



TOYO AUTOMATION CO., LTD

FA & ROBOT

Company profile





FA View

Solution

Even since the beginning of automation development in Taiwan, from simple automation processes in the early periods to the current connection with industry 4.0, Toyo has always been present.

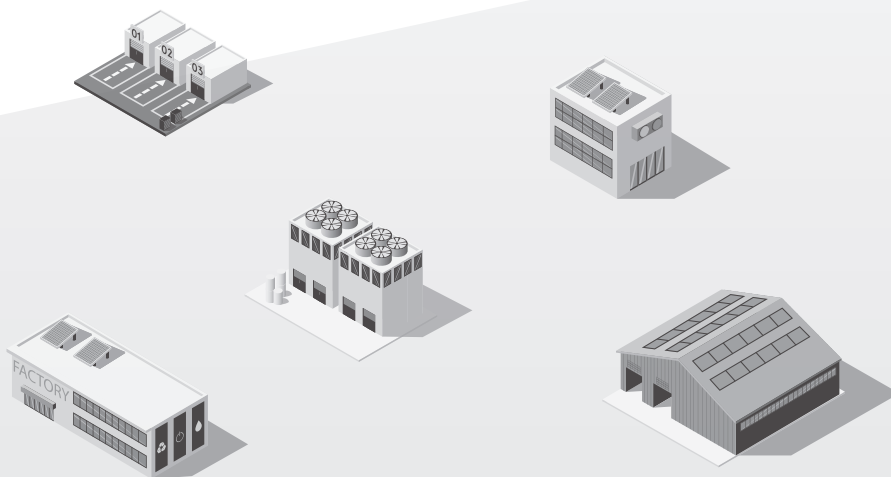
For a long time, we have focused on the development of professional miniature robots, ranging from the simplest control single-axis linear actuator without motor to the complete solution of full motor kits and control systems, all proudly manufactured in Taiwan. We strive to evolve and accommodate to the changes out there on the market today.

The market of small robotic arms requires rapid innovation and the notions to **"Discover Demands"** and **"Change Voluntarily"** are the original intentions that we have always kept. Change voluntarily has always been our core belief and the driving force that pushes our company forward.

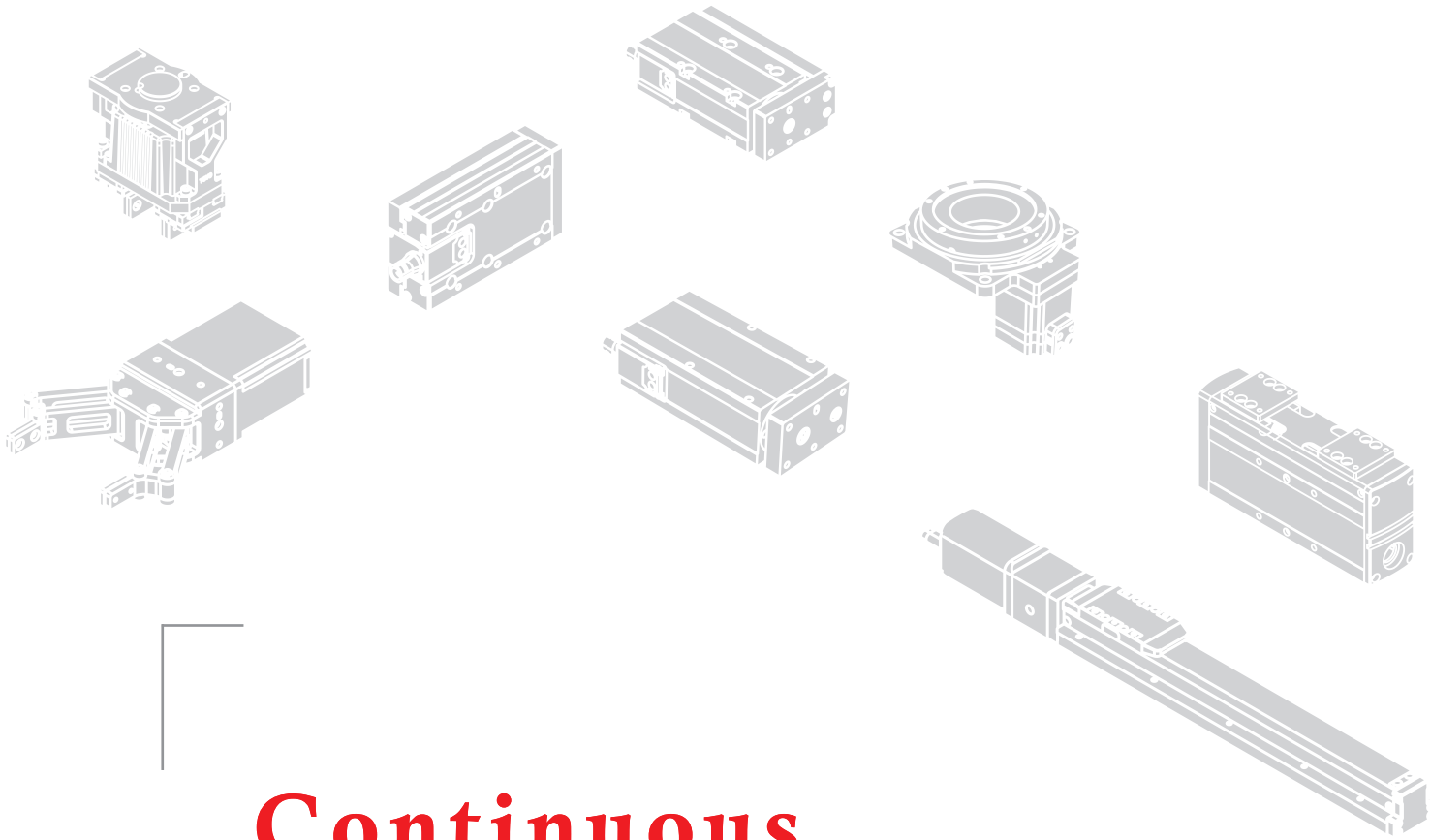
At Toyo, we handle our customer's requests with care. For different manufacturing procedure from each industry, TOYO has always focus on how to shorten cycle time and reduce machine down time during product development.

Through energy saving, reduction of wiring, servo motor integration and other improvements, more values were added to automation equipment manufactured in Taiwan.

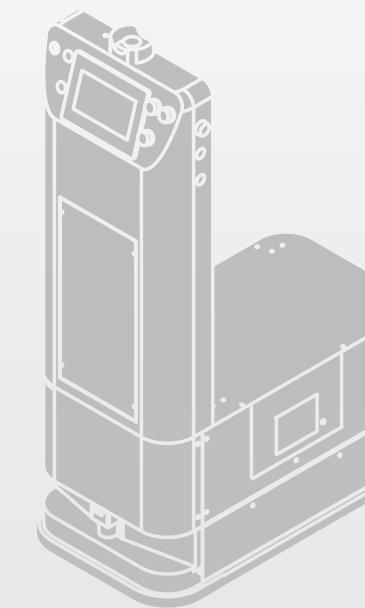
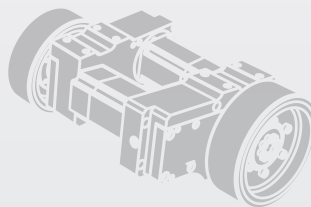
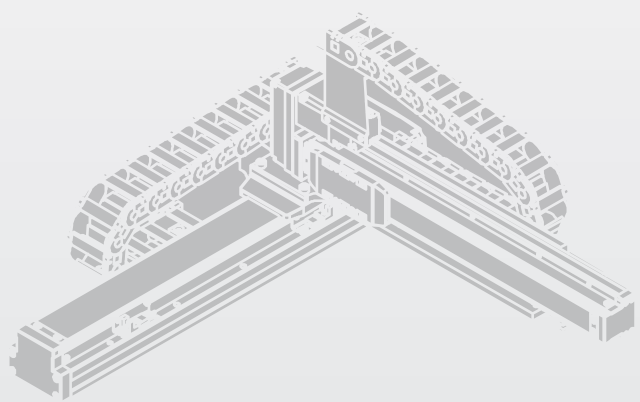
The philosophies of Toyo have always been **"Product Evolution"**, **"Stable Quality"** and **"Seek Excellence"**. We sincerely hope that Toyo can exceed your expectations and become the partner that will grow with your business.



FA &



**Continuous
Evolution
on Automation**



ROBOTS

Line up

6 Major Products of Linear Drive

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

An assortment of linear servo cylinder with/without controller system and automatic guided vehicle system included, sums up to a total of thousands of product types. Accuracy positioning and speed control enables linear movement or pick-up/release operations.



⊕ High price-performance ratio

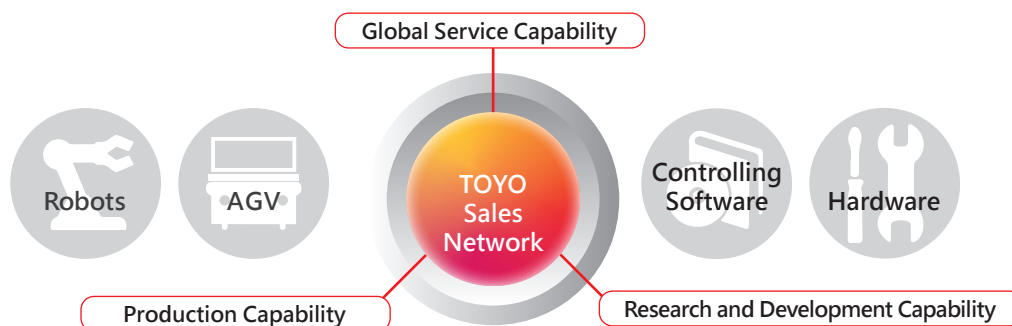
⊕ Flexible customization

⊕ Short delivery time

⊕ Stable quality

⊕ Versatile product line

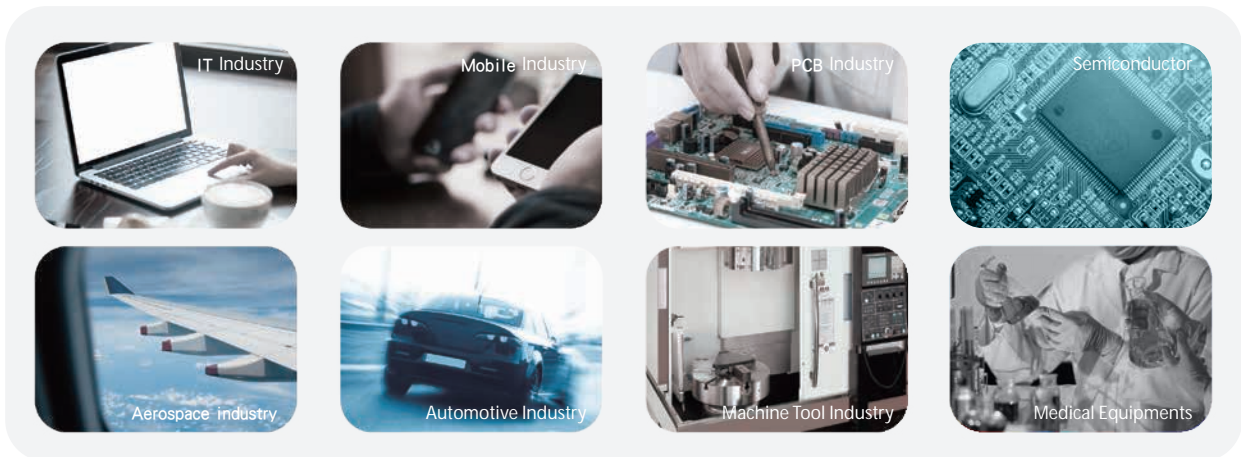
Operational strategy



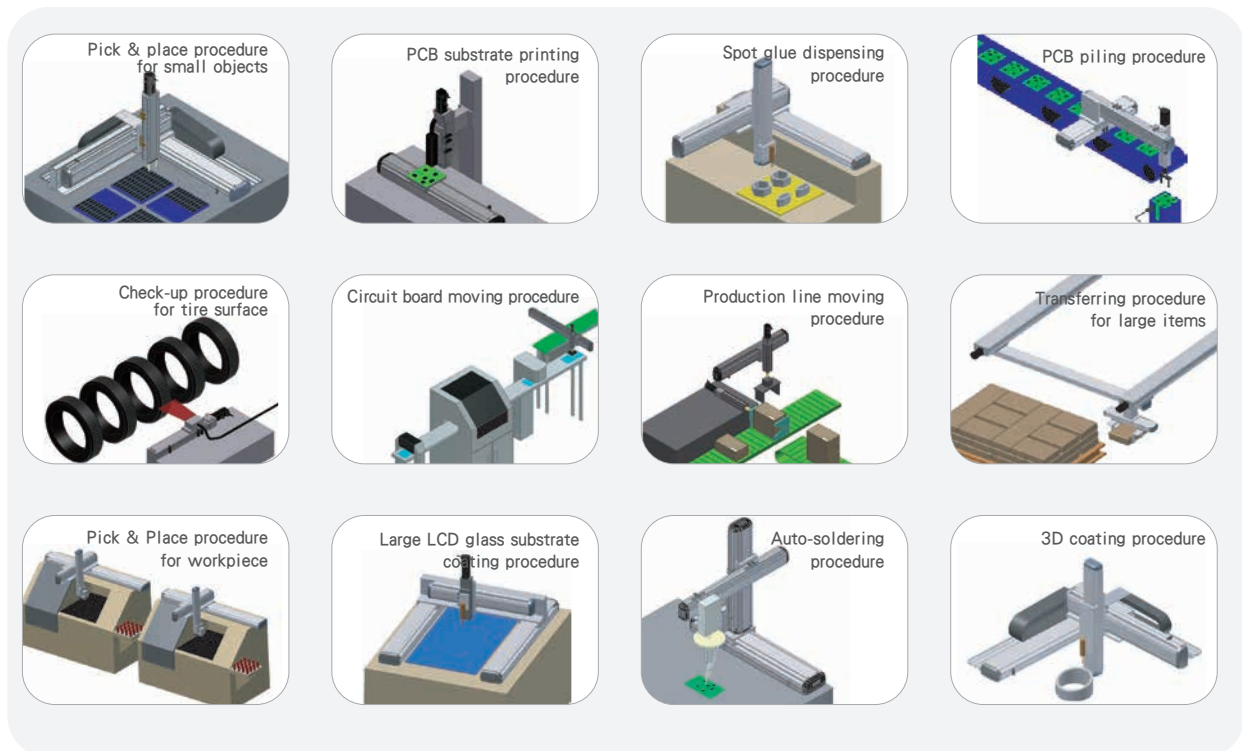
Application

Industry Application

Examples of Toyo automatic robot technology application can be seen in all types of manufacturing processes that relates to people' s daily life. Including industries such as medical, food products, computer, mobile phones, automotive and aerospace. We have continuously developed and introduced modern linear drive automatic robots that aims to solve the issues of insufficient labor forces and wage increases that the global manufacturing industry is facing today. Based on your needs, we provide the best products that enriches your life.



Manufacturing Process Application



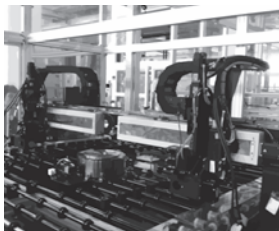
Basic Information

Company Profile

| | |
|-----------------------------------|---|
| Company Name | TOYO Automation Co., Ltd. |
| responsible person no. of workers | Chairman of board Mr. Johnny Lin 400 employees |
| Established On | 2000 |
| Registered Capital | NTD\$220,000,000 |
| Address | No. 55, Xinji 3rd Rd., Annan Dist., Tainan City 709, Taiwan. |
| Telephone | + 886-6-2021347 |
| Fax | + 886-6-2025974 |
| Website | www.toyorobot.com |



Tainan headquarters



From automotive to machine tool, 3C electronics, food and medical supplies, the use and application of automatic robots are versatile and broad. Since Toyo began to manufacture and sell robots with control systems in Taiwan, it has **improved value of domestic supply chain with market leading product development.**



Corresponding to various market demand, Toyo manufacturing system has evolved into a flexible model that accommodates to the customer's demand, **with 60% of manufacturing line catering to customize productions.** While maintaining high quality, low cost and short delivery time in mind, we also adjust our production lines to match the customer's demands.



When new manufacturing procedure and products are being developed, upgrades and adjustments to the equipment are generally required. **Toyo is capable of providing the best automation proposal that best fits your need,** by listening to the functionalities and qualities that you demand, improvements on previous engineering affords, reduction of work station and energy, plus lowering manufacturing cost.



Conceptualized from the idea to satisfy the customer's demand for products with high rigidity, Toyo is able to develop various techniques that improve the structure of our linear actuators. Changes to the design of current control system are also made to make it easier for the user. **There are currently over 20 patents, trademarks and models registration owned by Toyo.**



Service System



Free sample machine for lending

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

Free



Exhibition

Exhibitions are organized in order for the customer to understand 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.

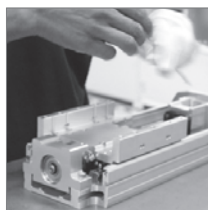
Free



Sharing of technical tips

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

Free



Inspection, Repairment

We provide the inspection and repairment service. Even the warranty period has expired, we will provide repairment services with reasonable cost.



Training Center

In the training center, you can see the actual product and the demo machine. 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

Completed distribution network and after-sales service sites are established. 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.

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.

Awards



Got 9th Taiwan Business Startup Award



Got 19th Taiwan Business Rising Star Award



CGTH/CGTY Series
Got 2018 Taiwan Excellence Awards



LGF / CHY Series
Got 2021 Taiwan Excellence Awards



LGW Series
Got 2021 Taiwan Excellence Awards



CPSG/LM4 Sreies
Got 2023 Taiwan Excellence Awards



LBT/LXY/SRT Sreies
Got 2024 Taiwan Excellence Awards

Toyo Product Lineup



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

Built-in linear guide-ways: slider type

GTH

Ballscrew type

GTH3/4/5/8/12/12M
GTH5S/8S
GTH4D/5D/8D/12D
GTH3K/4K/5K/8K



Built-in linear guide-ways: rod type

GTY

Ballscrew type

GTY4
GTY5
GTY8
GTY12



Standard slider type

ETH2

Ballscrew type

ETH2-14 ETH2-14D
ETH2-17 ETH2-17D
ETH2-22 ETH2-22D
ETH2-30 ETH2-30D



Push rod screw slide

Y

Screw drive

Y50
Y50D/L
Y65
Y65D/L



Standard type

ETB

Belt Type

ETB14M
ETB17M
ETB22M



European type

M

Belt Type

MH65/80
MK65/85/110
MG50/65/85



Clean-room type

ECH2

Ballscrew type

ECH2-14 ECH2-14D
ECH2-17 ECH2-17D
ECH2-22 ECH2-22D



Clean-room type

ECB

Belt Type

ECB14
ECB17
ECB22



Built-in linear guide-ways clean-room: slider type

GCH

Ballscrew type

GCH4 GCH12
GCH5 GCH5S
GCH8 GCH8S



Built-in linear guide-ways clean-room: Rod type

GCY

Ballscrew type

GCY4
GCY5
GCY8
GCY12



Single-axis Linear Actuator (Without motor)

Compatible with motors manufactured by other brands

Gear slide

ETK/ENK

Gear drive

ETK15 ENK15
ETK22 ENK22
ETK30 ENK30



Flat track built-in electric slide

GLTH/GLTB

Ballscrew type Belt Type

GLTH3/5/8/12 GLTB5
GLTH5D/8D GLTB8
GLMH5/8
GLTH5M/8M



Multi-axis Actuator (Without motor)

Compatible with motors manufactured by other brands

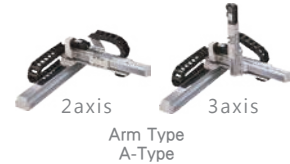
Built-in Linear Motion Guide

Mult Axis Type

XYGT

Ballscrew type

XYGT210-A XYGT440-A
XYGT320-A XYGT321-A
XYGT430-A XYGT432-A



Mult Axis Ball screw Type

XYTH

Ballscrew type

XYTH650-A
XYTH760-A
XYTH870-A
XYTH876-A



XYTH760-G
XYTH870-G
XYTH876-G



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



XYTH760-F



Mult Axis Belt Type

XYTB

Belt Type

XYTB650-A
XYTB760-A
XYTB870-A
XYTB876-A



XYTB870-G
XYTB876-G



Servo Cylinder

The best option for pneumatic cylinder replacement

Closed-loop stepping motor

Built-in Guideway Cylinder-Slide Type

CGTH

CGTH3/4/5/8
CGLTH3/4/5/8



Built-in Guideway Cylinder-Rod Type

CGTY

CGTY4
CGTY5
CGTY8



Built-in Guideway Cylinder-Cleanroom Type

CGCH

CGCH3
CGCH4
CGCH5
CGCH8



High rigidity miniature cylinder

CSG

CSG20
CSG25
CSG35



Electric Gripper

CH

CHZ2-S10 CHS2C-S20
CHZ2-S14 CHS2C-S40
CHZ2-S22 CHS2C-S68
CHS2B-S20 CHY2B-S80
CHS2B-S40 CHY2B-S150
CHS2B-S68



Hollow servo motor

Built-in Guideway Cylinder-Slide Type

DGTH

DGTH3
DGTH4
DGTH5



Built-in Guideway Cylinder-Rod Type

DGTY

DGTY4
DGTY5



Mini Cylinder

DM

DMG25
DMG40
DMH25
DMH40



Economical electric cylinder

High rigidity micro electric cylinder

CPSG

CPSG20
CPSG25
CPSG35



Mini electric cylinder - screw slide type

CPGLTH

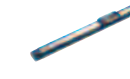
CPGLTH5
CPGLTH8



Mini electric cylinder - belt slide type

CPGLTB

CPGLTB5



Push rod screw slide

CPY

CPY43
CPY62



等照片

Toyo Product Lineup

TOYO ROBOT www.toyorobot.com

Free member registration

2D/3D images download

Real time model selection software
世軟體!

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

Linear Motor Robot

High speed, high acceleration/deceleration,twin load

| | | | |
|--|--|--|--|
| <p>Built-in linear guide-ways type linear motor robot</p> <p>LGF Clean Room Type Class 100</p> <p>LGF5 LGF15</p>  <p>TAIWAN EXCELLENCE</p> | <p>Built-in linear guide-ways type linear motor robot</p> <p>LGTW/LGNW/LGCW Clean Room Type Class 100</p> <p>LGTW20 LGCW20 LGTW35 LGCW35 LGNW20 LGNW35</p>  <p>TAIWAN EXCELLENCE</p> | <p>With iron-core flat type linear motor robot</p> <p>LTF3/LNF3/LCF3 Standard type Closed type Clean Room Type Class 100</p> <p>LTF3-15/30/75 LNF3-15/30/75 LCF3-15/30/75</p>  | |
| <p>Iron core linear motor</p> <p>LTF3-250 NEW Standard type</p>  | <p>Multi-drive Linear Shaft Motor Robot</p> <p>LM6 NEW Standard type</p>  | <p>Mini Electric Linear Motor Slides</p> <p>LZ NEW Standard type</p> <p>LZ72 LZ84 LZ90</p>  | <p>Electric Linear Motor Slides</p> <p>LSC3 NEW Standard type</p>  |

Single Robot

3 highly reliable and trustworthy specifications

Built-in Linear Guide Robot-Rod Type

SGTY
Ballscrew type


SGTY4 SGTY8 NEW
SGTY5 SGTY12



Built-in Linear Guide Robot-Slide Type

SGTH/STH
Ballscrew type Servo Motor

SGTH4 STH17 NEW
SGTH5 STH22
SGTH8 SGTH12M
SGTH12 STH17M
STH22M







Rotary series

Machine vision alignment OK

| | | | |
|---|---|--|---|
| <p>Electric spline</p> <p>CSL8 NEW Stepping Motor</p>  | <p>Rotary electric cylinder</p> <p>CRC NEW Stepping Motor</p> <p>CRC-7 CRC-9 CRC-11</p> <p>Coming Soon</p>  | <p>Rotary Cylinder</p> <p>SNT NEW Servo Motor</p> <p>SNT85 SNT130</p> <p>Coming Soon</p>  | <p>High-precision harmonic hollow rotating platform</p> <p>SRT NEW Servo Motor</p> <p>SRT85 SRT95 SRT110</p> <p>TAIWAN EXCELLENCE</p>  |
|---|---|--|---|

Cartesian Coordinates Robot

U shaped, cantilever, polar coordinates, cross shaped and more

| | | | |
|--|---|--|---|
| <p>Ball-screw-driven Desktop Robot</p> <p>JTHX</p> <p>JTHX-200 JTHX-300 JTHX-400 JTHX-500 JTHX-500D</p> | <p>Ball-screw-driven Desktop Robot</p> <p>JTHS</p> <p>JTHS-300 JTHS-400 JTHS-500 JTHS-500D</p>  | <p>Ball-screw-driven Desktop Robot</p> <p>JTHC</p> <p>JTHC-200 JTHC-300 JTHC-400 JTHC-500 JTHC-500D</p> | <p>Ball-screw-driven Desktop Robot</p> <p>JTHD</p> <p>JTHD-200 JTHD-300 JTHD-400 JTHD-500 JTHD-500D</p>  |
| <p>Ball-screw-driven Cartesian Robot</p> <p>XYCGT Stepping motor</p> <p>XYCGT320 XYCGT321</p>  | <p>Ball-screw-driven Cartesian Robot</p> <p>XYSGT servo motor</p> <p>XYSGT430 XYSGT432</p>  | | |

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

TSC400 Stepping Motor TSC400S Servo Motor



Automatic Guided Vehicle

MES compatible to achieve industry 4.0

| | | | | | | |
|---|---|---|---|---|--|---|
| <p>Basic Type AGV Unit</p> <p>MP-BS90S</p>  | <p>Basic Type AGV Unit</p> <p>PL-BS90M</p>  | <p>Basic Type AGV Unit</p> <p>PD-BS90M</p>  | <p>Servo Controller</p> <p>IPC</p>  <p>Lidar QR code reader</p> | <p>AGV System</p> <p>MPcart</p>  | <p>AGV System</p> <p>MultiV</p>  | <p>AGV System</p> <p>Pcart</p>  |
|---|---|---|---|---|--|---|

01

Electric Actuator Series



Single-axis Linear Actuator

Without motor



Ball Screw Drive



Belt Drive



Clean Room



Built-in Guideway

| | GTH Series | GTY Series | GCH Series | GCY Series | GLTH Series | |
|---------------------------------------|------------------------------------|-----------------------------------|------------------------------------|-----------------------------------|------------------------------------|--------------|
| Built-in Guideway Ball Screw Actuator | | | | | | |
| | Repeatability $\pm 0.005\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ | Repeatability $\pm 0.005\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ | Repeatability $\pm 0.005\text{mm}$ | |
| | 110 kg | 110 kg | 110 kg | 110 kg | 110 kg | Max. Payload |
| | 50~2200 mm | 50~800 mm | 50~1250 mm | 50~800 mm | 50~2500 mm | Stroke Range |
| Ball Screw Standard Actuator | | | | | | |
| | Repeatability $\pm 0.005\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ | Repeatability $\pm 0.005\text{mm}$ | Repeatability $\pm 0.01\text{mm}$ | | |
| | 400 kg | 110 kg | 150 kg | 3000 kg | | Max. Payload |
| | 50~2100 mm | 50~500 mm | 50~1800 mm | 50~800 mm | | Stroke Range |
| Belt Drive Standard Actuator | | | | | | |
| | Repeatability $\pm 0.04\text{mm}$ | Repeatability $\pm 0.1\text{mm}$ | Repeatability $\pm 0.04\text{mm}$ | Repeatability $\pm 0.06\text{mm}$ | | |
| | 85 kg | 200 kg | 85 kg | 8 kg | | Max. Payload |
| | 50~3500 mm | 50~5000 mm | 50~4050 mm | 50~3000 mm | | 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 | |
|  | |
| Repeatability $\pm 0.005\text{mm}$ | |
| 10 kg | Max. Payload |
| 1250×550×350 mm | Stroke Range |

Ball Screw Cartesian Robot

| | |
|---|---|
| XYTH Series | XYCH Series |
|  |  |
| X · Y · Z axis Repeatability $\pm 0.05\text{ mm}$ | |
| 22 kg | 22 kg |
| Max. Payload | |
| 1500×1050×550 mm | 1500×1050×550 mm |
| Stroke Range | |


Combination

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

Belt Type Cartesian Robot

| | |
|---|---|
| XYTB Series | XYCB Series |
|  |  |
| X · Y axis Repeatability $\pm 0.04\text{ mm}$ | |
| 22 kg | 22 kg |
| Max. Payload | |
| 3500×750×550 mm | 3500×750×550 mm |
| Stroke Range | |

Combination

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

02

Servo Cylinder Series

Servo Cylinder

With motor & controller

 Ball Screw Drive
 Closed-Loop Stepping Motor
 Clean Room
 Built-in Guideway

 Closed-Loop Stepping Motor Control
 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 | CSG Series | CGTH Series | CGTY Series | CGCH Series |
|------------------|----------------------------|--|--|---|--|
| | |  |  |  |  |
| | | Repeatability ±0.01mm | Repeatability ±0.005mm | Repeatability ±0.01mm | Repeatability ±0.005mm |
| | | 12.8 kg | 30 kg | 30 kg | 30 kg |
| | | 30/50/75/100/125 mm | 50~1250 mm | 50~800 mm | 50~1250 mm |

Max. Payload
Stroke Range

| TC100 Controller | Electric Gripper | CHZ2 Series | CHS2B Series | CHS2C Series | Built-in controller | CHY2B Series |
|------------------|------------------|---|---|--|-----------------------|---|
| | |  |  |  | |  |
| | | Repeatability ±0.02mm | Repeatability ±0.01mm | Repeatability ±0.01mm | Repeatability ±0.05mm | |
| | | 278 N | 509 N | 509 N | 90/30 N | |
| | | 22 mm | 68 mm | 68 mm | 80/150 mm | |

Max. Gripping Force
Max. Open-Close Stroke

| Built-in controller | Built-in Cylinder | CPSG Series | CPGLTH Series | CPGLTB Series | CPY Series |
|---------------------|-------------------|---|---|--|---|
| | |  |  |  |  |
| | | Repeatability ±0.01mm | Repeatability ±0.005mm | Repeatability ±0.06mm | Repeatability ±0.07mm |
| | | 12 kg | 30 kg | 2 kg | ? kg |
| | | 30/50/75/100/125 | 50~650 mm | 50~1500 mm | ?~? mm |

最大荷重
行程範圍

提供數值 / 等照片

Servo Cylinder

With motor & controller



Ball Screw Drive



Servo Motor



Clean Room



Built-in Guideway



Servo Motor
25W/40W



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



| | | DGTH Series | DGTY Series | DMG Series | DMH Series | |
|------------------|---------------------------|------------------------|------------------------|-----------------------|-----------------------|--------------|
| XC100 Controller | Mini Cylinder | | | | | |
| | | Repeatability ±0.005mm | Repeatability ±0.01mm | Repeatability ±0.01mm | Repeatability ±0.01mm | |
| | | 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 | | | | | |
| | | Repeatability ±0.005mm | Repeatability ±0.005mm | | | |
| | | 110 kg | 150 kg | | | Max. Payload |
| | | 50~2200 mm | 50~2200 mm | | | Stroke Range |

03








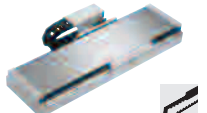
Linear Motor Robot Series

Linear Motor Robot

With motor & controller

 Linear Motor Drive
 THK LM Guide
 Clean Room
 Built-in Guideway



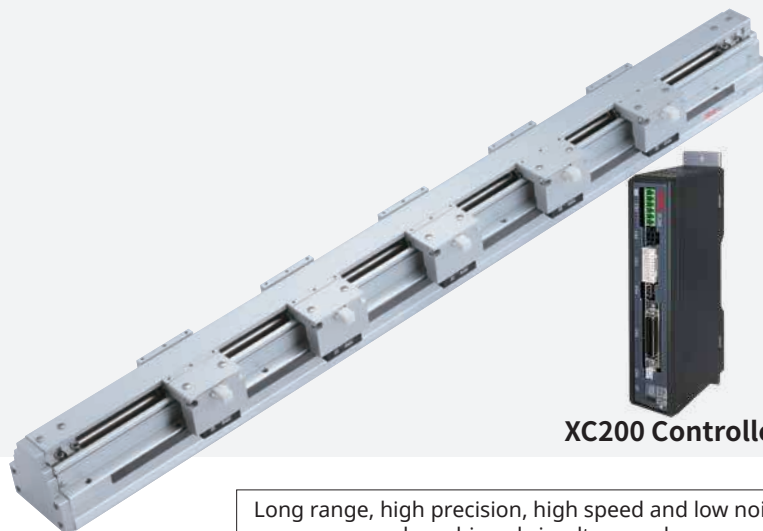
| | LGTW Series | LGNW Series | LGCW Series | LGF Series | |
|---|---|---|--|---|--------------|
| Built-in Guideway Linear motor Robot |  |  |  |  | |
| | Repeatability ±0.002mm | Repeatability ±0.002mm | Repeatability ±0.002mm | Repeatability ±0.002mm | |
| | 20~70 kg | 20~70 kg | 20~70 kg | 15 kg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

Linear Motor Robot

With motor & controller



Linear Motor Drive



XC200 Controller

Multi-drive Linear Shaft Motor Robot

LM6 Series




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

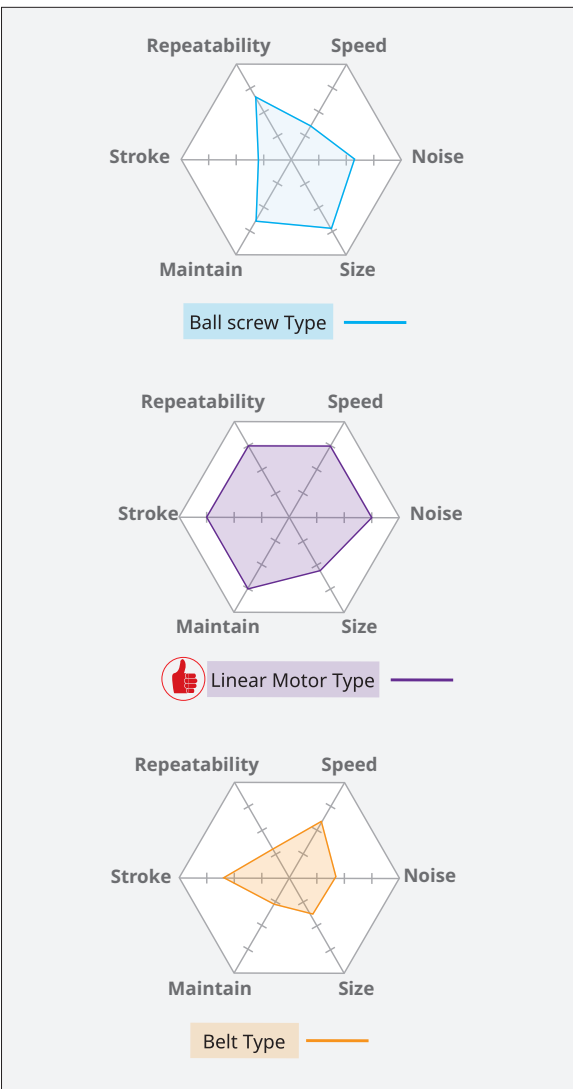


Repeatability $\pm 0.002\text{mm}$

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



100 sets of programs



10000 points

Optional double X axis



R-axis style optional (JTHS series only)



Economical desktop robot

JTHC



JTHD



X.Y.Z axis : Repeatability ± 0.01 mm

X : 12 Z : 6 kg

X : 10 Z : 5 kg

Max. Payload

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

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

Stroke Range

Standard desktop robot

JTHX



JTHS



X.Y.Z axis :
Repeatability ± 0.01 mm

X.Y.Z axis :
Repeatability ± 0.005 mm

X : 10 Z : 5 kg

X : 15 Z : 8 kg

Max. Payload

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

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

Stroke Range

Applications

Soldering



Dispensing



Screw fastening



Vision 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

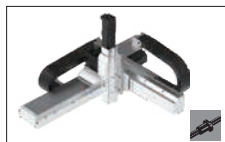


Ballscrew drive Cartesian desktop robot

XYCGT



XYSGT



X.Y.Z axis Repeatability ± 0.005 mm

Z:5.5 kg

Z:12 kg

Max. Payload

1100×300×100 mm

1250×450×100 mm

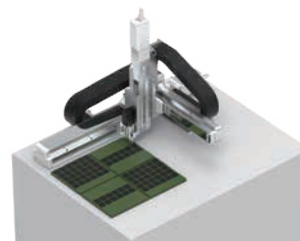
Stroke Range

Applications

CCD Machine Vision Inspection



Pick-and-place for Small-sized Workpieces



Dispensing for Small-sized Workpieces

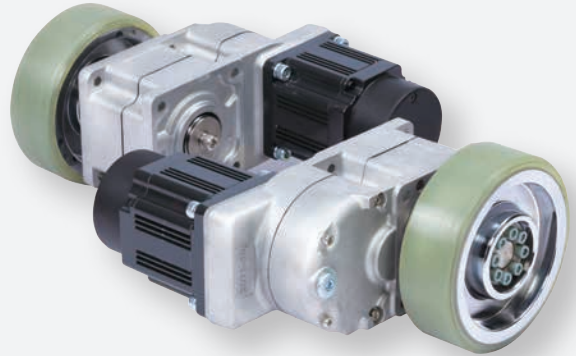


05

Automatic Guided Vehicles

AGV Drive Kit

With motor & controller



| Drive Kit | PL Series | MultiV Series | |
|-----------|-------------|---------------|-----------------|
| | | | |
| | 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 |

Controller

IPC



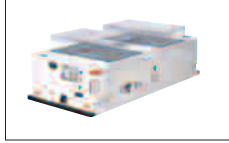


Automated Guided Vehicle

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 |

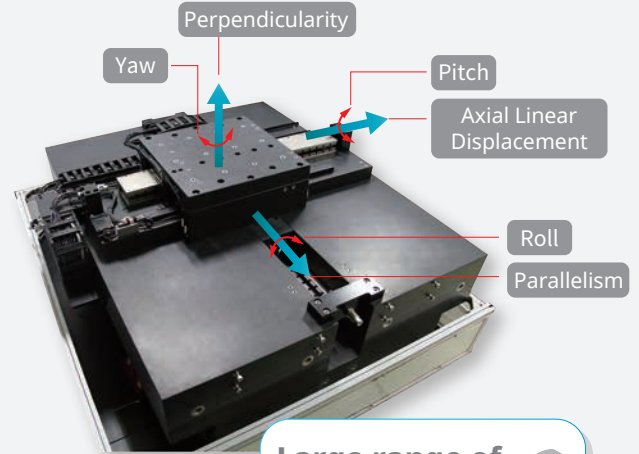
| | | | | |
|------------|---|---|---|-----------------|
| AMR | MPcart Series | MPcart Series | MPcart Series | |
| |  |  |  | |
| | DC24V/40AH | DC24V/40AH | DC24V/60AH | Battery Voltage |
| | 700 kg | 100 kg | 900 kg | Max. Payload |
| | 3~45 m/min | 3~45 m/min | 3~45 m/min | Max. Speed |

| | | | | |
|------------|---|---|---|-----------------|
| 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 |

06


Air Bearing Linear Stage

Air Bearing Linear Stage

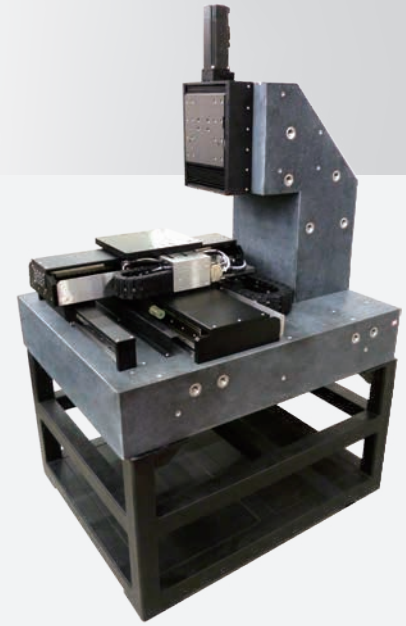








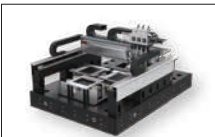
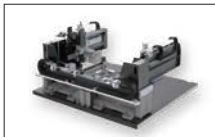
Large range of motion, high precision **6**

| | | | |
|-------------------|---|---|------------------------|
| 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 | |
| |  |  | |
| | 200*200*100mm | 500*500*100mm | Stroke |
| | <1μm | <1μm | Repeatability |
| | <2μm | <5μm | Flatness /straightness |

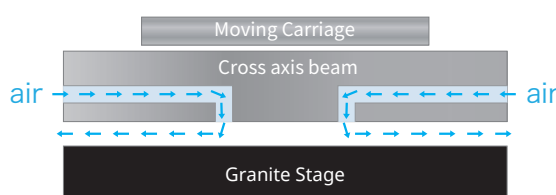
| Brand | Air Bearing Type | Design | Module Components | Assembly & Maintenance | Load Capacity | Stiffness |
|-------------|-----------------------------|---------|-------------------|-------------------------|---------------|--|
| Other Brand | (Air Pad) | Complex | More and complex | Hard and time-consuming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

Slide with linear motors stage



| | | | | | |
|--------------------|---|---|---|---|------------------------|
| Linear Motor Stage | Dual motor stand linear stage | X-Y-Z linear stage | X-Y linear stage | Gantry X-Y-R stage | |
| |  |  |  |  | |
| | 500mm | 300*300*100mm | 300*300mm | 450*450mm | Stroke |
| | <1μm | <1μm | <1μm | <1μm | Repeatability |
| | <8μm | <3μm | <3μm | <5μm | Flatness /straightness |
| Linear Motor Stage | Gantry stage | Gantry X-Y stage | Gantry X-Y-Z stage | Gantry X-Y-Z stage | |
| |  |  |  |  | |
| | 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



Structure of Air Bearing

- 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

Company History

Operation Progress

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
 Dongyouda'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

2024 The first in Taiwan: the new built-in slide table 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 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

2020 The globally unique built-in type linear motor module officially mass-produced

2019 DM series officially mass-produced
 XC100-controller of DC Servo Motor officially mass-produced

2018 Cart Series of AGVS officially released.
 Drive Unit Series of AGVS officially released.

2017 Development of TC100- controller of servo motor completed
 The only G series track embedded actuator developed and mass produced in Taiwan

2016 Servo cylinder officially released
 Development of Servo stepping motor controller TC100 completed

2015 Accumulated production output for AGV exceeded 200 units
 Develop of 4 axis horizontal multi-joint robot completed

2014 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

2013 Development of first AGV system completed
 Accumulated production output for positioning platform XYY exceeded 150 units

2012 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

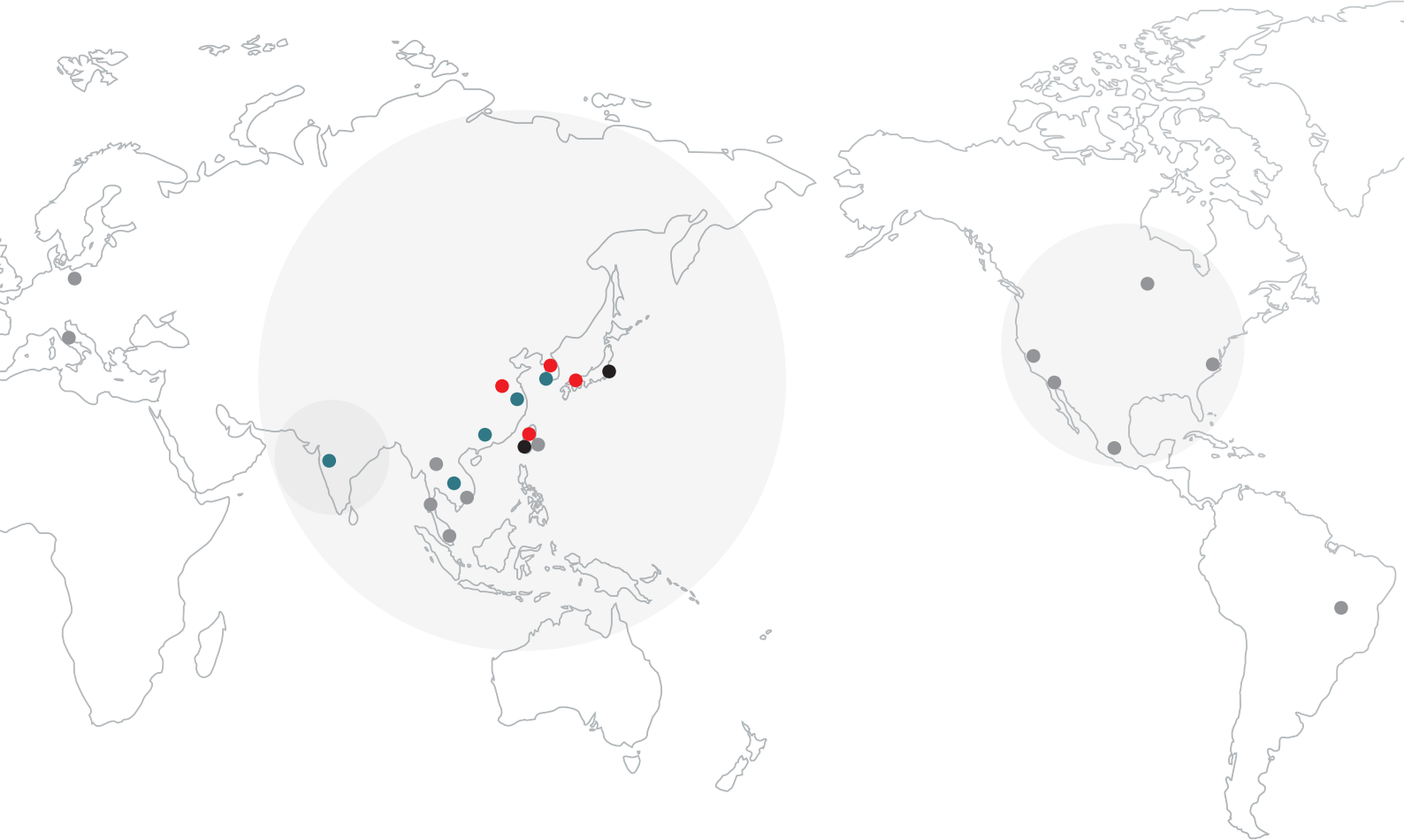
2011 Accumulated production output for single axis robot exceeded 5,000 units
 Development of single axis robot exceeds 30 specifications
 Production of positioning platform XYY series officially started

2010 Development of Cartesian multi-axis robot completed
 Production of single axis robot officially started
 Development of single axis industrial use robot completed

2009 Distribute logistics and gripper-related automation components
 Distribute relative robots

2008 }
 2000

Global Services



| | Taiwan | China | Japan | South East Asia | Korea | Europe | America | India |
|-------------------|--------|-----------------------|-------|-----------------|--------|--------|---------|-------|
| Production Fab | • | • | • | • | • | | | |
| Overseas Branches | | •Shuzhou •Shenzhen | | •Thailand | •Korea | | • | • |
| Technology Center | • | | • | | • | | | |
| Agency | • | • | • | • | • | • | • | |

TOYO Global Network

TOYO GROUP GLOBAL SERVICE



LINE



facebook



Instagram



YouTube



LinkedIn



twitter



WeChat



KAKAO

- 東佑達自動化科技股份有限公司
TOYO AUTOMATION CO., LTD.
台南市安南區新吉三路55號
No. 55, Xinji 3rd Rd., Annan Dist., Tainan City 709, Taiwan.
Tel:+886-6-2021347 Fax:+886-6-2025974
- 東佑達奈米系統股份有限公司
TOYO NANO SYSTEM CORPORATION.
新竹縣湖口鄉八德路一段67號
No. 67, Sec. 1, Bade Rd. Hukou Township, Hsinchu County 303117, Taiwan.
Tel:+886-3-5696060 Fax: +886-3-5696161
- 東佑達機器人(蘇州)有限公司
TOYO ROBOT (SHUZHOU) CO., LTD.
江蘇省昆山市張浦鎮振新東路586號(浩盛工業園C12-2)
No 586, Zhenxin East Road, Zhangpu Town, Kunshan City, Jiangsu Province, China.
Tel:+86-512-86890880 Fax:+86-512-86890881
- 東佑達自動化科技(深圳)有限公司
TOYO AUTOMATION (SHENZHEN) CO., LTD.
深圳市寶安區龍華大浪華榮路明君商務中心1208室
1208 Mingjun Business Center Huarong Road, Baoan District, Shenzhen City, China.
Tel:+86-755-81713415 Fax:+86-755-81713435
- TOYO ROBOTICS AMERICAS
Silicon Valley, CA, US
Email : ta1@toyorobot.com
- TOYO JAPAN 株式会社
埼玉県さいたま市大宮区桜木町1 - 266 - 3シンワKIビル413号室, Japan
413 Shinwa KI Building, 3-266, Sakuragicho 1 chome, Omiya-ku Saitama-shi, Saitama 330-0854 Japan
TEL:+81-48-658-8930
- TOYOROBOTICS KOREA CO.LTD.
경기도 안산시 단원구 엠티브이12로 21번길 30
30, Emtibeui 12-Ro, 21 Beon-Gil, Danwon-Gu, Ansan-Si, Gyeonggi-Do, Republic Of Korea
Tel:+82-02-6941-1681
- TOYO ROBOTICS PRIVATE LIMITED INDIA
Office No-15A, 4th Floor, A-Building City Vista, Kharadi, Pune - 411014, MH, India.
TEL:+919226535061
Email : sales@toyorobotics.co
- TOYO VIETNAM (SALES OFFICE)
Thanh Xuan district, Hanoi city, Viet Nam
TEL:+84 986 358 863
Email : vietnamtoyo_1@toyorobot.com
- TOYO ROBOT (THAILAND) CO., LTD.
118/27 Moo 18 Klong Nueng Klong Luang Pathumthani 12120 Thailand.
E-mail : stanley@toyorobot.com



※ Specifications and appearance are subject to change without prior notice.
※ Products shown in this catalogue have been insured with Product Liability Insurance.
Copyright © TOYO AUTOMATION CO.,LTD Copyrighted Materials, Offenders will be Prosecuted!
TEX2401-24P 2024.08

Official
Website



www.toyorobot.com