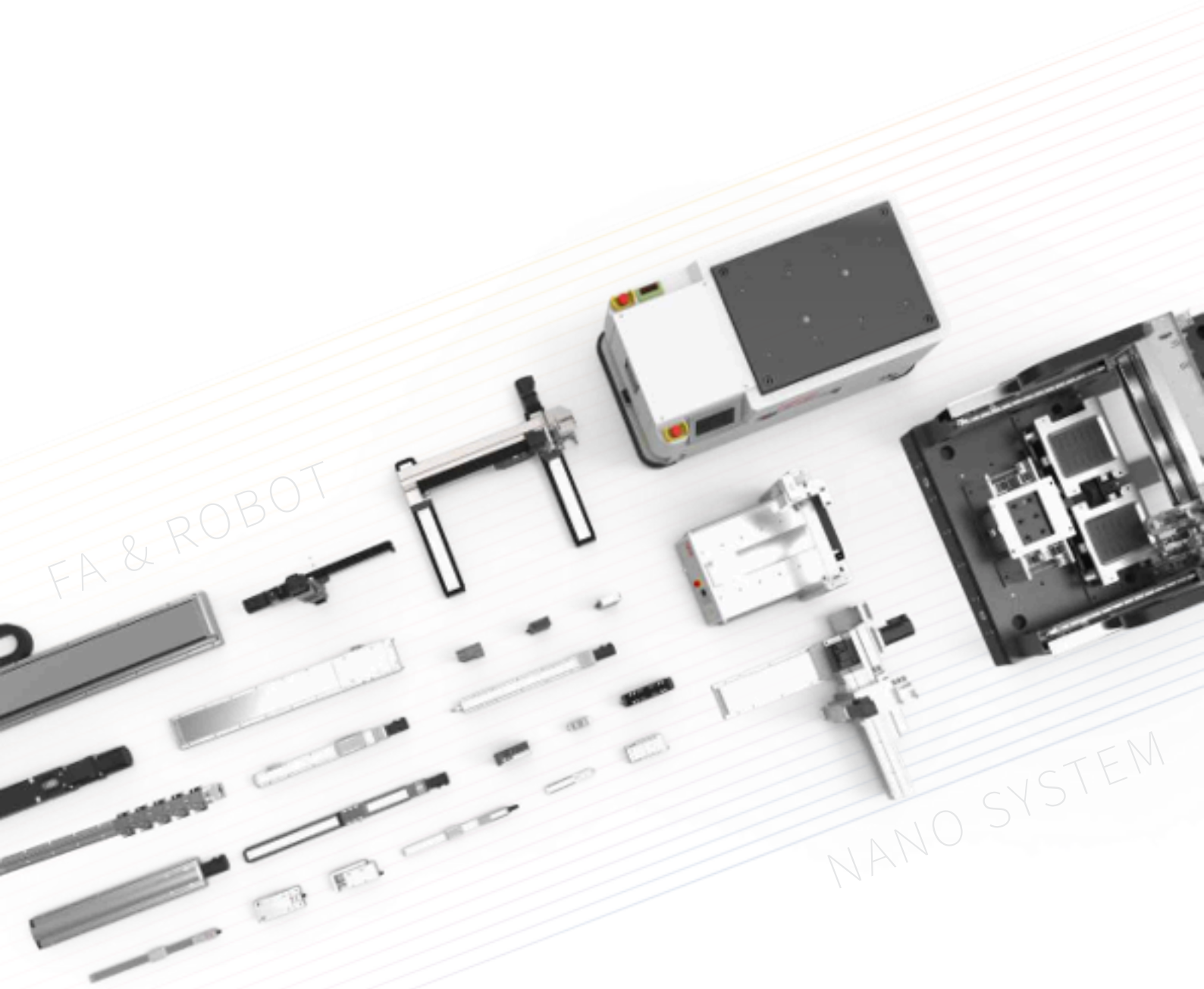




TOYO COMPANY PROFILE



FA & ROBOT

NANO SYSTEM



FA View

Solution

TOYO

From the early days of basic automation to today's Industry 4.0 integration, TOYO has grown alongside Taiwan's automation industry. We specialize in compact automation solutions and small-scale robotic systems.

Starting from simple motorless linear modules, we have evolved to fully integrated motor and control systems — delivering complete, reliable solutions manufactured in Taiwan. As market demands rapidly evolve, we remain committed to: **Identifying needs. Driving change. Continuous improvement.**

Our product development focuses on helping customers reduce cycle time and minimize downtime across diverse manufacturing processes. Through energy-saving designs, simplified wiring, and integrated motor-controller systems, we enhance the added value of automation equipment.

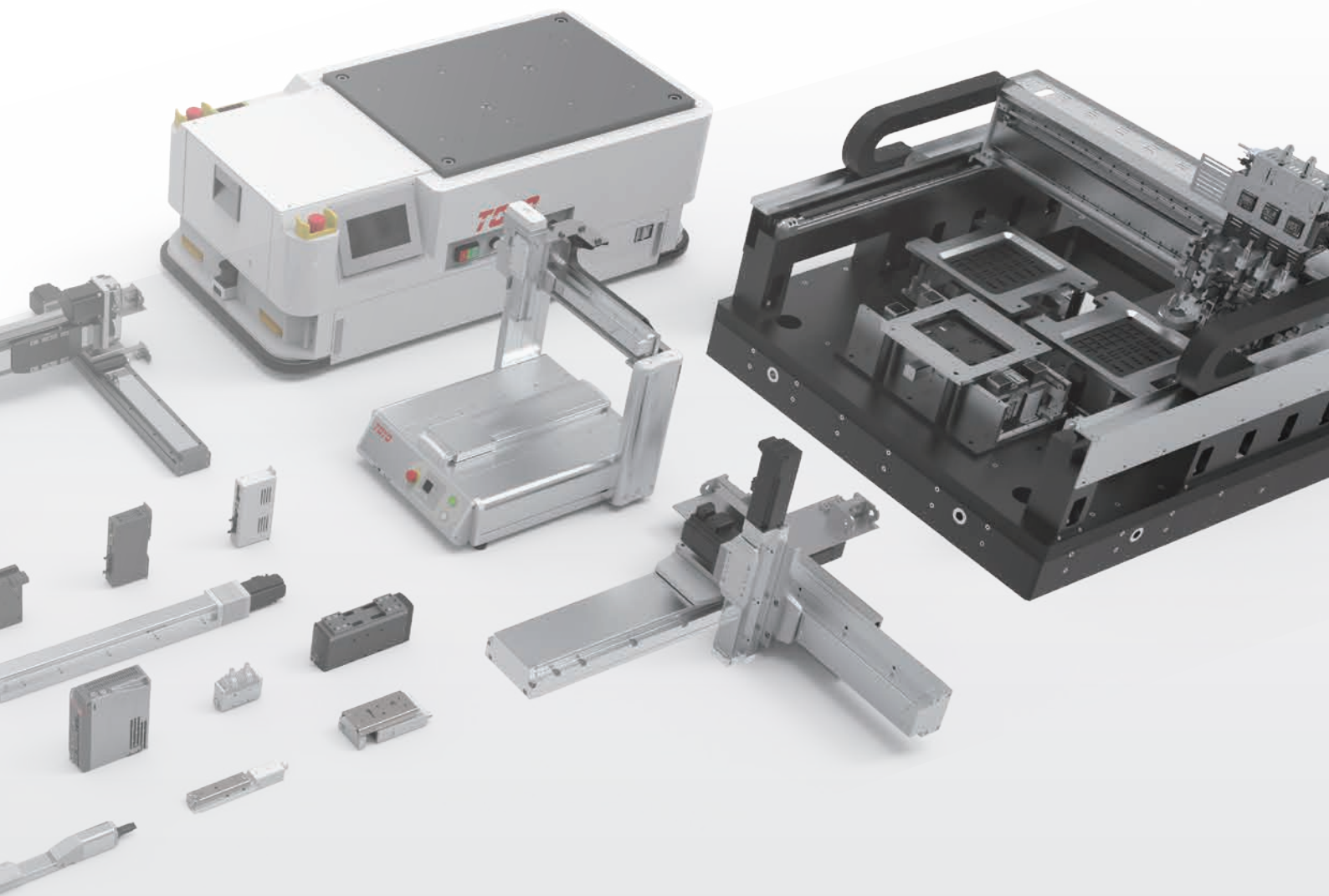
Beyond traditional automation technologies, we have advanced into nano-level precision motion systems. TOYO NANO System solutions provide ultra-high precision and stability for semiconductor, optoelectronics, and high-end manufacturing industries — pushing the boundaries of nano-scale motion control.

Our philosophy is simple: **Product Evolution. Stable Quality. Pursuit of Excellence.**

We strive not only to meet expectations — but to grow together as a trusted long-term partner.

FA &

Continuous Evolution on Automation °



ROBOTS

Basic & Line up

Basic Information

| | |
|---------------------|--|
| Company Name | TOYO AUTOMATION CO., LTD |
| Chairman | Johnny (Tsun-Te) Lin |
| Number of Employees | 500+ |
| Established | 2000 |
| Capital | NTD 300 Million |
| Address | No. 55, Xinren 3rd Rd., Annan Dist., Tainan City, Taiwan |
| Tel | + 886-6-2021347 |
| Fax | + 886-6-2025974 |
| Website | www.toyorobot.com |



Tainan Headquarters

6 Major Products of Linear Motion

Through continuous research and development efforts, Toyo is able to meet and exceed the automation requirements for all types of manufacturing processes.

TOYO offers a comprehensive range of linear servo actuators, available with or without integrated controller systems. For longer travel applications we also offer automated guided vehicle (AGV) solutions. With thousands of product configurations available, our systems deliver precise positioning and high-speed control for a wide range of linear motion, pick-and-place, and material handling applications.



- ⊕ High price-performance ratio
- ⊕ Stable quality

- ⊕ Flexible customization
- ⊕ Versatile product line

- ⊕ Short delivery time

Application

Industry Application

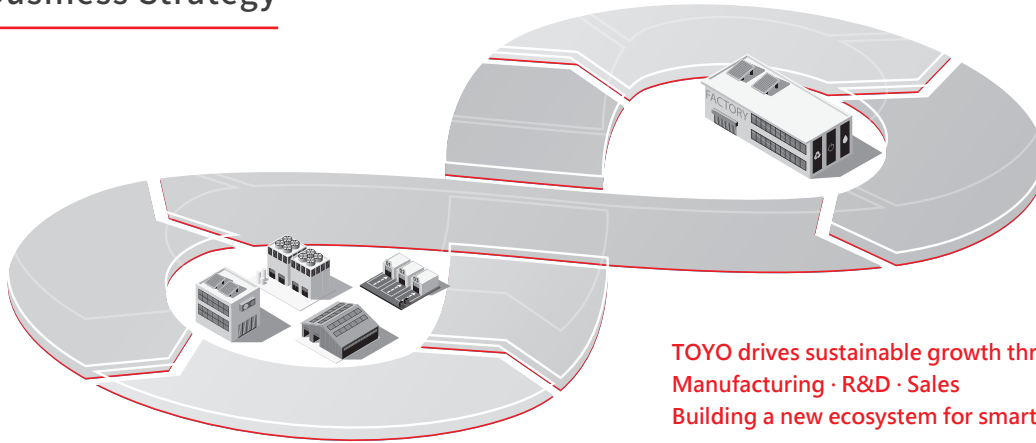
TOYO robotics are automating a wide array of manufacturing processes which are helping people each day. A few of our key industries include: medical, food products, computer, mobile phones, automotive and aerospace. We have continuously developed and introduced modern automation solutions which aim to solve the issues of insufficient labor force and wage increases plaguing the global manufacturing industry today. Based on your needs, we provide the best products to enrich your life.



Manufacturing Process Application



Business Strategy



TOYO drives sustainable growth through three core pillars-
Manufacturing · R&D · Sales
 Building a new ecosystem for smart automation advancement.

R&D Capabilities

- Motor Control
- Software Development
- Precision Machinery Engineering
- High Mechatronics Integration

Manufacturing Capabilities

- In-house production of key core components
- 60% customized solutions
- Japan-line OEM quality certification
- Comprehensive product portfolio

Sales & Marketing Capabilities

- Global production and sales network
- Strategic partnerships (YAMAHA / CKD)
- Comprehensive after-sales service
- High market share in linear modules

Global Service Network

● Manufacturing Plant ● Subsidiary ● Distributor



Service System



Free sample actuators for demo

Standard sample tester available for lending to the customer at no cost! Please contact your local sales representative or distributor.

Free



Exhibition

Visit us at any one of our many global trade-shows to learn more about our products. Please contact us for more information.



24 hours online services

Year round 24 hours on call service that provides product solutions anytime you call for the region of China and Taiwan.

24 Taiwan : 0800-800-893
24 China : 400-875-0009

Free



Exhibition car

For the customer in Taiwan to experience and understand our products, we have established the Toyo Exhibition car project. Please contact us for more information.

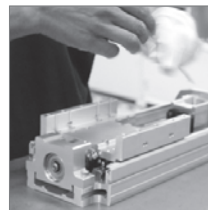
Free



Sharing of technical tips

We host product seminars/technical workshops to share our most advanced technologies with our customers.

Free



Repair

We provide the inspection and repair service. Even if the warranty period has expired, we will provide repair services at a reasonable cost.



Training Center

In the training center, you can see the actual product and demo machines. Also, we provide training on various technologies imported into the robot, technical consultation, and related courses. Please contact us for further information.



Worldwide Sales Network

A global network of sales and technical support available to help where you needed. For further details, please contact the relevant regional distributors.

Quality System

Quality Assurance Certification



ISO 9001 ISO 14001 ISO 45001

Passed ISO9001, ISO14001 and OHSAS18001 international certification.

Awards



Got 9th Taiwan Business Startup Award



Got 19th Taiwan Business Rising Star Award

Patented Technologies



#M398055 #M429543 #M440838 #M523013 #M523014 #M523015



#M523016 #M523017 #M534739 #M523019 #M523018 #I530627



Patent applications certified by the Intellectual Property Office of Ministry of Economic Affairs.



CGTH/CGTY Series
Got 2018 Taiwan Excellence Awards



LGF / CHY Series
Got 2021 Taiwan Excellence Awards



LGW Series
Got 2021 Taiwan Excellence Awards



CPSP/LM4 Series
Got 2023 Taiwan Excellence Awards



LBT/LXY/SRT Series
Got 2024 Taiwan Excellence Awards



CW/CAB Series
Got 2025 Taiwan Excellence Awards

Toyo Product Lineup



10 days
delivery time for
standard products

10 days delivery time for standard products. Please contact your local sales representative for products with special requirements.

Taiwan : 0800-800-893
China : 400-875-0009

Single-axis Linear Actuator (Without motor)

Compatible with motors manufactured by other brands

TSG
High rigidity miniature cylinder
TSG20
TSG25
TSG35

GTH
Built-in linear guide-ways: slider type
Ballscrew type
GTH3/4/5/8/12/12M
GTH5S/8S
GTH4D/5D/8D/12D
GTH3K/4K/5K/8K

GTY
Built-in linear guide-ways: rod type
Ballscrew type
GTY4
GTY5
GTY8
GTY12

ETH2
Standard slider type
Ballscrew type
ETH2-14
ETH2-17
ETH2-22
ETH2-30

Y
Push rod screw slide
Screw drive
NEW
Y50
Y43
Y50D/LY43D/L
Y65
Y62
Y65D/LY62D/L
YH95

X
Double-Stroke slide
Screw drive
GLTH8X
GLTH12X
ETH2-17X
ETH2-22X

GTB
Standard type
Belt Type
GTB5
GTB8
GTB12
GMB5
GMB8

ETB
Standard type
Belt Type
ETB14M
ETB17M
ETB22M

M
European type
Belt Type
MH65/80
MK65/85/110
MG50/65/85

ECH2
Clean-room type
Ballscrew type
ECH2-14
ECH2-17
ECH2-22

ECB
Clean-room type
Belt Type
ECB14
ECB17
ECB22

Class 10

GCH
Built-in linear guide-ways clean-room: slider type
Ballscrew type
GCH4
GCH5
GCH8

GCY
Built-in linear guide-ways clean-room: Rod type
Ballscrew type
GCY4
GCY5
GCY8
GCY12

Class 10

Single-axis Linear Actuator (Without motor)

Compatible with motors manufactured by other brands

GLTH/GLTB
Flat track built-in electric slide
Ballscrew type | Belt Type
GLTH3/5/8/12
GLTH5D/8D
GLMH5/8
GLTH5M/8M

ETK/ENK
Gear slide
Gear drive
NEW
ETK15
ETK22
ETK30

ENK15
ENK22
ENK30

Multi-axis Actuator (Without motor)

Compatible with motors manufactured by other brands

XYGT
Built-in Linear Motion Guide
Multiaxis Type
Ballscrew type
XYGT210-A
XYGT320-A
XYGT430-A

2 axis
3 axis
Arm Type
A-Type

XYTH
Multiaxis Ball screw Type
Ballscrew type
XYTH650-A
XYTH760-A
XYTH870-A
XYTH876-A

Arm Type
A-Type

XYTH760-G
XYTH870-G
XYTH876-G

Gantry Type
G-Type

XYTH650-P
XYTH760-P
XYTH880-P
XYTH886-P

Polar Coordinate
Type P-Type

XY Type
F-Type

XYTB
Multiaxis Belt Type
Belt Type
XYTB650-A
XYTB760-A
XYTB870-A
XYTB876-A

Arm Type
A-Type

XYTB870-G
XYTB876-G

Gantry Type
G-Type

Servo Cylinder

The best option for pneumatic cylinder replacement

Closed-loop stepping motor

CGTH
Built-in Guideway Cylinder-Slide Type
CGTH3/4/5/8
CGLTH3/5/8

CGTY
Built-in Guideway Cylinder-Rod Type
CGTY4
CGTY5
CGTY8

CGCH
Built-in Guideway Cylinder-Cleanroom Type
CGCH3/4/5/8
CGLCH3/5/8

CSG
High rigidity miniature cylinder
CSG20
CSG25
CSG35

CH
Electric Gripper
CHZ2-S10
CHZ2-S14
CHZ2-S22
CHS2B-S20
CHS2B-S40
CHS2B-S68

CHS2C-S20
CHS2C-S40
CHS2C-S68
CHY2B-S80
CHY2B-S150

CGLTH
Built-in Guideway Cylinder-Slide Type
CGLTH3AZK
CGLTH5AZK(C)
CGLTH8AZK(C)
CGLTH12AZK(C)
CGLTH5MAZC
CGLTH8MAZC

CGLTB
Built-in Guideway Cylinder-Slide Type
CGLTB5AZC
CGLTB8AZC

CGS
High rigidity miniature cylinder
CSG20AZK
CSG35AZK

Orientalmotor Co-branding

Hollow servo motor

DGTH
Built-in Guideway Cylinder-Slide Type
DGTH3
DGTH4
DGTH5

DGTY
Built-in Guideway Cylinder-Rod Type
DGTY4
DGTY5

DM
Mini Cylinder
DMG25
DMG40
DMH25
DMH40

Economic electric cylinder

CPSG
High rigidity micro electric cylinder
CPSG20
CPSG25
CPSG35

CPGLTH
Mini electric cylinder - screw slide type
CPGLTH3
CPGLTH5
CPGLTH8

CPGLTB
Mini electric cylinder - belt slide type
CPGLTB5

CPY
Push rod screw slide
CPY43
CPY62

Toyo Product Lineup

TOYO ROBOT

www.toyorobot.com

Free member registration

2D/3D images download

Real time model selection software

24 Taiwan : 0800-800-893
24 China : 400-875-0009

Linear Motor Robot

High speed, high acceleration/deceleration, dual carriage

Built-in linear guide-ways type linear motor robot

LGF

Clean Room Type
LGF5
LGF15



Built-in linear guide-ways type linear motor robot

LGTW/LGNW/LGCW

Clean Room Type
LGTW20 LGCW20
LGTW35 LGCW35
LGNW20 LGNW35



With iron-core flat type linear motor robot

LTF3/LNF3/LCF3

Standard type Closed type Clean Room Type
LTF3-15/30/75
LNF3-15/30/75
LCF3-15/30/75



Iron core linear motor

LTF3-250

Standard type



Multi-drive Linear Shaft Motor Robot

LM6

Standard type



Mini Electric Linear Motor Slides

LZ

Standard type



Electric Linear Motor Slides

LSC3

Standard type



Single Robot

3 highly reliable and trustworthy specifications

Built-in Linear Guide Robot-Rod Type

SGTY

Ballscrew type
SGTY4 SGTY8
SGTY5 SGTY12



Built-in Linear Guide Robot-Slide Type

SGTH/STH

Ballscrew type Servo Motor
SGTH4 STH17
SGTH5 STH22
SGTH8 SGTH12M
SGTH12 STH17M
STH22M



Rotary series

Suitable for visual alignment

Electric spline

CSL8

Stepping Motor



Rotary electric cylinder

CRC

Stepping Motor

CRC-7
CRC-9
CRC-11



Coming Soon

High-precision harmonic hollow rotating platform

SRT

Servo Motor

SRT85
SRT95
SRT110



Cartesian Coordinates Robot

Gantry, cantilever, polar coordinates, cross shaped and more

Ball-screw-driven Desktop Robot

JTHX

JTHX-200
JTHX-300
JTHX-400
JTHX-500
JTHX-500D

Ball-screw-driven Desktop Robot

JTHS

JTHS-300
JTHS-400
JTHS-500
JTHS-500D



Ball-screw-driven Desktop Robot

JTHC

JTHC-200
JTHC-300
JTHC-400
JTHC-500
JTHC-500D



Ball-screw-driven Cartesian Robot

XYCGT

Stepping motor

XYCGT320
XYCGT321



Ball-screw-driven Cartesian Robot

XYSGT

Servo motor

XYSGT430
XYSGT432



Robot specific controllers (1 ~ 4 axis)

High performance control system

Servo Motor Controller

TC/XC/LC/SC/SD

TC100
XC100
LC100
SC100
SD100
XC200



4 axis Controller

TSC

TSC400
TSC400S



Automatic Guided Vehicle

MES compatible to achieve industry 4.0

Basic Type AGV Unit
MP-BS90S



Basic Type AGV Unit
PL-BS90M



Basic Type AGV Unit
PD-BS90M



Servo Controller
IPC



AGV System
MPcart



AGV System
MultiV

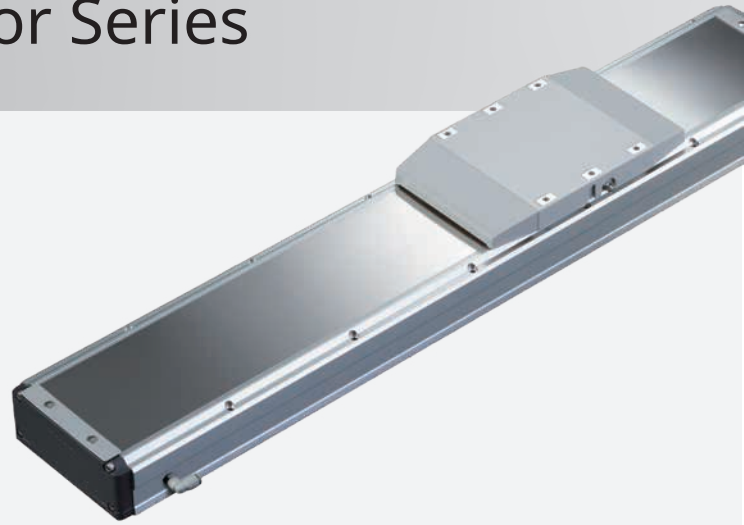


AGV System
Pcart



01

Electric Actuator Series



Single-axis Linear Actuator

Without motor



Ball Screw Drive



Belt Drive



Clean Room



Built-in Guideway

Built-in Guideway Ball Screw Actuator

| TSG Series | GLTH Series | GTH Series | GTU Series | GCH Series | GCU Series |
|--|--|--|---|--|--|
|  |  |  |  |  |  |
| Repeatability $\pm 0.01\text{mm}$ | Repeatability $\pm 0.005\text{mm}$ | Repeatability $\pm 0.005\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ | Repeatability $\pm 0.005\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ |
| 12.8 kg | 110 kg | 110 kg | 110 kg | 110 kg | 110 kg |
| 75/100/150 mm | 50~2500 mm | 50~2200 mm | 50~800 mm | 50~1250 mm | 50~800 mm |

Max. Payload
Stroke Range

Ball Screw Standard Actuator

| ETH2 Series | ETH Series | Y Series | YH95/Y95 | ECH2 Series | ECH Series |
|---|---|---|--|---|---|
|  |  |  |  |  |  |
| Repeatability $\pm 0.005\text{mm}$ | Repeatability $\pm 0.005\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ | Repeatability $\pm 0.005\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ |
| 150 kg | 150 kg | 110 kg | 3000 kg | 150 kg | 150 kg |
| 50~2100 mm | 50~2400 mm | 50~500 mm | 50~800 mm | 50~1500 mm | 50~1500 mm |

Max. Payload
Stroke Range

Belt Drive Standard Actuator

| GLTB Series | GTB Series | ETB Series | M Series | ECB Series |
|---|---|---|--|---|
|  |  |  |  |  |
| Repeatability $\pm 0.06\text{mm}$ | Repeatability $\pm 0.04\text{mm}$ | Repeatability $\pm 0.04\text{mm}$ | Repeatability $\pm 0.1\text{mm}$ | Repeatability $\pm 0.04\text{mm}$ |
| 8 kg | 85 kg | 85 kg | 200 kg | 85 kg |
| 50~3000 mm | 50~3050 mm | 50~3500 mm | 50~5000 mm | 50~4050 mm |

Max. Payload
Stroke Range

Multi-axis Linear Actuator

Without motor



Ball Screw Drive



Belt Drive



Clean Room



Built-in Guideway



| | | |
|--|--|--|
| Built-in Guideway Ball Screw Cartesian Robot | XYGT Series | XYGL Series |
| |  |  |
| | Axis Repeatability $\pm 0.005\text{mm}$ | Axis Repeatability $\pm 0.005\text{mm}$ |
| | 10 kg | 12 kg |
| | 1250×550×350 mm | 1250×300×150 mm |





Max. Payload
Stroke Range



| | |
|----------------------|--|
| Double-Stroke Slidie | □□-X Series |
| |  |
| | Axis Repeatability $\pm 0.04\text{mm}$ |
| | 100 kg |
| | ~1600 mm |

Max. Payload
Stroke Range





| | | |
|----------------------------|---|---|
| Ball Screw Cartesian Robot | XYTH Series | XYCH Series |
| |  |  |
| | X · Y · Z Axis Repeatability $\pm 0.005\text{ mm}$ | |
| | 22 kg | 22 kg |
| | 1500×1050×550 mm | 1500×1050×550 mm |

Max. Payload
Stroke Range

| | |
|---|---|
| Combination | |
|  |  |
| Arm Type A-Type | Gantry Type G-Type |
|  |  |
| Polar coordinate P-Type | XY Type F-Type |

| | | |
|---------------------------|---|---|
| Belt Type Cartesian Robot | XYTB Series | XYCB Series |
| |  |  |
| | X · Y · Z Axis Repeatability $\pm 0.04\text{ mm}$ | |
| | 22 kg | 22 kg |
| | 3500×750×550 mm | 3500×750×550 mm |

Max. Payload
Stroke Range

| | |
|---|---|
| Combination | |
|  |  |
| Arm Type A-Type | Gantry Type G-Type |
|  |  |
| Polar coordinate P-Type | XY Type F-Type |

02

Servo Cylinder Series

Servo Cylinder

With motor & controller

Ball Screw Drive
 Belt Drive
 Closed-Loop Stepping Motor
 Clean Room
 G

Closed-Loop Stepping Motor
 Position Control 127 Points
 Pulse Control LD/OC
 Communication Control RS485
 Input Voltage DC24V

New EtherCAT
 TC100 Controller
 Built-in controller

| | | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|---|-----------------------------------|
| TC100 Controller Built-in Guideway Cylinder | CGTH Series | CGTY Series | CGCH Series | CSG Series | |
| | | | | | |
| | Repeatability $\pm 0.005\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ | Repeatability $\pm 0.005\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ | |
| | 30 kg | 30 kg | 30 kg | 12.8 kg | Max. Payload |
| | 50~1250 mm | 50~800 mm | 50~1250 mm | 30/50/75/100/125 mm | Stroke Range |
| TC100 Controller Electric Gripper | CHZ2 Series | CHS2B Series | CHS2C Series | Built-in controller Controller Built-in Electric Gripper | CHY2B Series |
| | | | | | |
| | Repeatability $\pm 0.02\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ | | Repeatability $\pm 0.05\text{mm}$ |
| | 278 N | 509 N | 509 N | | 90/30 N |
| | 22 mm | 68 mm | 68 mm | 80/150 mm | Max. Open-Close Stroke |
| Built-in controller Built-in Cylinder | CPSG Series | CPGLTH Series | CPGLTB Series | CPY Series | |
| | | | | | |
| | Repeatability $\pm 0.01\text{mm}$ | Repeatability $\pm 0.005\text{mm}$ | Repeatability $\pm 0.06\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ | |
| | 12 kg | 30 kg | 5 kg | 50 kg | Max. Payload |
| | 30/50/75/100/125 | 50~650 mm | 50~1500 mm | 50~700 mm | Stroke Range |

Servo Cylinder

With motor & controller



Ball Screw Drive Servo Motor Clean Room

- Servo Motor
- Position Control
127 Points
- Pulse Control
LD/OC
- Communication Control
RS485
- Input Voltage
DC24V
- LD/OC
separated to
reduce noise

New
EtherCAT



XC100 Controller

SC100 Controller



| | | | | | | |
|------------------|---------------|------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|--------------|
| XC100 Controller | Mini Cylinder | DGTH Series | DGTY Series | DMG Series | DMH Series | |
| | | | | | | |
| | | Repeatability $\pm 0.005\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ | |
| | | 30 kg | 30 kg | 15 kg | 15 kg | Max. Payload |
| | | 50~800 mm | 50~600 mm | 50/75/100mm | 50/75mm | Stroke Range |

| | | | | |
|------------------|---------------------------|------------------------------------|------------------------------------|--------------|
| SC100 Controller | High rigidity manipulator | SGTH Series | STH Series | |
| | | | | |
| | | Repeatability $\pm 0.005\text{mm}$ | Repeatability $\pm 0.005\text{mm}$ | |
| | | 110 kg | 150 kg | Max. Payload |
| | | 50~2200 mm | 50~2200 mm | Stroke Range |


| | | | | | |
|-------------------|----------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------|
| AZ/PAK Controller | Built-in Guideway Cylinder | CGLTH Series | CGLTB Series | CSG Series | |
| | | Orientalmotor Co-branding | Orientalmotor Co-branding | Orientalmotor Co-branding | |
| | | | | | |
| | | Repeatability $\pm 0.005\text{mm}$ | Repeatability $\pm 0.06\text{mm}$ | Repeatability $\pm 0.005\text{mm}$ | |
| | | 110 kg | 12 kg | 20 kg | Max. Payload |
| | | 50~2500 mm | 50~3000 mm | 30/50/75/100/125 mm | Stroke Range |

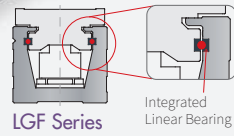
03









Linear Motor Robot Series

Linear Motor Robot

With motor & controller

-  Linear Motor Drive
-  Clean Room
-  Built-in Guideway



| Built-in Guideway Linear motor Robot | LGTW Series | LGNW Series | LGCW Series | LGF Series | Max. Payload Stroke Range | |
|--------------------------------------|---|---|--|--|---|------------------------------|
| |  |  |  |  | | |
| | Repeatability $\pm 0.002\text{mm}$ | Repeatability $\pm 0.002\text{mm}$ | Repeatability $\pm 0.002\text{mm}$ | Repeatability $\pm 0.002\text{mm}$ | | |
| | 20~70 kg | 20~70 kg | 20~70 kg | 15 kg | | |
| | 200~3000 mm | 200~3000 mm | 200~3000 mm | 160~2500 mm | | |
| Flat Type Linear Motor Robot | LTF3 Series | LNF3 Series | LCF3 Series | Iron Core Linear Motor Module | LTF3-250 Series | Max. Payload Stroke Range |
| |  |  |  | |  | |
| | Repeatability $\pm 0.002\text{mm}$ | Repeatability $\pm 0.002\text{mm}$ | Repeatability $\pm 0.002\text{mm}$ | | Repeatability $\pm 0.002\text{mm}$ | |
| | 120 kg | 120 kg | 120 kg | | 250 kg | |
| | 202~4688 mm | 202~3053 mm | 202~3053 mm | 300~5000 mm | | |

Linear Motor Robot

With motor & controller




Linear Motor Drive



XC200 Controller

Multi-drive Linear Shaft Motor Robot

LM6 Series



台湾精品 2023

Repeatability $\pm 0.002\text{mm}$

6 kg Max. Payload

250~1270 mm Stroke Range

Electric Linear Motor Slides

LSC Series




Repeatability $\pm 0.002\text{mm}$

6 kg (Horizontal) Max. Payload

60/90/120/150 mm Stroke Range

Mini Electric Linear Motor Slides

LZ Series

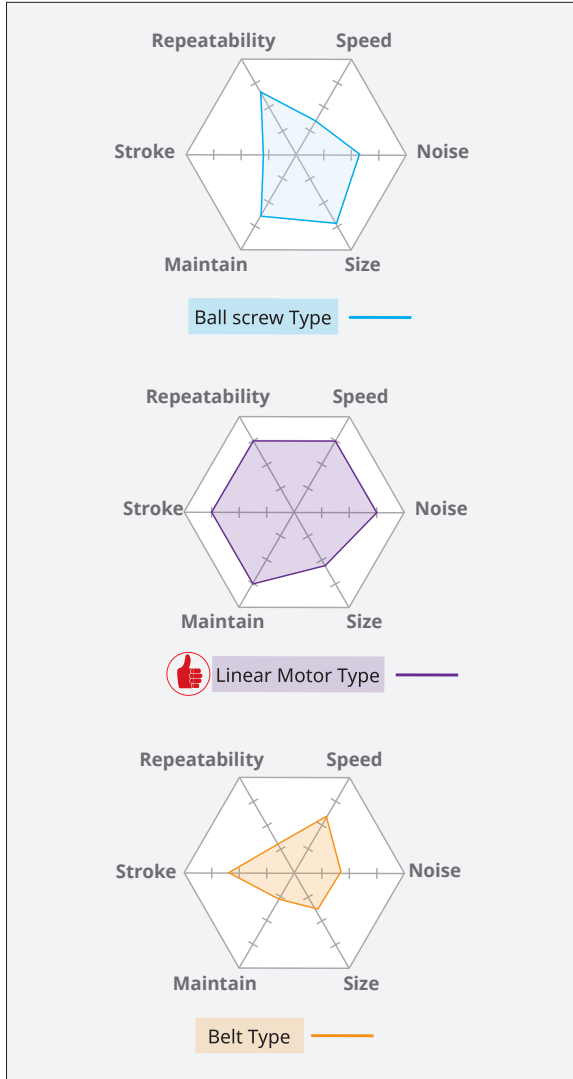


Repeatability $\pm 0.002\text{mm}$

1.9 kg Max. Payload

13~40 mm Stroke Range

Long range, high precision, high speed and low noise can be achieved simultaneously.



04

Desktop Robot Series

Desktop Robots



ballscrew drive



Max. stroke
500-500mm



Max. speed
1000mm/s



Z axis
payload
8Kg



Built-in
controller
TSC400



repeatability
 ± 0.005
mm

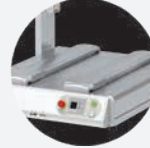


100 sets
of programs



10000
points

Optional double X axis



R-axis style optional
(JTHS series only)



Economical desktop robot

JTHC



XYZ : Repeatability ± 0.01 mm

X:12 Z:6 kg

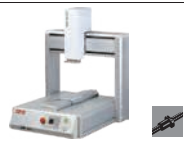
Max. Payload

X.Y:200/300/400/500 mm
Z:100 mm

Stroke Range

Standard desktop robot

JTHX



XYZ : Repeatability
 ± 0.01 mm

X:10 Z:5 kg

X.Y:150/250/350/450 mm
Z:100 mm

JTHS



XYZ : Repeatability
 ± 0.005 mm

X:15 Z:8 kg

X.Y:300/400/500 mm
Z:100 mm

Max. Payload

Stroke Range

Applications

Soldering



Dispensing



Screw fastening



Visual inspection



Desktop Robots



ballscrew drive



Max. stroke
1250-500mm



Max. speed
1000mm/s



Z axis
payload
12Kg



Built-in
controller
TSC400



repeatability
 ± 0.005



100 sets
of programs



10000
points



Ballscrew drive Cartesian desktop robot

XYCGT



XYSGT



XYZ: Repeatability ± 0.005 mm

Z: 5.5 kg

Z: 12 kg

Max. Payload

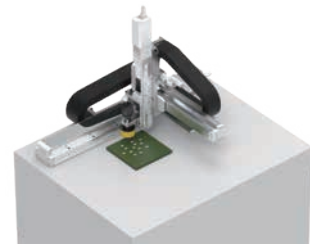
1100×300×100 mm

1250×450×100 mm

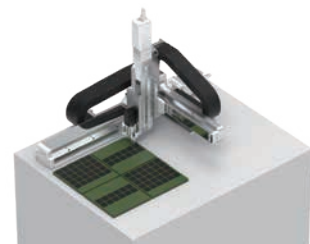
Stroke Range

Applications

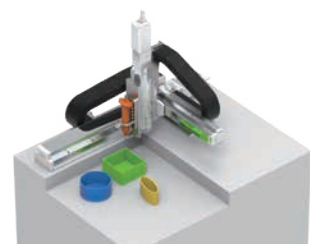
CCD Machine Vision Inspection



Pick-and-place for Small-sized Workpieces



Dispensing for Small-sized Workpieces

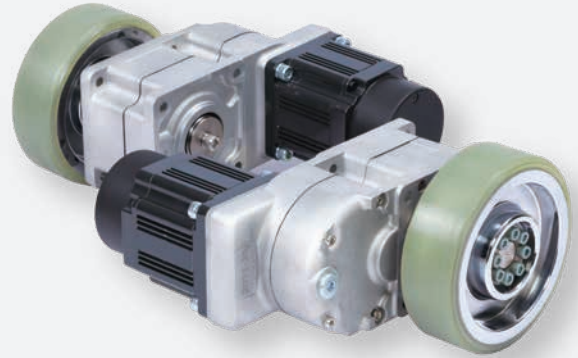


05

Automatic Guided Vehicles

AGV Drive Kit

With motor & controller



| Drive Kit | PL Series | MultiV Series | Controller | | |
|------------|---|---|-----------------|---|-----------------|
| |  |  | |  IPC | |
| | DC24V/DC48V | DC48V | | | Battery Voltage |
| | 400 kg | 300 kg | | | Max. Payload |
| 3~45 m/min | 1~60 m/min | Max. Speed | | | |
| Drive Kit | MP Series | MP Series | | | |
| |  |  | | | |
| | DC24V/DC48V | DC24V/DC48V | Battery Voltage | | |
| | 350 kg | 350 kg | Max. Payload | | |
| 3~40 m/min | 3~40 m/min | Max. Speed | | | |









Automated Guided Vehicle

With motor & controller



| | | | | | |
|-----|--|--|--|--|-----------------|
| AMR | MultiV Series | Pcart Series | Pcart Series | Pcart Series | |
| |  |  |  |  | |
| | DC24V/40AH | DC24V/40AH | DC24V/40AH | DC24V/40AH | Battery Voltage |
| | 300 kg | 100 kg | 300 kg | 5 kg | Max. Payload |
| | 1~60 m/min | 3~45 m/min | 3~30 m/min | 3~45 m/min | Max. Speed |

| | | | | |
|-----|---|---|---|-----------------|
| AMR | MPcart Series | MPcart Series | MPcart Series | |
| |  |  |  | |
| | DC24V/40AH | DC24V/40AH | DC24V/60AH | Battery Voltage |
| | 700 kg | 100 kg | 900 kg | Max. Payload |
| | 3~45 m/min | 3~45 m/min | 3~45 m/min | Max. Speed |

| | | | | |
|-----|---|---|---|-----------------|
| AGV | Pcart Series | Pcart Series | Pcart Series | |
| |  |  |  | |
| | DC24V/40AH | DC24V/40AH | DC24V/40AH | Battery Voltage |
| | 300 kg | 200 kg | 200 kg | Max. Payload |
| | 3~45 m/min | 3~45 m/min | 3~45 m/min | Max. Speed |

Linear Rotary Actuator - VLR Series



VLR16

| VLR16-S15 | VLR16-S25 |
|--|--|
|  |  |
| Effective Stroke : 15mm | Effective stroke : 25mm |
| Maximum Thrust : 13.2N | Maximum Thrust : 13.2N |
| Maximum Torque : 48N | Maximum Torque : 48N |

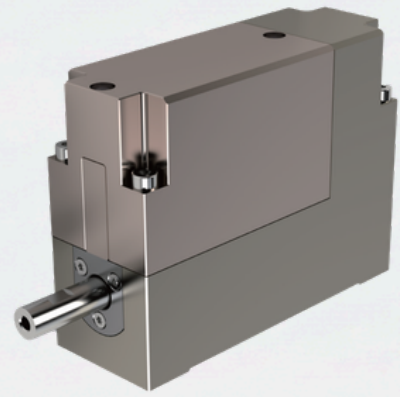
VLR20

| VLR20-S15 | VLR20-S25 | VLR20-S45 |
|---|---|--|
|  |  |  |
| Effective Stroke : 15mm | Effective stroke : 25mm | Effective Stroke :45mm |
| Maximum Thrust : 13.2N | Maximum Thrust : 13.2N | Maximum Thrust : 28N |
| Maximum Torque : 48N | Maximum Torque : 48N | Maximum Torque : 48N |

VLR25

| VLR25-S30 | VLR25-S45 | VLR25-S65 |
|---|---|--|
|  |  |  |
| Effective Stroke : 30mm | Effective stroke : 45mm | Effective Stroke : 65mm |
| Maximum Thrust : 36N | Maximum Thrust : 36N | Maximum Thrust : 36N |
| Maximum Torque : 76N | Maximum Torque : 135N | Maximum Torque : 135N |

Linear Rotary Actuator - VL Series



VL20

| VL20-S15 | VL20-S25 | VL20-S45 |
|---|---|--|
|  |  |  |
| Effective Stroke : 15mm | Effective stroke : 25mm | Effective Stroke : 45mm |
| Maximum Thrust : 9.5N | Maximum Thrust : 13.2N | Maximum Thrust : 28N |
| Continuous Thrust : 4.2N | Continuous Thrust : 5.8N | Continuous Thrust : 11.2N |

VL25

| VL25-S10 | VL25-S25 |
|---|---|
|  |  |
| Effective Stroke : 10mm | Effective stroke : 25mm |
| Maximum Thrust : 12.6N | Maximum Thrust : 18.5N |
| Continuous Thrust : 5.4N | Continuous Thrust : 8.2N |

VL32

| VL32-S10 |
|---|
|  |
| Effective Stroke : 10mm |
| Maximum Thrust : 30.5N |
| Continuous Thrust : 13N |

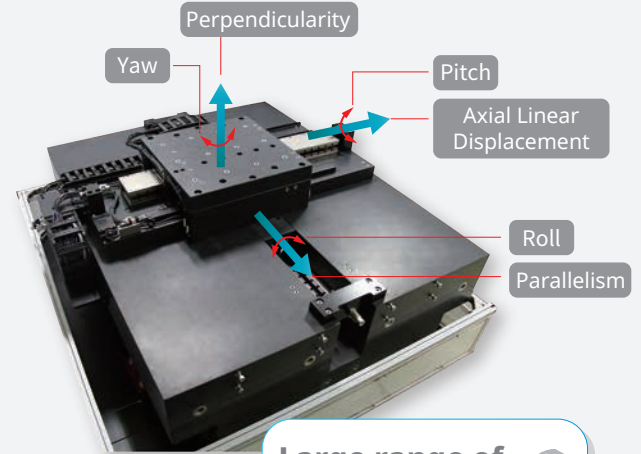
VL50

| VL50-S10 | VL50-S25 | VLR25-S65 |
|---|---|--|
|  |  |  |
| Effective Stroke : 10mm | Effective stroke : 25mm | Effective Stroke : 50mm |
| Maximum Thrust : 115N | Maximum Thrust : 48N | Maximum Thrust : 40.5N |
| Continuous Thrust : 46N | Continuous Thrust : 19.2N | Continuous Thrust : 15.8N |





07


Nano System Positioning Stage

Air Bearing Linear Stage

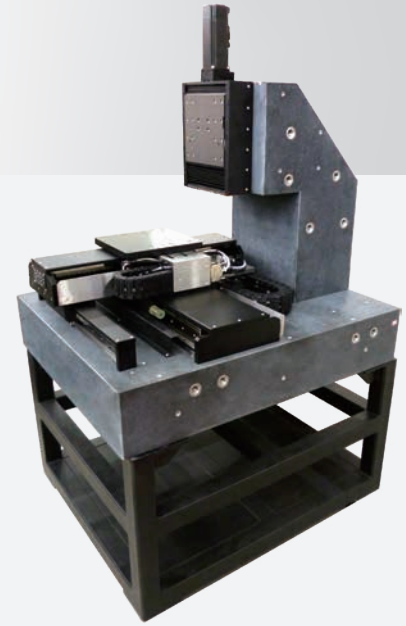


Large range of motion, high precision **6**

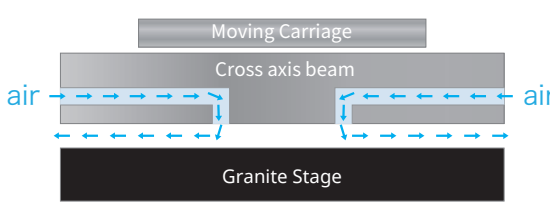
| | | | | |
|-------------------|---|---|--|------------------------|
| Air Bearing Stage | Single Axis | Dual-axis Direct-drive | | |
| |  |  | | |
| | 400mm | 1200mm | Stroke | |
| | <1μm | <1μm | Repeatability | |
| | <2μm | <3μm | Flatness /straightness | |
| Air Bearing Stage | XYZ Multi-axis Direct-drive | XYZR Multi-axis Direct-drive | XYZθ Multi-axis Direct-drive | |
| |  |  |  | |
| | 200*200*100mm | 500*500*100mm | 500*500*100mm | Stroke |
| | <1μm | <1μm | <1μm | Repeatability |
| | <2μm | <5μm | <2μm | Flatness /straightness |

| Brand | Air Bearing Type | Design | Module Components | Assembly & Maintenance | Load Capacity | Stiffness |
|-------------|-----------------------------|---------|-------------------|-------------------------|---------------|--|
| Other Brand | (Air Pad) | Complex | More and complex | Hard and time-consuming | low | Average |
| TOYO | Built-in Air bearing (TOYO) | Simple | Fewer and simple | Quick and easy | High | High  |

Nano-level Linear Motor Stage



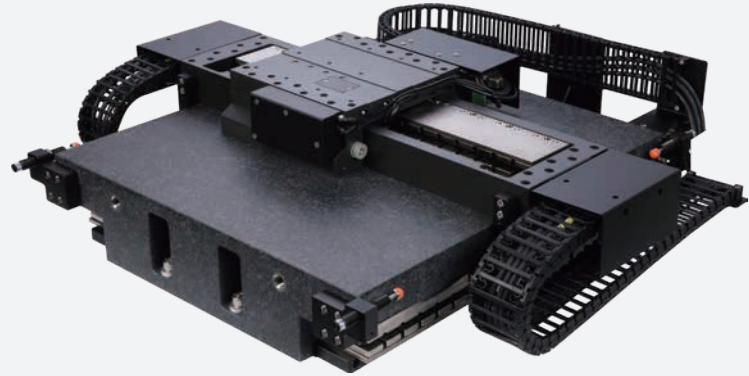
| | | | | | |
|--------------------|---|---|---|---|------------------------|
| Linear Motor Stage | Dual motor linear stage | X-Y-Z linear stage | X-Y linear system | Gantry X-Y-R system | |
| |  |  |  |  | |
| | 500mm | 300*300*100mm | 300*300mm | 450*450mm | Stroke |
| | <1μm | <1μm | <1μm | <1μm | Repeatability |
| | <8μm | <3μm | <3μm | <5μm | Flatness /straightness |
| Linear Motor Stage | Gantry system | Gantry X-Y system | Gantry X-Y-Z system | Gantry X-Y-Z system | |
| |  |  |  |  | |
| | 1600*1200mm | 600*600*100mm | 1000*700*40mm | 500*500*100mm | Stroke |
| | ± 1μm | <1μm | ± 1μm | <1μm | Repeatability |
| | ± 10μm | <8μm | <10μm | <5μm | Flatness /straightness |



| Advantages of Air Bearing Stage | |
|---|---|
|  <p>Structure of Air Bearing</p> | <ul style="list-style-type: none"> • Nozzles are built-in to the active faces of the high-precision components • High stiffness and High load capacity • Streamlined design featuring fewer components • Achieves high mechanical precision through specialized geometric design • Optimized multi-axis precision • Long-term reliability and stability |


07




Nano System Positioning Stage




Air Bearing Linear Stage





| | | | |
|------------------|--|--|------------------------|
| Air Bearing Axis | LBT210 | LBT275 | |
| |  Class 1 |  Class 1 | |
| | ±0.25µm | ±0.25µm | Repeatability |
| | 0.1% | 0.1% | Speed Ripple 100mm/s |
| | ±0.75µm | ±0.75µm | Flatness /straightness |

| | | |
|-------------------------|---|------------------------|
| XY Air-bearing Platform | CAB-XY300 | |
| |  Class 1 | |
| | ±0.25µm | Repeatability |
| | 0.1% | Speed Ripple 100mm/s |
| | ±0.5µm | Flatness /straightness |

| | | | | |
|----------------|---|---|---|-------------------|
| Cast iron Axis | LTS22 | LTSU22 | ETS22 | |
| |  Class 100 |  Class 100 |  Class 100 | |
| | Iron-Core Linear Motor | Ironless Linear Motor | Ball Screw | |
| | ±0.5µm | ±0.5µm | ±1µm | Repeat-ability |
| | ±2µm | ±2µm | ±3µm | Absolute Accuracy |
| | ±3/±5µm | ±3/±5µm | ±3/±5µm | Stroke Range |

| | | | | |
|-----------------|--|---|---|----------------------|
| Alignment Stage | LXY150 | LXY300 | LXY100-G | |
| |  Class 100 |  Class 100 |  Class 100 | |
| | Crossed Roller Guide | Crossed Roller Guide | Integrated Linear Bearing | |
| | ±0.3µm | ±0.5µm | ±1µm | Repeatability |
| | 0.4% | 0.4% | 0.4% | Speed Ripple 100mm/s |
| | ±2µm | ±3µm | ±5µm | Stroke Range |

| | | | |
|-------------------|---|---|------------------------|
| Horizontal Z-Axis | ZH20H | ZH20 | |
| |  Class 100 |  Class 100 | |
| | ±1µm | ±3µm | Repeatability |
| | 80Kg | 20kg | Max.Payload |
| | 20µm | 60µm | Flatness /straightness |

| | | |
|-----------------------------|--|------------------------|
| XYZ Mini Linear motor Stage | MCRB | |
| |  Class 100 | |
| | ±0.25µm | Repeatability |
| | X100,Y100,Z50mm | Stroke |
| | ±2µm | Flatness /straightness |

| | | |
|--|---|---------------|
| Large Hollow Precision Rotary Platform | LR | |
| |  Class 100 | |
| | ±10 arcsec | Repeatability |
| | ±20° | Stroke |
| | 30~40kg | Payload |

Company History

Operation Progress

Japan(TY) subsidiary was established
 CW/CAB series products won the
 2024 Taiwan Excellence Award
 Vietnam subsidiary was established

SRT/LBT/LXY series products won the
 2024 Taiwan Excellence Award

Established multiple overseas sales companies:
 North American Company (California, USA)/
 Indian Company (Pune)/Japanese Company (Tokyo)
 Established Korean factory (Gyeonggi-do)
 Cooperated with CKD to establish electric cylinder
 production line in Thailand factory

CPSG/LM4 series products won the
 2023 Taiwan Quality Award
 TOYO's Korean subsidiary was established

This Linear motor module LGW series
 won the Taiwan excellence award.
 Construction of Factory 2 at
 the Xingji Factory Complex has begun.

Gripper CHY series won Taiwan excellence
 Product Award
 Linear motor robot module LGF series
 won Taiwan excellence Product Award

Thailand warehouse established
 In response to the epidemic
 first to hold global Online exhibition
 The first to launch YouTube Online seminar

Xinji factory completed
 Establish TOYO Robot (Thailand)
 Establish TOYO Robot (Japan)
 Become strategic partner with YAMAHA

Obtain Taiwan Excellence Award

Received the 19th "Raising Start Award" award
 for outstanding export vendor
 Acquired 5000 ping of land inside Hsin Chi Industry Park

Acquired patent for new M534739 AGV
 Passed ISO14001 certification

Fukuoka Fab in Japan established
 Suzhou Fab in China established

Overseas sales network increased to 10 distributors
 Started OEM production for CKD Japan

Acquired patent for new model M429543
 Acquired patent for new actuator model M440838
 Entered Apple's supply chain officially
 Acquired OHSAS 18001: 2007 certification

New fab in Yongkang Technology Park completed and activated
 Became official cooperating technical partners
 with Matsumoto Shouten Co., Ltd of Japan.
 Raw Material Barcode Management System implemented
 Passed ISO9001 certification

Second branch in China established –
 Wuxi Toyo Automation Co., Ltd.
 Quality Assurance Center established.
 Acquired 3D inspection equipment
 Acquired Republic of China Patent number M398055
 IE ERP Enterprise Resource Planning system implemented

Approved by the Ministry of Economic Affairs for
 "Tax Exemption Reward for Crucial Technology Firms"
 Honored with the 9th Business Startup Award
 "Silver Medal" from the Ministry of Economic Affairs
 First branch in China established –
 Shenzhen Toyo Automation Co., Ltd.
 Processing Department established

First participation of Taipei exhibition
 Marketing Department established for
 improvement of product promotion

TOYO company established
 ECON company established

Product Progress

2025

2024

The first in Taiwan: the new Low profile built-in
 guideway actuator GLTH / GLTB

2023

The only original product in Taiwan: Nano air bearing
 Throttle components are directly embedded in
 high-precision components

2022

Development and mass production of hollow motors,
 screws, and multi-axis controllers TSC400.
 The product has successfully entered the national
 epidemic prevention equipment-nucleic acid testing
 machine.

2021

2020

Developed and mass-production of the
 CSL8 series spline modules
 Leading in the industry to launch a desktop robot
 full ballscrew drive
 Single-axis controller with built-in EtherCAT module
 Leading in the industry to launch a dust-free series of
 electric grippers
 Developed and mass-production of the CHY series of
 large-stroke built-in controller electric grippers

2019

The globally unique built-in type linear motor module
 officially mass-produced

2018

DM series officially mass-produced
 XC100-controller of DC Servo Motor officially
 mass-produced

2017

Cart Series of AGVS officially released.
 Drive Unit Series of AGVS officially released.

2016

Development of TC100- controller of servo motor completed
 The only G series track embedded actuator developed
 and mass produced in Taiwan

2015

Servo cylinder officially released
 Development of Servo stepping motor controller TC100 completed

2014

Accumulated production output for AGV exceeded 200 units
 Develop of 4 axis horizontal multi-joint robot completed

2013

Accumulated production output for single axis robot
 exceeded 60,000 units
 Accumulated production output for Cartesian robot
 exceeded 5,000 units
 High speed linear motor actuator officially on sale

2012

Development of first AGV system completed
 Accumulated production output for positioning platform XYY
 exceeded 150 units

2011

Accumulated production output for Cartesian robot
 exceeded 1,000 units
 Accumulated production output for single axis robot
 exceeded 20,000 units
 Development of high speed linear motor actuator completed

2010

Accumulated production output for single axis robot
 exceeded 5,000 units
 Development of single axis robot exceeds 30 specifications
 Production of positioning platform XYY series officially started

2009

Development of Cartesian multi-axis robot completed
 Production of single axis robot officially started

2008

Development of single axis industrial use robot completed

2000

Distribute logistics and gripper-related automation
 components
 Distribute relative robots

TOYO GROUP GLOBAL SERVICE



Facebook



Instagram



LinkedIn



YouTube

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