

## Upgrade the machine capability

Current manufacturing trend and global market requires more variety, high precision and complicate components in small production lot size. Only 4 axis or 5 axis machines can offer solution and integrate multiple machines' processes into combined machining to achieve qualified good surface finish, quality and productivity, which wins customer satisfaction and trust.



### Automotive industry

#### RCV-H series suitable for milling spindle heads

A machine manufacturer for auto part uses HIWIN Torque Motor Rotary Table as the milling spindle head.

- ✓ Suitable for machining center, drilling and tapping machines, engine, gearboxes, crankshafts, clutches, tire mold.



**Total Solution**  
Single-Axis Robots / Ballscrew / Linear Guideway / Bearings

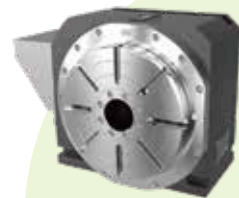


#### RCV series suitable for four-axis or 3+1 axis

Consumers are increasingly demanding for product aesthetics. Therefore, machine manufacturers are continuously facing the challenge of machine upgrades.

An European metal processing machine manufacturer developed the machine, which equipped with HIWIN RCV series to produce automotive metal mold, which provide turn-key solution and achieve curve shape with fine surface in single process.

- ✓ Suitable for machining center and engraving machines. Aluminum processing, smart phones / 3C component, laser parts processing, precision equipment, textile machine parts, bicycle parts, etc.,



**Total Solution**  
Single-Axis Robots  
Ballscrew  
Linear Guideway  
Bearings



### 3C industry Soft metal machining

※3C : computer / cell phone / appliances



**Total Solution**  
Ballscrew / Linear Guideway / Bearings / DATORKER® Strain Wave Gear / Industrial Robot



### Other metal machining industry

#### RAB/RAS series suitable for 5 axis machine center

For customer's 5 axis machine center, HIWIN provides the total solution and helps customer to complete the design.

- ✓ Suitable for curve mold and graphite machining. Medical, 3D printer, auto and metal parts machining.



### Total Solution

Wafer Robot / EFEM / Servo Motor / Ballscrew / Linear Guideway / Bearings / DATORKER® Strain Wave Gear System

#### RCH series suitable for wafer inspecting machine

- ✓ Suitable for large work platform, wafer grinding and polishing, inspecting and measuring equipment.



### Electronic equipment industry



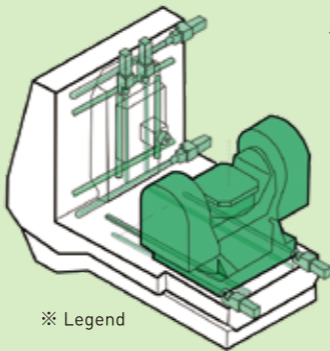
### Total Solution

Wafer Robot / EFEM / Servo Motor / Ballscrew / Linear Guideway / Bearings / DATORKER® Strain Wave Gear System

## References

### Not just a rotary table !!

## HIWIN® Total Solution



※ Legend

### The best partner for upgrade and transformation

HIWIN's core competence is to offer mechatronic system integration. Provides from pre-sale to after sale product life cycle service, covers from customer product design, evaluation, selection, FEA structure simulation and maintenance service. With innovative and reliable product, HIWIN offers total solution and value added to our customers in improving the machining productivity and competitiveness.

### Automation Solution



Articulated Robot



SCARA Robot



Electric Gripper



Wafer Robot



EFEM



Smart Warehouse



i4.0BS® / i4.0GW®

### Electromechanical Solution



Torque Motor



Direct Drive Motor



Linear Motor Stage



Linear Motor



Motion Controller Servo Drive



AC Servo Motor



Linear Guideway



Ballscrew Ball Spline



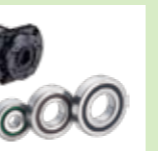
Single-Axis Robot



Crossed Roller Bearing



Support Unit Ballscrew Bearing



DATORKER® Strain Wave Gear System  
DATORKER® Strain Wave Gear

Feel free to contact us!



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# HIWIN®

## Best Partner for Machine Users to Upgrade and Improve Productivity

### Torque Motor Rotary Table



HIWIN Support



About HIWIN





## Are you troubled by the following ?

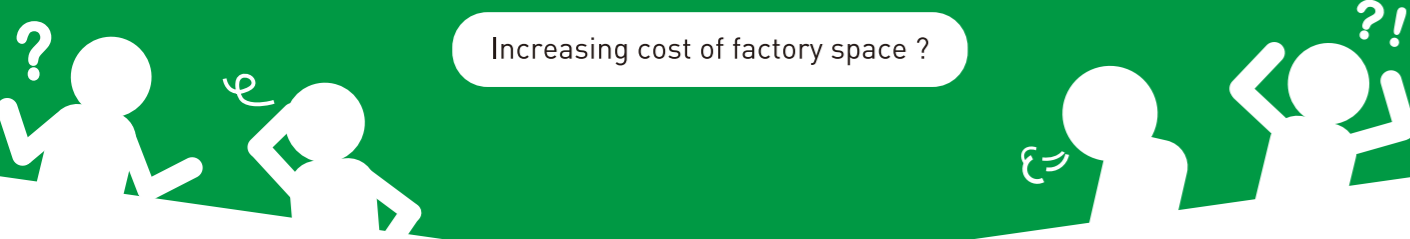
Having accuracy issues when loading & unloading workpiece ?

Have difficulties in calibrating accuracy with traditional rotary table ?

Instability in machining quality ?

Do you want to perform complicate machining in one setup instead of multiple machines' loading & unloading workpiece?

Increasing cost of factory space ?



## Leave all these troubles to **HIWIN Torque Motor Rotary Table**

### ✓ **Stable Machining Quality**

HIWIN Rotary Table is equipped with Torque Motor, which unlike the traditional mechanical type Rotary Table, has advantage of zero friction, zero backlash. There is no need to calibrate accuracy, can reduce maintenance cost, repair cost and increase service life.

### ✓ **Enhance machining accuracy and efficiency**

Assist in upgrade of 3 Axis machine to 3+1 or 3+2, to achieve higher stability in machining quality.

### ✓ **Save Space**

Machining of complex workpiece can be done in one machine. Upgrade to 4/5 Axis Machine with HIWIN Rotary Table for one stop solution.

### ✓ **Save Labor Cost**

Production line upgrade, one time machining, reduce loading and unloading frequency, save manpower and time

## Product features

# Advantages of Torque Motor Rotary Table

Process complex surface with high-quality, precise & smooth surface finish. Specialize in simultaneous machining, offer small to big size table, may customize by requirement.

### Why?

- ▶ Suitable for all kinds of four and five axis machining
- ▶ Modular design with simple and compact structure
- ▶ Customizable and interchangeable table sizes as required
- ▶ High acceleration, high rigidity and high accuracy
- ▶ Improve efficiency, increase productivity
- ▶ Zero backlash, high stability and long service life
- ▶ Robust built-in clamping system
- ▶ Compatible with all major controllers

### HIWIN® Rotary tables are **Direct Driven with HIWIN Torque Motors**

#### Water cooling design

- ▶ Hollow axis
- ▶ Maximum torque upto 5020Nm
- ▶ Suitable for multi-axis machining, tool manufacturing, tool storage system, gear hobbing machines, screen printing, customized 3C electronic manufacturing, etc..



### RAB Series



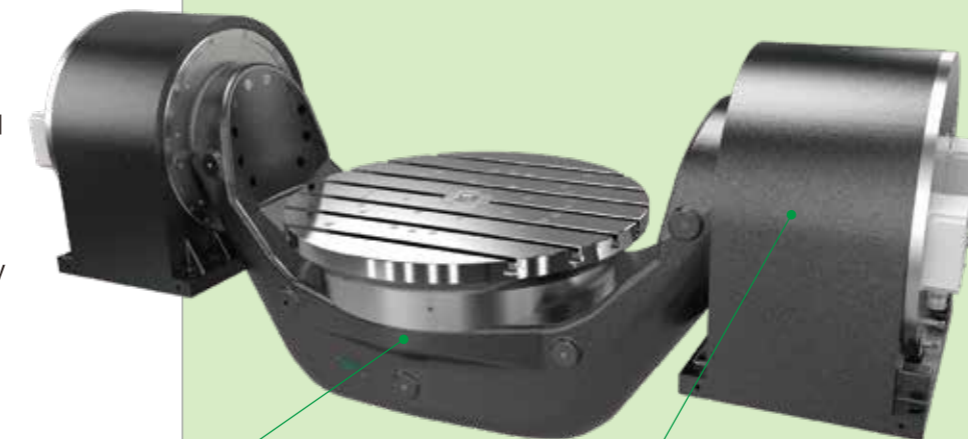
## Dual Axis Dual Arm

#### For high rigidity application

- ▶ The table types can be customized as required
- ▶ Stops precisely and controllable tilting angle
- ▶ Suitable for all types of control systems
- ▶ Zero backlash transmission to improve accuracy and surface finishing
- ▶ High response synchronized performance

Available table sizes (mm): 170 / 200 / 250 / 320 / 400 / 500 / 630 / 800

Applications : Metal machining, Mold manufacturing, Laser engraving, Welding equipment, Forging parts machining, etc..



High rigidity structure design

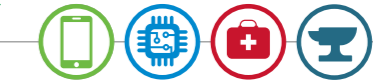
#### ▶ Rotary axis

Equipped with high precision bearing, with high axial and radial rigidity, hollow center

#### ▶ Tilting axis

Equipped With high precision bearing, with high axial and radial rigidity

### RAS Series



## Dual Axis Single Arm

#### For compact space application

- ▶ Single arm rotary tables with compact structure, design suitable for five axis machines with limited space design
- ▶ Zero backlash transmission to improve accuracy and surface finishing
- ▶ High response synchronized performance

Available table sizes (mm): 125 / 170 / 250 / 320 / 400 / 500 / 630 / 720

Applications : Metal machining, Mold manufacturing, Laser engraving, Welding equipment, Forging parts machining, Jewelry processing etc..



### RCV Series



## Vertical Single Axis

#### Vertical and horizontal two-ways

- ▶ Direct drive mechanism, reducing overall inertia and increasing acceleration.
- ▶ High precision encoders providing high accuracy positioning.
- ▶ Excellent option for machine upgrading to 3+1/ 4+1 axis.

Available table sizes (mm): 125 / 170 / 250 / 320

Applications : Metal machining, Mold manufacturing, Soft metal machining, EDM, SPM, Automation equipment, Inspection equipment, etc..



### RCH Series



## Horizontal Single Axis

#### For horizontal operation

- ▶ High dynamic positioning rotary table.
- ▶ Excellent runout accuracy.
- ▶ Mill-turn and grind machine applications.

Available table sizes (mm): 200 / 400 / 600 / 800

Applications : Metal machining, Mold manufacturing, Appearance inspection, Chemical-Mechanical Polishing (CMP), etc..

