



WeChat official account



IECHO website

**Hangzhou IECHO Science & Technology Co., Ltd.**

Headquarters address: No.1 Building, No.1 Weiye Road, Binjiang District, Hangzhou, China

Factory Address : No.180 - 2golf rd dongzhou str. fuyang hangzhou zhejiang

Tel: +86-571-86609560 Fax: +86-571-86698923

Email: [info@iechosoft.com](mailto:info@iechosoft.com)

[www. iechocutter.com](http://www.iechocutter.com)



**SKII**

**HIGH-PRECISION MULTI-INDUSTRY  
FLEXIBLE MATERIAL CUTTING SYSTEM**

**Precise / Intelligent / High speed / Flexible**

**Ball & Doggett**



A PROVIDER OF INTELLIGENT CUTTING

INTEGRATED SOLUTIONS FOR THE NON-METAL INDUSTRY

IECHO was established in 1992 and went public in March 2021. Over the past 30 years, IECHO has always adhered to independent innovation, a "professional" R&D team, continuous technological innovation, "fast" industry insight, and continuous injection of new blood, completing every growth and transformation, and improving the full coverage of the non-metal industry. Reach high-quality cooperation with many industry leaders.

2500<sub>mm/s</sub>

Maximum movement speed

2G

Linear motor drive acceleration

Magnetic scale positioning

HIGHSPEED

IECHO latest motion control module "IECHOMC" makes machine run more intelligently and able to switch into different motion modes to meet processing needs for different products and different industries.



4	3	66+	179+	126+
National standard	Industry standards	Invention patents	Patents	Software copyrights
100+	6%+	4000+	2000+	461+
R & D personnel	R&D investment	Annual capacity	Process standards	Staff
35000+	100+	60+	30+	300+
Users	Sales countries and regions	Industries coverage	National outlets	Global outlets

SEVEN CORE TECHNOLOGIES

Remote Diagnosis Rapid diagnosis and remote resolution	Intelligent Optimization Optimizing strategies based on features	Custom Development Develop exclusive control software	MES Connect to various management systems	Linear Motor Drive	Modular Framework Platform	Optical Automatic Knife Initialization



## Linear motor drive “Zero” transmission

IECHO SKII adopts the linear motor drive technology, which replaces the traditional transmission structures such as synchronous belt, rack and reduction gear with electric drive motion onto connectors and gantry. The fast response by the “Zero” transmission greatly shortens the acceleration and deceleration, which improves the overall machine performance significantly.



### Accuracy improvement

The linear transmission system reduces the transmission error caused by the mechanical mechanism, thereby greatly improving the cutting accuracy of the equipment.

### Acceleration

The high-speed response of the direct drive shortens the acceleration and deceleration process, thereby increasing the overall cutting speed, and the speed can reach 2 m/s.

### Noise reduction

The guide rail uses a magnetic pad to suspend the guide rail (without mechanical contact), which greatly reduces the noise of the equipment when it is moving.

### Efficiency enhancement

There are no other links in the transmission process, which reduces the energy loss of mechanical friction.

### High-speed response

The new drive mode greatly improves the dynamic response performance of all closed-loop control systems, and the response speed is extremely fast and sensitive.

## MAGNETIC SCALE POSITIONING

# ACCURACY

Through magnetic scale positioning, real-time detection of the actual position of moving parts, real-time correction by the motion control system, truly achieve the mechanical movement accuracy of the entire table is  $\pm 0.025\text{mm}$ , and the mechanical repeatability accuracy is 0.015mm



## Optical Automatic Knife Initialization

- Automatic Knife Initialization accuracy  $< 0.3\text{mm}$
- Automatic Knife Initialization efficiency increased by 300%
- Suitable for all tools



## One-time Modular Steel Frame

The frame of the fuselage is made of high-quality carbon structural steel, which is formed at one time by a large five-axis gantry milling machine to ensure the accuracy of the equipment.

The use of stress-relieving annealing treatment, combined with later flaw detection technology, ensures that the equipment still maintains stable accuracy after transportation, high-speed operation and long-term use, and improves the service life of the equipment.





# TABLE HEIGHT COMPENSATION FUNCTION

## Intelligent Table Compensation

During the cutting process, the cutting depth of the tool can be adjusted in real time to ensure that the drop between the table and the tool is consistent.

## Data editing module

- Compatible with DXF, HPGL, PDF files generated by various CAD.
- Automatically connect unclosed line segments.
- Automatically delete duplicate points and line segments in files.



## Cutting Optimization Module

- Cutting Path Optimization Function
- Smart overlapping lines cutting function
- Cutting Path Simulation Function
- Ultra long continuous cutting function

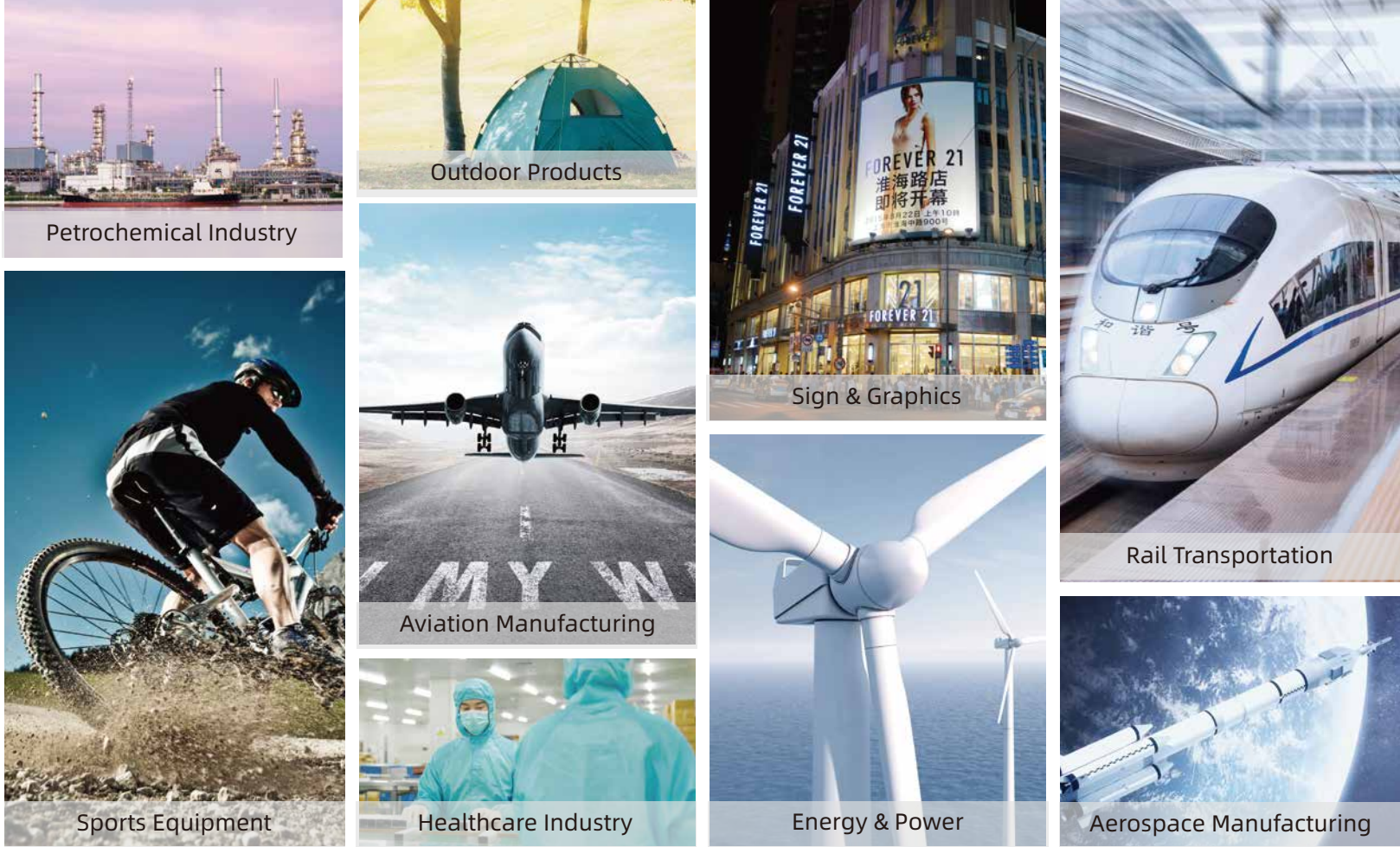
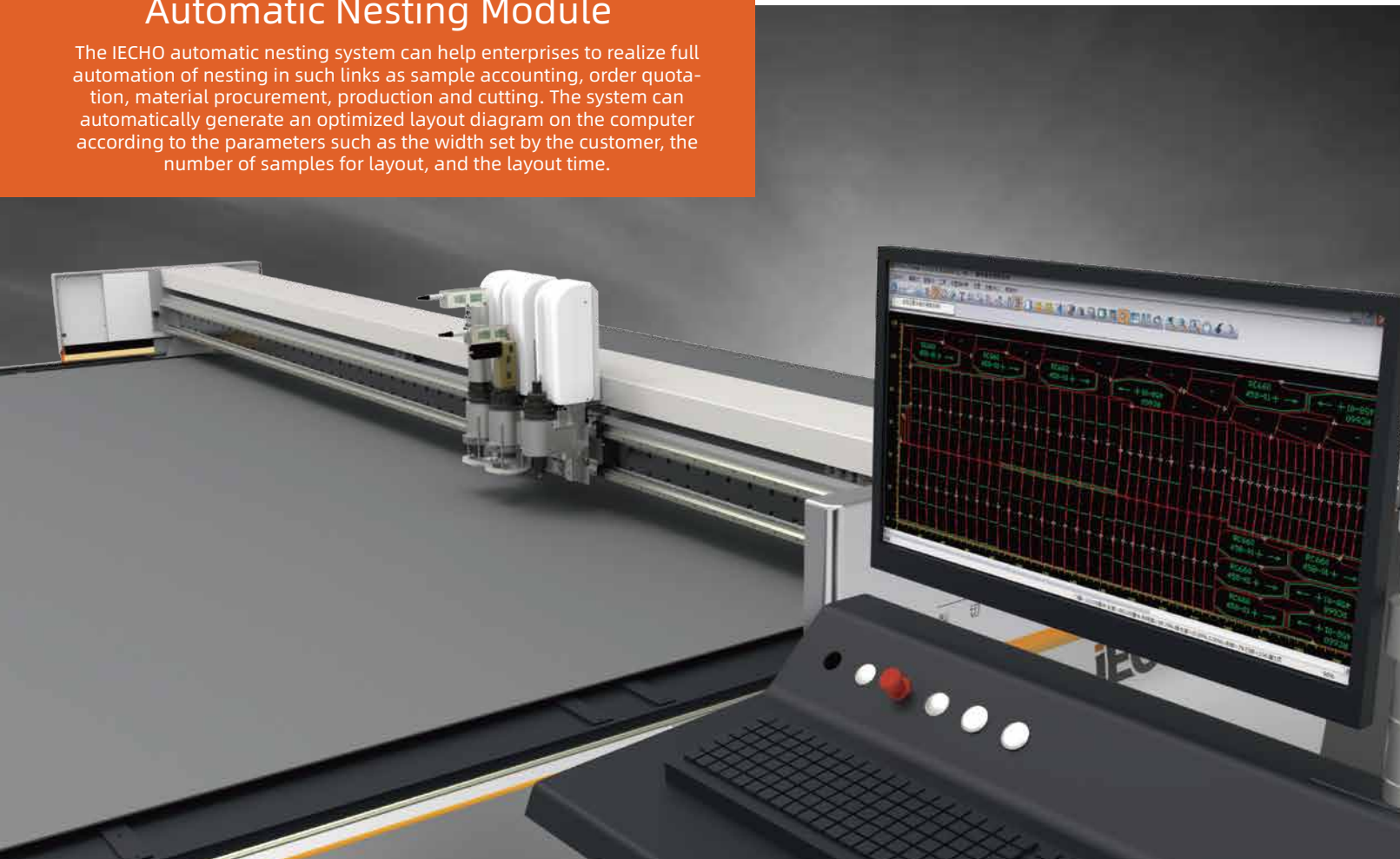
## Cloud Service Module

Customers can enjoy fast online services through cloud service modules

- Error code report
- Remote problem diagnosis: The customer can obtain the help of the network engineer remotely when the engineer has not done the on-site service.
- Remote system upgrade: We will release the latest operating system to the cloud service module in time, and customers can upgrade for free through the Internet.

## Automatic Nesting Module

The IECHO automatic nesting system can help enterprises to realize full automation of nesting in such links as sample accounting, order quotation, material procurement, production and cutting. The system can automatically generate an optimized layout diagram on the computer according to the parameters such as the width set by the customer, the number of samples for layout, and the layout time.



## APPLICATION INDUSTRY

## Parameter

Name	SK II -3532	SK II -3516	SK II -2516
Size (mm )	4400X3900X830	4400X2300X830	3400X2300X830
Effective cutting area (mm )	3500X3200	3500X1600	2500X1600
Weight	1.0t-1.6t		
Maximum cutting speed	2500mm/s		
Maximum cutting thickness	50mm		
Cutting accuracy	0.05mm		
Machine head	Two cutting heads, Three cutting heads		
Power supply	380V/50HZ		
Interface	Serial port		
Operating environment	Temperature 0℃-40℃, Humidity 20%-80%RH		
Tool	UCT, V-CUT, CTT, KCT, EOT, POT, PRT, 350W Router , Cylinder pen, etc.		

\*The product parameters and functions mentioned on this page are subject to change without notice.