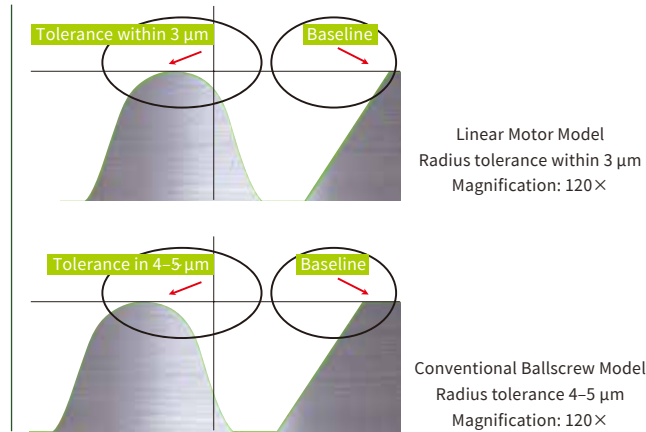
Linear Motor

All models are equipped with CHMER's UX1 linear motor drive system, delivering stronger thrust with lower energy consumption to ensure stable and accurate movement every time.

It features zero friction, no backlash, no transmission loss, no vibration, and excellent responsiveness.

Ballbar Testing

After 5 Years of Use

Linear Motor Model	Traditional Ball-Screw Model
Roundness : 5-7μm	Roundness : 12-16 μm

Linear Motor Achieves Superior Accuracy in Corner Transitions

Tolerance within 3 μm   Baseline

Linear Motor Model
Radius tolerance within 3 μm
Magnification: 120×

Tolerance in 4–5 μm   Baseline

Conventional Ballscrew Model
Radius tolerance 4–5 μm
Magnification: 120×

Reduction of the tolerance on shape accuracy

Especially at the intersection of straight line to curve

	Linear Motor		Ballscrew	
	Section A	Section B	Section A	Section B
Top	5.999	3.999	5.999	3.998
Middle	6.000	3.998	5.998	3.995
Bottom	6.000	4.000	6.000	3.999
Tolerance	-0.001	-0.002	-0.002	-0.005

《Machining Conditions》

▌ Brass wire = 0.20 mm/BS
▌ Workpiece=SKD11
▌ Thickness=50 mm
▌ Number of cuts=3

《Cutting Profile》

A:6mm   B:4mm
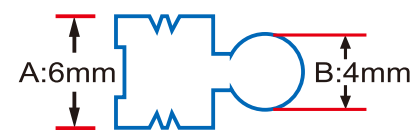
Enhanced Surface Accuracy

When equipped with the optional AC-μ Super Fine Finish Circuit, the linear motor system significantly enhances finishing speed, surface uniformity, and detailing.With speed deviation under 10%, it achieves superior surface finishes beyond the capabilities of traditional ballscrew systems.

▌ Brass wire = 0.20 mm/BS   ▌ Workpiece = SKD11
▌ Number of cuts = 5   ▌ Thickness = 25 mm
▌ Surface roughness = Ra 0.25 μm   ▌ Roundness = 2 μm
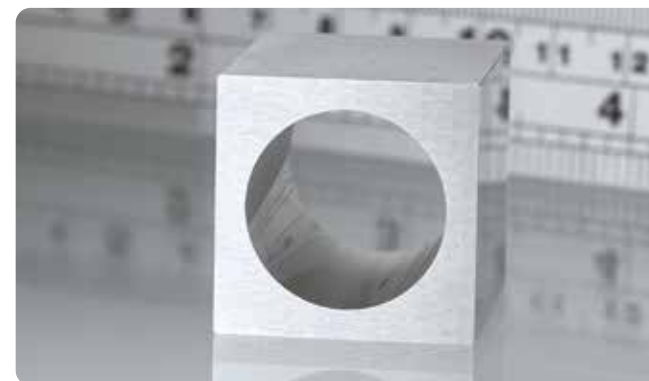
Absolute Linear Scale

▌ High precision: Provides superior position detection accuracy for improved machining precision.
▌ No need for homing: Eliminates repeated homing after each startup, saving time.
▌ Excellent anti-interference: Stable performance even in harsh environments.
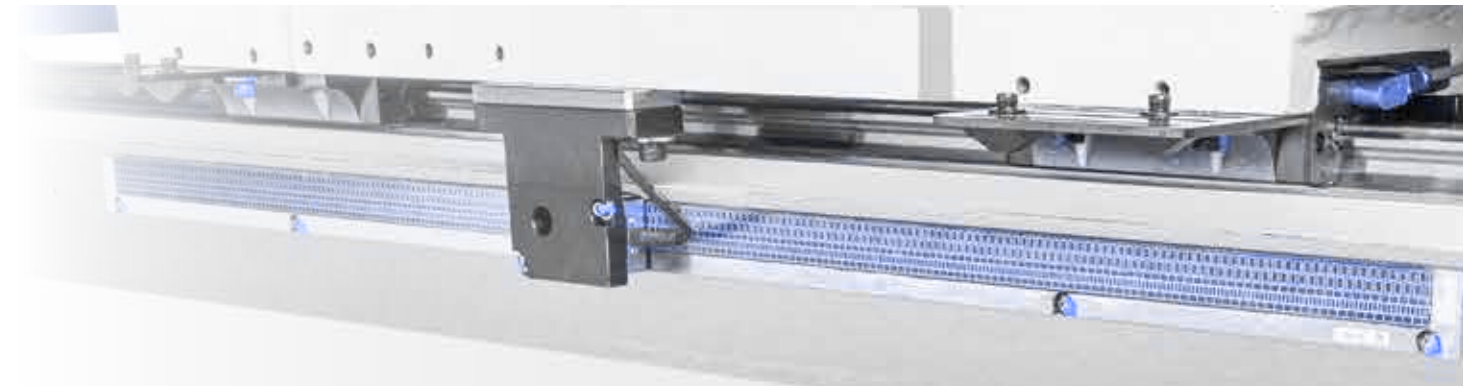
CE Certification

Complies with EU certification standards and meets relevant safety and environmental regulations, providing users with the highest level of protection and reliability.
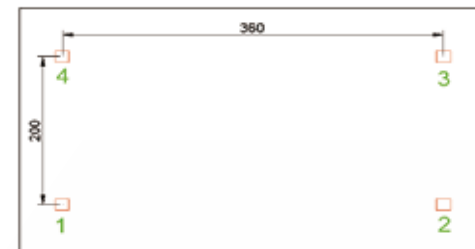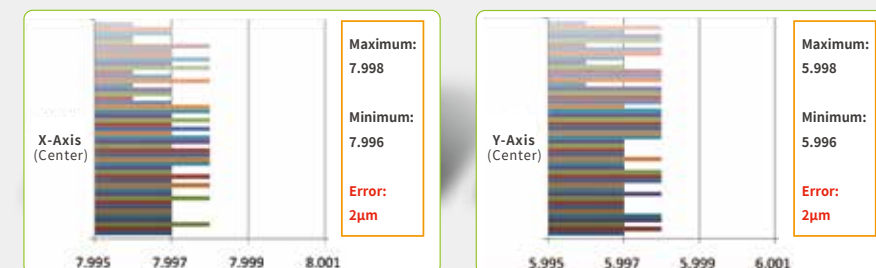
Precision Performance

High Accuracy + High Repeatability = High Stability

Positioning Accuracy – Pitch (mm)					Shape Accuracy – Cutting Shape (mm)			
Coordinate			Measured Deviation				Measured Deviation	
NO	X	Y	X	Y	NO	Square Hole	X	Y
1	0.00	0.00	0.0000	0.0000	1	8 x 8	0.0012	0.0009
2	360.00	0.00	-0.0036	-0.0002	2	8 x 8	0.0015	0.0013
3	360.00	200.00	-0.0027	-0.0021	3	8 x 8	0.0011	0.0010
4	0.00	200.00	-0.0003	-0.0012	4	8 x 8	0.0009	0.0012
Min. Deviation mm			-0.0003	-0.0002	Min. Deviation mm		0.0009	0.0009
Max. Deviation mm			-0.0036	-0.0021	Max. Deviation mm		0.0015	0.0013

▌ Workpiece : SKD11

▌ Thickness : 20.0 mm

▌ Wire Diameter : 0.25 mm(Standard Brass Wire)

▌ Number of cuts : 3 passes (1 rough cut + 2 skim cuts)

▌ Ambient Temperature : 23°C±0.5°C

Machining Accuracy

X-Axis (Center)

Maximum: 7.998
Minimum: 7.996
Error: 2μm

7.995   7.997   7.999   8.001

Y-Axis (Center)

Maximum: 5.998
Minimum: 5.996
Error: 2μm

5.995   5.997   5.999   6.001

The machine maintained a repeatability of ±2 μm over 50 consecutive punches, showcasing precision comparable to premium Japanese and Swiss models.

50 consecutive single-pass punches，Machining size: 8 × 6 mm   Thickness: 30 mm

01   AC/DC Power Supply

The high-speed non-electrolytic AC power system is ideal for special metals such as tungsten alloy and titanium alloy.
It suppresses electrolysis-induced surface corrosion and oxidation, significantly reducing soft layer formation and extending mold lifespan.

02   Corner Control Function

Corner Control ON   Corner Control OFF

The unique corner control function ensures ultra-precise machining quality.

Conditions :

▌ Workpiece: SKD11

▌ Wire Diameter: Ø 0.20 mm

▌ Number of cuts: 1

▌ Magnification: 150× optical projector

AC - μ Super Fine Finish Circuit (Opt.)

Applicable only to the UA432L model

AC-μ Super Fine Finish Circuit enables high-frequency discharge and precise energy control for superior surface quality :

▌ Best surface roughness: Ra 0.14 μm (Tungsten Carbide)

▌ Best surface roughness: Ra 0.25 μm (SKD11 Steel)

Material: Tungsten Carbide | Wire Ø 0.20 mm | Thickness: 20 mm					
Passes		5	4	3	2	1
Surface Roughness (μm)	Ra	0.14	0.20	0.45	1.42	2.0
	Ry	1.2	1.6	3.3	10.2	13.0

Material: SKD11 | Wire Ø 0.20 mm | Thickness: 50 mm					
Passes		5	4	3	2	1
Surface Roughness (μm)	Ra	0.25	0.32	0.62	2.0	2.4
	Ry	2.1	3.0	5.0	13.3	14.3

Intelligent Stepped Control (ISC) Power Supply (Opt.)

Through monitoring discharge waves, ISC can provide precise discharge control for stepped workpieces. It effectively prevents wire breakage, reduces wire marks, ensures high-speed and stable machining, and delivers high-quality finished parts.

Conditions: ▌ Workpiece: SKD11   ▌ Wire diameter: Ø0.25 mm

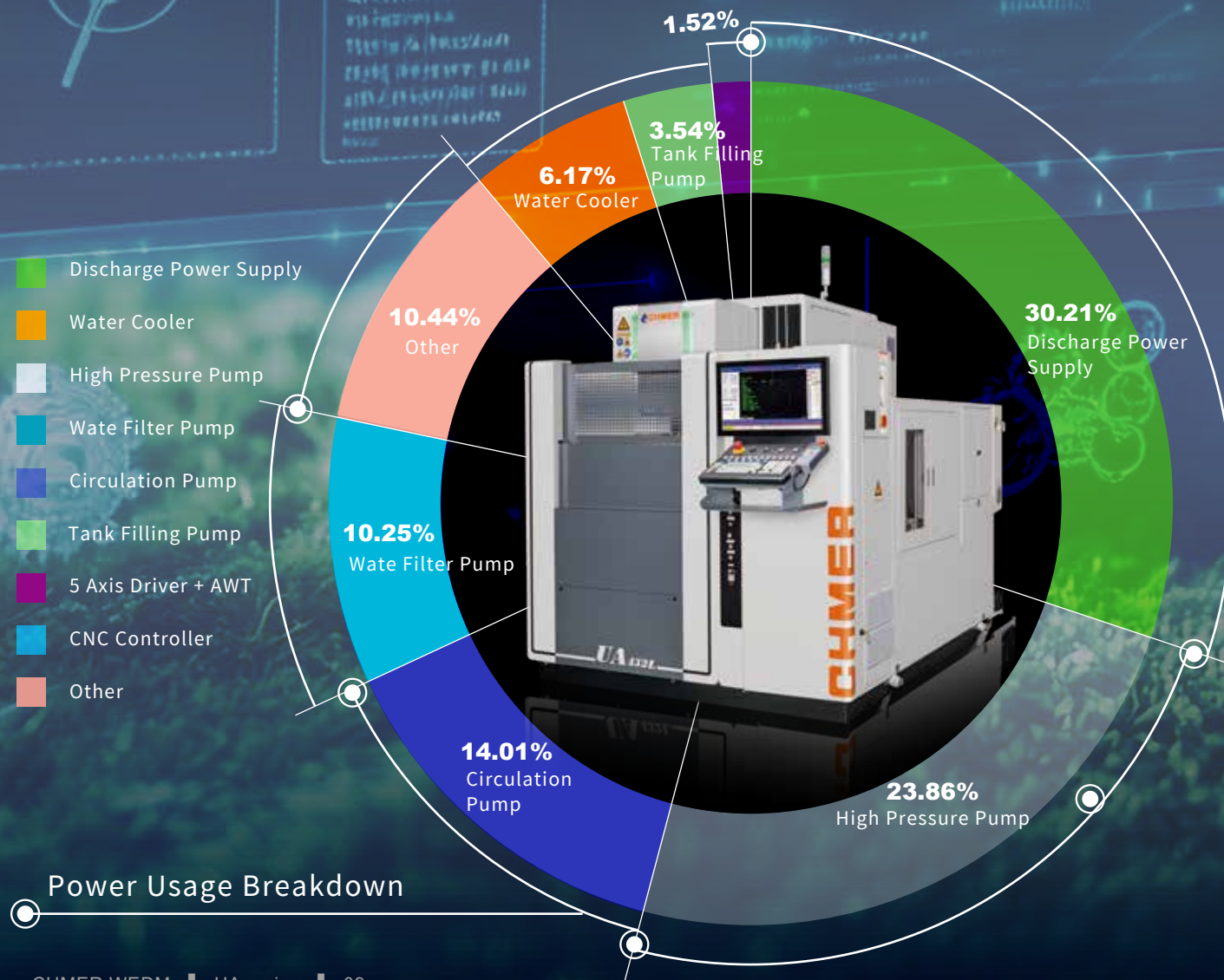**Speed Test**   35 % UP

Stepped function OFF

60 mm
30 mm
10 mm

1.1   2.1   5.4

Unit: mm/min

Stepped function ON

60 mm
30 mm
10 mm

2.1   3.3   5.4

Unit: mm/min

Accuracy Test   6 μm improved by

Stepped function OFF

-4
-1   -5
9 μm
0   4   3

Unit: μm

Stepped function ON

1
-2   0
3 μm
0   0   1

Unit: μm

Concave Amount   2 μm improved by

Stepped function OFF

5   4

Unit: μm

Stepped function ON

3   3

Unit: μm
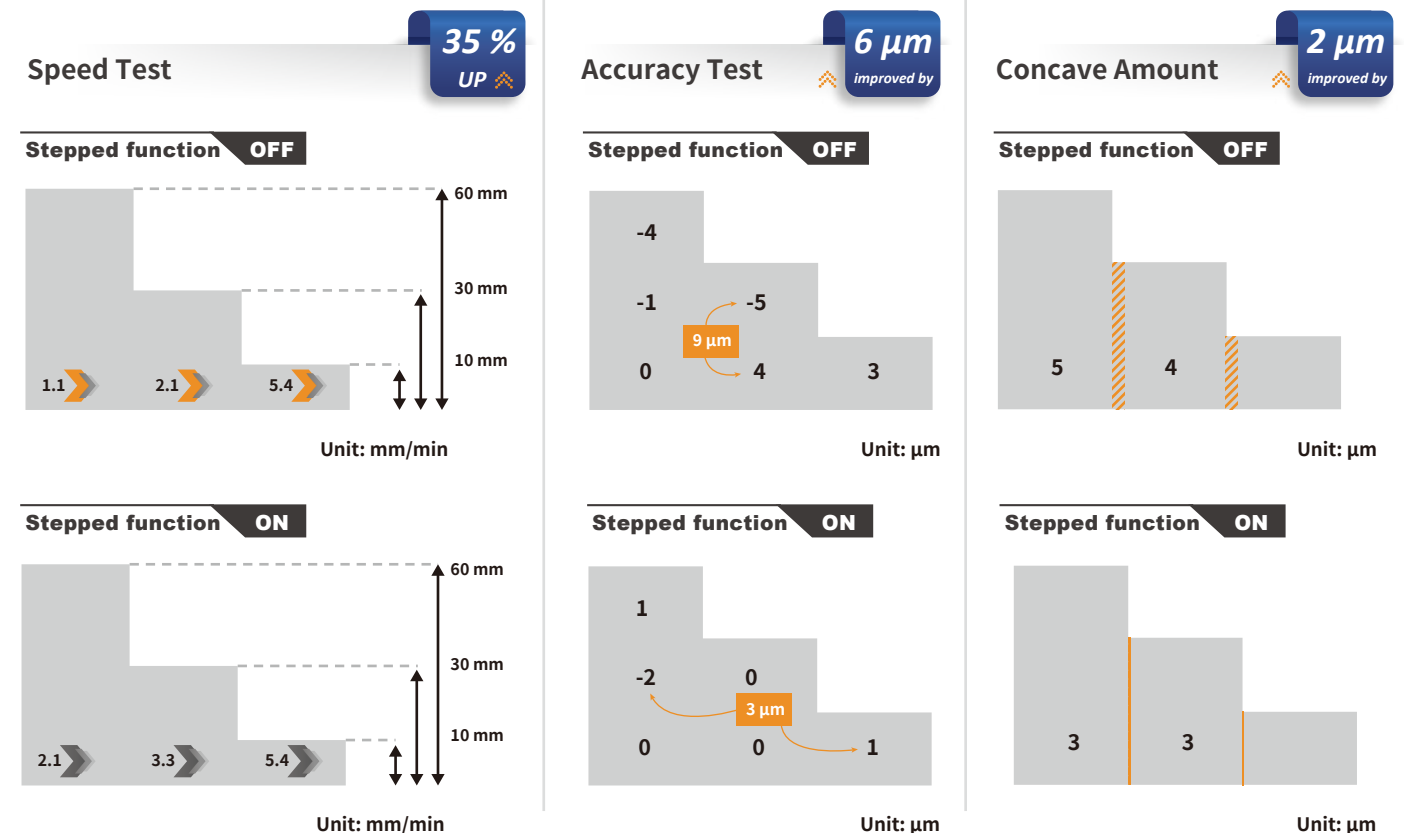
High-efficiency Energy Management System

Embracing the AI revolution and the wave of green machinery, energy-saving, net-zero carbon emissions, and even negative carbon are becoming increasingly important issues in carbon management. CHMER continues to make advancements and improvements by introducing modular products, which reduce the number of components, design hours, and assembly time. The company adopts energy-efficient, high-performance products to lower CO_2 emissions during processing. By optimizing mechanical movements, the energy-saving capabilities of new products are being demonstrated in practice.

Power Usage Breakdown

- Discharge Power Supply
- Water Cooler
- High Pressure Pump
- Wate Filter Pump
- Circulation Pump
- Tank Filling Pump
- 5 Axis Driver + AWT
- CNC Controller
- Other

- 1.52%
- 3.54% Tank Filling Pump
- 6.17% Water Cooler
- 10.44% Other
- 30.21% Discharge Power Supply
- 10.25% Wate Filter Pump
- 14.01% Circulation Pump
- 23.86% High Pressure Pump


High-efficiency Energy Management System

Unlocking Green Potential Through Intelligent Energy-saving Solutions

The UA series integrates intelligent power-saving systems and water circulation solutions.
Compared to the previous generation, power system consumption is reduced by 28%, and water system energy use is reduced by 45%, resulting in an overall 40% decrease in machining energy consumption.
With a built-in energy-saving loop, energy is recycled and reused to maximize efficiency and sustainability.

✓ Energy-saving Inverter Chiller

Precise temperature control with ±0.5°C accuracy ensures stable machining and reduces energy consumption by 45%.
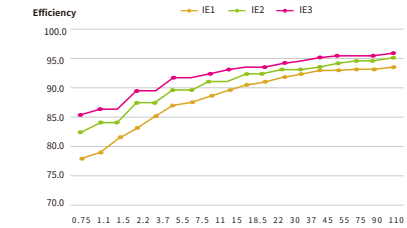
✓ High-efficiency IE3 Motor System

Equipped with IE3-grade inverter motors for precise load adjustment and output control, maximizing performance while reducing energy loss.

✓ Eco Cut (Energy-saving Cutting Mode)

Built-in Eco Cut mode reduces brass wire consumption by 42%.

Taiwan's First ISO 14955-Certified Wire Cut EDM Manufacturer

In 2024, the UA series successfully obtained the ISO 14955 Green Machine Tool Certification from the European Union, becoming the first wire cut EDM manufacturer in Taiwan to receive this international recognition.

This milestone contributes to carbon reduction and supports enterprises in advancing toward sustainable development.
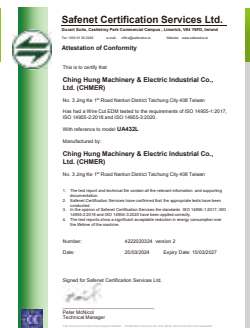
Energy Efficiency Comparison

CHMER	Old Series (2015)	New Series (2024)	Energy Saving (%)
Standby (4 hr)	4.68 kW	1.36 kW	-71%
Preparation (4 hr)	4.98 kW	1.55 kW	-69%
Processing (16 hr)	9.53 kW	5.73 kW	-40%
Daily Consumption	191.12 kW	103.32 kW	-54%

Carbon Emission Performance

Daily Energy Savings

Energy Reduction in Processing
40%

Charge a Smartphone
6913 Times

Net Zero Emissions
2050

03 Flatness Compensation System
POS **(Opt.)**

Equipped with a probe measurement system, POS compensates for deviation and converts it into a true vertical plane after calculation.

90°
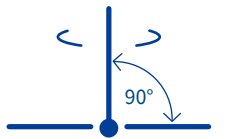
04 Taper Compensation System
System

During machining, angle deviation can be corrected and adjusted to any desired degree.

i8 + Power Supply

15%
CUTTING SPEED

ENERGY SAVING 28%

The intelligent i8+ power system boosts cutting speed by 15% while achieving 28% energy savings.
It also features automatic discharge path optimization to enhance machining stability and reduce power loss.

01 Discharge Control
System

The system uses an embedded current-reducing control architecture and ASIC chips to improve discharge efficiency. It monitors the gap in real time, effectively suppresses arc discharge, and stabilizes the cutting conditions, resulting in up to 15% faster cutting speed.

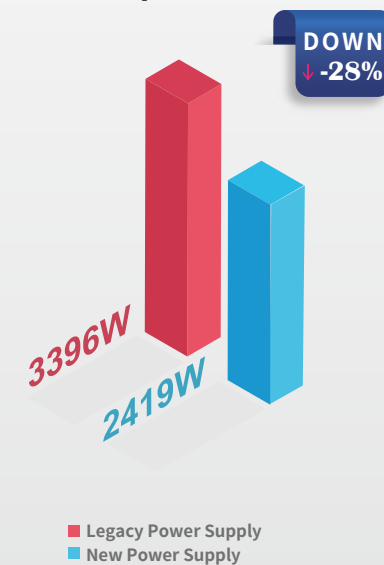## 02 IVC High-frequency Switching Inverter
Power Supply

The upgraded IVC high-frequency switching inverter offers wide-range power output adjustment,
allowing operators to fine-tune the discharge energy for better cutting performance and system safety.

It also adopts advanced filtering technology to reduce external interference and output more accurate energy pulses, ensuring precise discharge judgment and stable cutting performance.

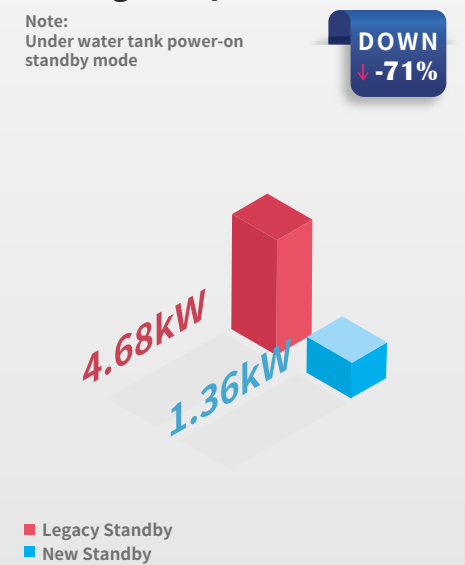## 05 Energy Recycling Technology
Next-Generation

The new-generation i8+ power system incorporates advanced energy recycling circuits. It converts energy generated from reverse currents at high-speed switching into reusable power at the power source end, achieving 28% energy savings compared to the previous generation.
Unlike traditional designs that dissipate heat via SINK resistors, this system reduces carbon emissions while achieving real energy efficiency.

01 Power Efficiency Comparison

DOWN ↓ -28%

3396W
2419W

■ Legacy Power Supply
■ New Power Supply

02 Standby Power Saving Comparison

Note:
Under water tank power-on standby mode

DOWN ↓ -71%

4.68kW
1.36kW

■ Legacy Standby
■ New Standby

In-House Controller

Features of the W5N Control System

The W5N GenOS controller integrates a Linux-based high-performance system with industrial PC technology, boosting computing power by over 15 times and supporting multi-axis synchronous control.

It features Database, FTP server, OPC UA server, and remote desktop functions for seamless data collection, remote monitoring, and MES system integration.

The modular hardware design improves maintenance convenience, enables quick upgrades, and facilitates efficient external device integration, ensuring long-term operational stability.

Intuitive Operation Interface

Simple and clear touch interface with guided navigation, allowing new users to operate quickly.

Preloaded Hole Machining Data

Stores up to 3,999 sets of machining data, with access to multiple hole-cutting parameters.

CAD/CAM Software (Opt.)

Supports 2D/3D graphics input, enabling direct toolpath conversion without additional processing steps for seamless execution.

01 Linux-Based OS

Independently developed Linux-based technology ensures high availability, stability, and reliability. It flexibly meets various operational needs without concerns about viruses or software licensing issues, delivering optimal performance across different applications.

02 Digital Water Pressure Adjustment

The digital water pressure system features automatic adjustment, allowing precise pressure and flow rate control based on actual machining needs, ensuring process stability.

03 QR Code Program Input (Opt.)

Utilizes QR code scanning for quick input of program calls and machining parameters, streamlining pre-processing setup while reducing manual input time and error rates.

04 EtherCAT Communication

Combining EtherCAT automation with GenOS enables high-speed response and scalability, meeting multi-axis synchronized motion control needs. Supports up to 7-axis EtherCAT communication and discharge modules, boosting computing performance 15×.

05 Temperature Monitoring

Integrated temperature sensors and control system monitor equipment operating temperatures in real time. Data collected by sensors provides instant temperature feedback, enabling thermal compensation to maintain optimal operating conditions. Supports preventive maintenance strategies to enhance efficiency and stability.

06 Enhanced Performance

From graphical data loading to pre-machining simulation, the controller's computation time has improved 15× compared to the previous generation.

New vs. Old Controller Comparison				
Item	Unit	F-Type	N-Type	Difference
Computing Performance	FLOPs	806	12135	↑ 15×
Size	LxHxW cm	28.5x20.5x30.5	19.4x14.8x6	↓ 90%
Weight	kg	9.05	1	↓ 90%
Power Consumption	W	44	13.44	↓ 70%
Component Count	pcs	159	12	↓ 92%
Overall Assembly Size	kg	105	84	↓ 20%
100MB File Loading Speed	s	31.8/36.5	2.9/2.7	↑ 12×

Information Management Center - Features

▦ Data Visualization

Real-time machine data is displayed, retrieved from the machine's database, and converted into pie charts and line graphs, using data visualization for production line analysis.

💬 Active Push Notifications

CHMER's smart push notification system is perfectly integrated with the alarm system, allowing you to monitor machine status anytime, anywhere.

Whether dining, resting, socializing, or on vacation, you will receive notifications instantly on your phone or tablet.

In the Industry 4.0 era, this system significantly shortens problem response time, reduces cost losses, minimizes manpower for on-site monitoring, and enhances overall operational efficiency.

Information Management Center - Includes

01 📱 Mobile Data Platform

Offers mobile management capabilities, allowing instant access to various machine information, such as machine status, uptime, consumable life management, and real-time machining monitoring, through phones or tablets.
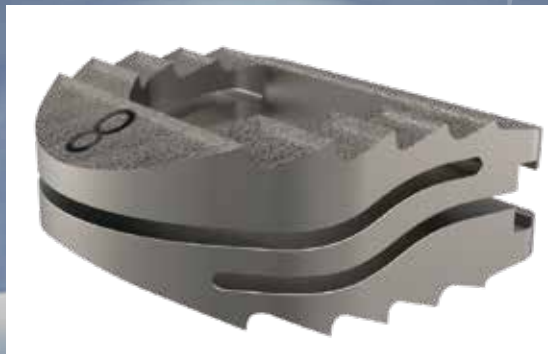
02 ☁ Intelligent Information Management Center

Stores large amounts of machine data every second, viewable through historical data query pages, allowing the resolution of the following issues:

 a. Understanding machine uptime (critical for customers)

 b. Knowing consumable usage (helps customers know when to replace consumables)

 c. Conducting detailed analysis of machine operation (retrieve alarms during specific timeframes, and know the machine's status at the time to further analyz

Mobile Technology and Optimal Intelligence (Opt.)

Without standing in front of the machine, the all new "Remote monitoring & IoT" can connect to the Cloud through various mobile devices.

The intelligent Cloud function creates a perfect mobile management platform and gives you a foreseeable future and a new era of intelligent machinery.

With the core technology of intelligent information management center, the IoT can collect the data and history of every machine, for instance, the relation between power, temperature, and time, and can observe the characteristic data by time. The customer can own a database of big data.

Under the intelligent information management center, we develop two kinds of software service platform for easy and convenient management system, including

 ▌ Mobile Data Platform

 ▌ iConnected Information Management Center

You can choose the suitable platform among different service platforms.

MEDICAL
INDUSTRY

Lumbar Intervertebral Cage

AUTOMOTIVE
INDUSTRY

Transmission System Mold

ENERGY
INDUSTRY

Sic Heating Element

AEROSPACE
INDUSTRY

Fir Tree Machining,
Nickle Base Material

Standard/Optional

Standard ●   Optional ○   Not Available —

Features & Item	Specification	Unit	UA432L	UA643L
Power Supply & Control System				
Power Supply	i8+	1 set	●	●
AC/DC Power	AC/DC	1 set	●	●
Intelligent Stepless Control Power	ISC	1 set	○	○
Super Fine Finish Circuit	AC-μ	1 set	○	○
Touch Screen	24"	1 set	●	●
Interrupted Power Recovery	CHMER	1 set	●	●
USB	CHMER	1 set	●	●
Internet Data Transfer	CHMER	1 set	●	●
DXF Transferring Function	CHMER	1 set	●	●
Remote Monitoring & Internet Connection	CHMER	1 set	○	○
Mechanism & Machining System				
UX1 Linear Motor Drive System		1 set	●	●
Absolute Linear Scale	0.1 μm resolution	1 set	●	●
Automatic Wire Threading System	AWT 6.0	1 set	●	●
Wire Diameter Machining	0.15~0.30 mm	1 set	●	●
Wire Threading Assistant Device		1 set	●	●
Z-Axis Travel Extension	300mm	1 set	○	-
Z-Axis Travel Extension	400mm	1 set	-	○
Automatic Rise-and-Fall Door		1 set	●	●
Intelligent Water Level Control System		1 set	●	●
High Efficiency Water Circulation System		1 set	●	●
Energy Saving Inverter Chiller	20000 BTU	1 set	●	●
Additional Functions				
Temperature Monitoring Device	CHMER	1 set	○	○
Digital Water Pressure Adjustment	CHMER	1 set	●	●
CE Conformity	CE circuit + EMC shielding	1 set	●	●
6th Axis Machining	CHMER	1 set	○	○
Jumbo Wire Feeder	30 kg	1 set	○	○
Auto Wire Chopper	Ø ≤ 0.1 mm Not Usable	1 set	○	○
2 in 1 Transformer and AVR	CHMER	1 set	○	○
Waste Adhesion Prevention	CHMER	1 set	○	○
Sleep Mode & Wake-up	CHMER	1 set	●	●
Wire Overflow Protection	CHMER	1 set	●	●
QR Code Program Input	CHMER	1 set	○	○
Taper Compensation System	CHMER	1 set	●	●
Flatness Compensation System	CHMER	1 set	○	○
CAD/CAM	CHMER	1 set	○	○

2 - Year Warranty — Full Coverage

5 - Year Warranty — Linear Motors

10 - Year Guarantee — Accuracy Guarantee

Standard/Optional Features

Standard

Patented Automatic Rise and Fall Front Door

Best protection and automatically rise and fall door to match the loading and unloading workpiece by automation

Standard

Energy-Saving Inverter Chiller

Autonomous temperature detection, smart variable frequency, and fast cooling precisely control water temperature to ±0.5°C, ensuring stable processing with 45% lower power consumption than standard chillers.

Standard
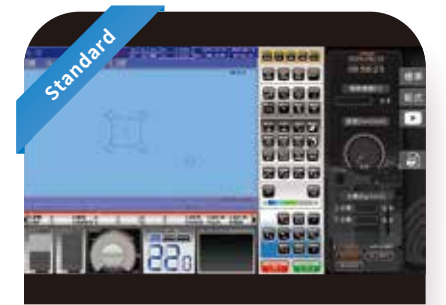
DXF Transferring Function

CHMER self-developed software can convert drawing to program

Standard

Sleep Mode & Wake-up

Allows you to pre-set daily wake-up times for the equipment, enabling it to start up and execute production tasks immediately.
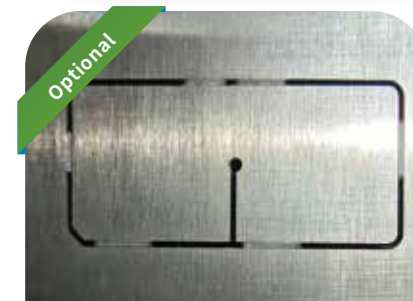

Optional

Jumbo Wire Feeder

30 kg wire spool provides long time cutting for unmanned operation

Optional

The 6th Axis

Equipped with IP68 protection, the 6th-axis supports underwater 3D machining, enabling complex surfaces and rotational angles for broader applications and greater added value.

Optional

Dross Adhesion Prevention

Optional welding helps prevent dross from affecting machining. Residual dross is removed post-processing, improving equipment utilization.

Optional

Flatness Compensation System

Equipped with a probe measurement system, POS compensates for deviation and converts it into a true vertical plane after calculation.

Optional

Auto Wire Chopper

The wire cutting device cuts waste wire into sections, increasing waste box space utilization by over 100% compared to traditional methods where wire is wound in a continuous coil.

UA SERIES

Standard Specifications

Model		UA432L	UA643L
X, Y, Z Travel	mm	400 x 300 x 250	600 x 400 x 300
U, V Travel	mm	100 x 100	120 x 120
Max. Workpiece Size	mm	800 x 600 x 245	950 x 650 x 295
Max. Workpiece Weight	kg	550	700
X, Y Feedrate	mm/min	1800	1800
Axis Drive System		XY Axes Linear Motor Drive/ UVZ Axes AC Servo Motor Drive	
Wire Diameter (Standard)	mm	Ø 0.15 ~ 0.30 (Ø 0.25)	
Wire Tension	gf	300 ~ 2500	
Max. Wire Feeding Speed	mm/sec	300	
Wire Feeder Load Capacity	kg	≦ 8	
Max. Cutting Taper	mm	± 21°/110(Wide Angle Nozzle，DA+DB=15	± 21°/140(Wide Angle Nozzle，DA+DB=15
Machine Dimension (WxDxH)	mm	2190 x 3235 x 2420	2430 x 3800 x 2440
Net Weight	kg	2700	4000
Dielectric Filtration System			
Dielectric Capacity	L	850	1080
Filter		Paper	Paper
Ion Exchange Resin Filter	L	14	14
Water Quality Control		Auto	Auto
Water Temperature Control		Auto	Auto
Power Supply Unit			
Circuit Type		Transistor, No Resistance Loop	
Discharge Mode		Rough Machining / Fine Machining / AC-μ Super Fine Finish (Optional)	
Discharge Voltage Levels	part	16 (Standard) / 20 (Optional)	
Discharge Time Levels	part	60	
Pause Time Levels	part	233	

CNC Unit

|			
Controller Version	N-Type Controller	Compensation Functions	Linear / Circular
Operating System	GenOS (LINUX)	Position Command	Absolute / Incremental
Processor	32 bit	Command Unit	Metric / Inch
CPU Core Count	Quad-core	Machining Speed Control	Servo / Fixed
RAM	4 GB	Interpolation Rate	0.001–9,999.999
Storage	32 GB	Program Storage Capacity	1,000–9,999
Display	24" Color Touch Screen	Power Input	3 Phase 220 V ± 5%
Servo Control	EtherCAT – Semi-closed Loop, Fully-closed Loop (Optical Encoder)	Max Input Power	8 kVA
Controlled Axes	5 / 7 Axes: X, Y, U, V, Z (Optional Rotary Axis)	Input Method	Keyboard, RS232C, RS422, RS485, USB, LAN
Resolution Unit	0.0001 mm		
Max Display Value	±9,999.9999 mm		

Floor Layout

UA432L
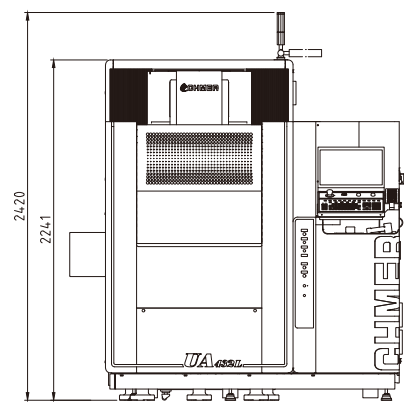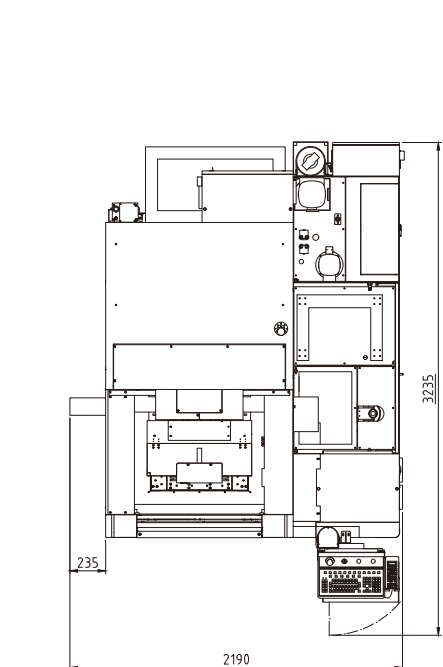
Worktable Hole Layout
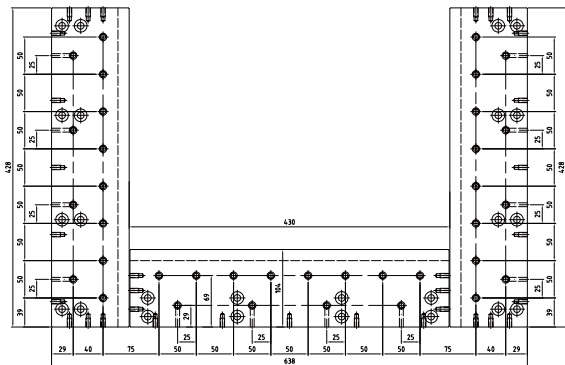
UA643L
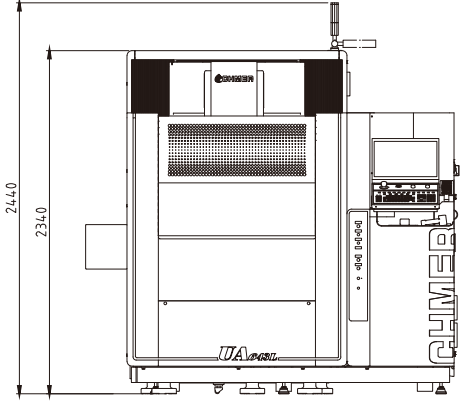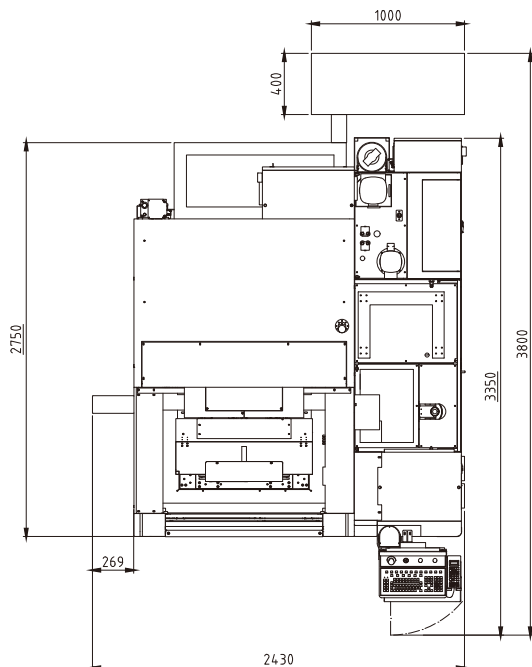
Worktable Hole Layout
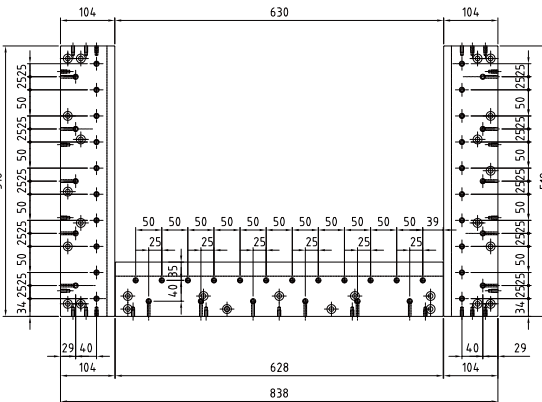
※Due to continuous improvements, the design and specifications are subject to change without prior notice.