



TOYO AUTOMATION CO., LTD

FA & ROBOT

Company profile





FA View

Solution

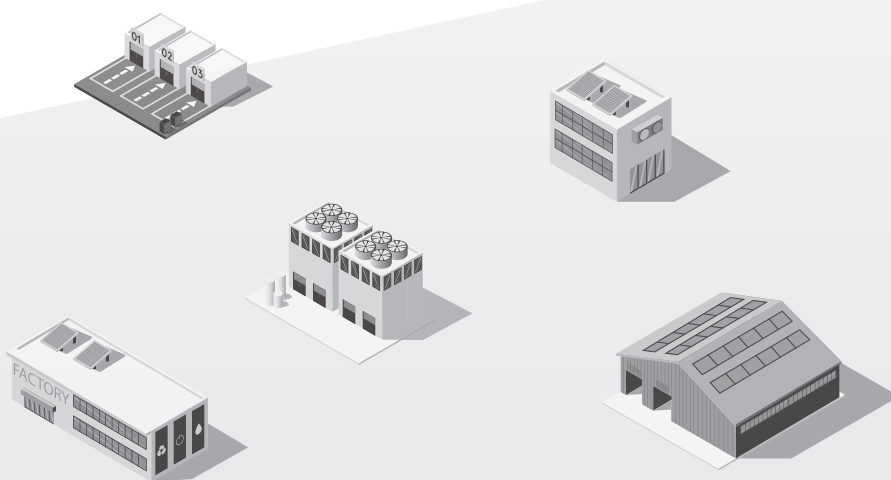
Even since the beginning of automation development in Taiwan, from simple automation processes in the early periods to the current connection with industry 4.0, Toyo has always been present.

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.

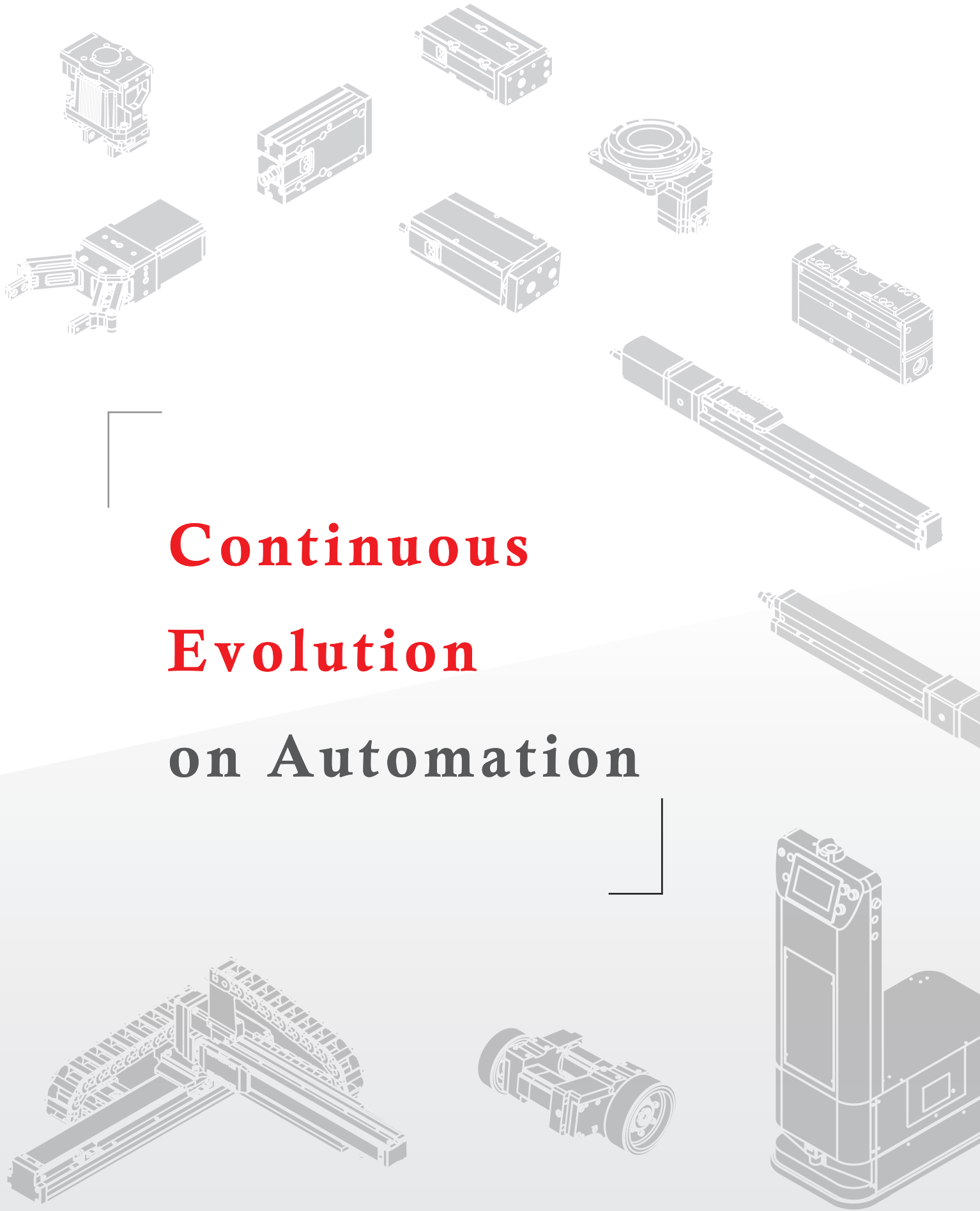
The market of small robotic arms requires rapid innovation and the notions to **"Discover Demands"** and **"Change Voluntarily"** are the original intentions that we have always kept. Change voluntarily has always been our core belief and the driving force that pushes our company forward.

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.

Actuator



Servo Cylinder



Linear Motor Robot



Desktop Robot



Automated Guided Vehicle



Air Bearing
Linear Motor System



⊕ High price-performance ratio

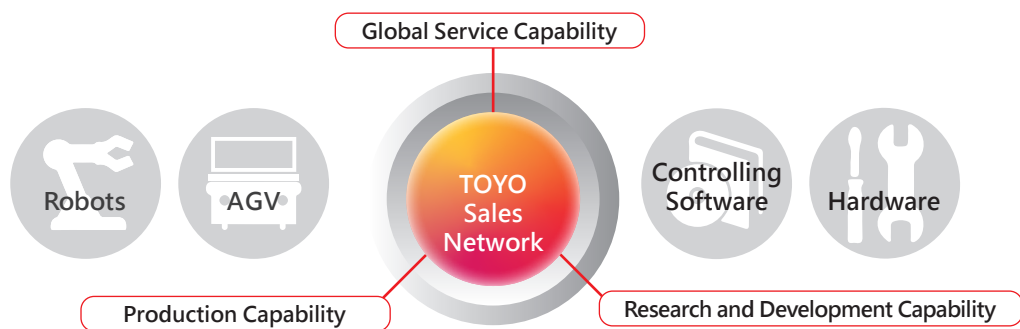
⊕ Stable quality

⊕ Flexible customization

⊕ Versatile product line

⊕ Short delivery time

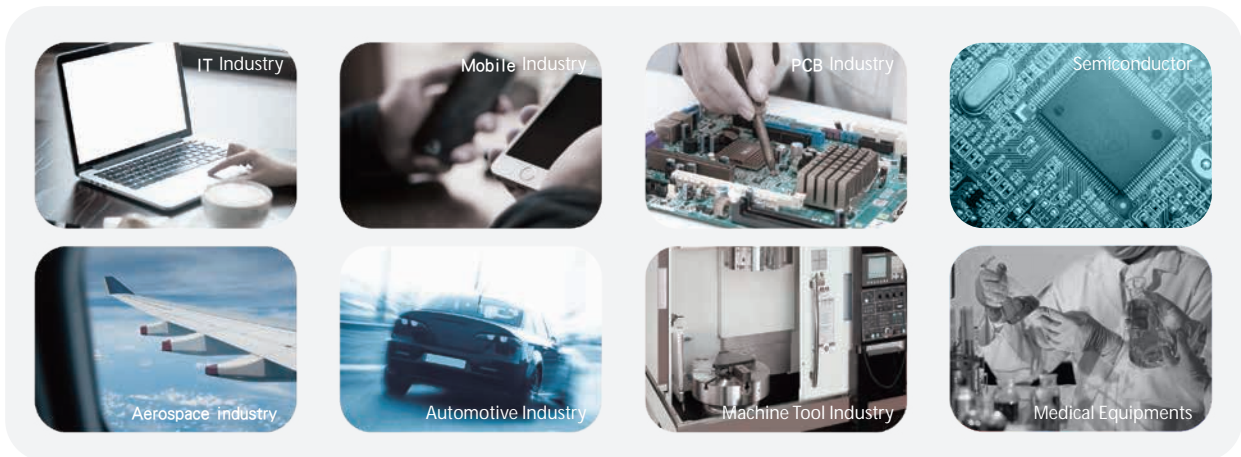
Operational strategy



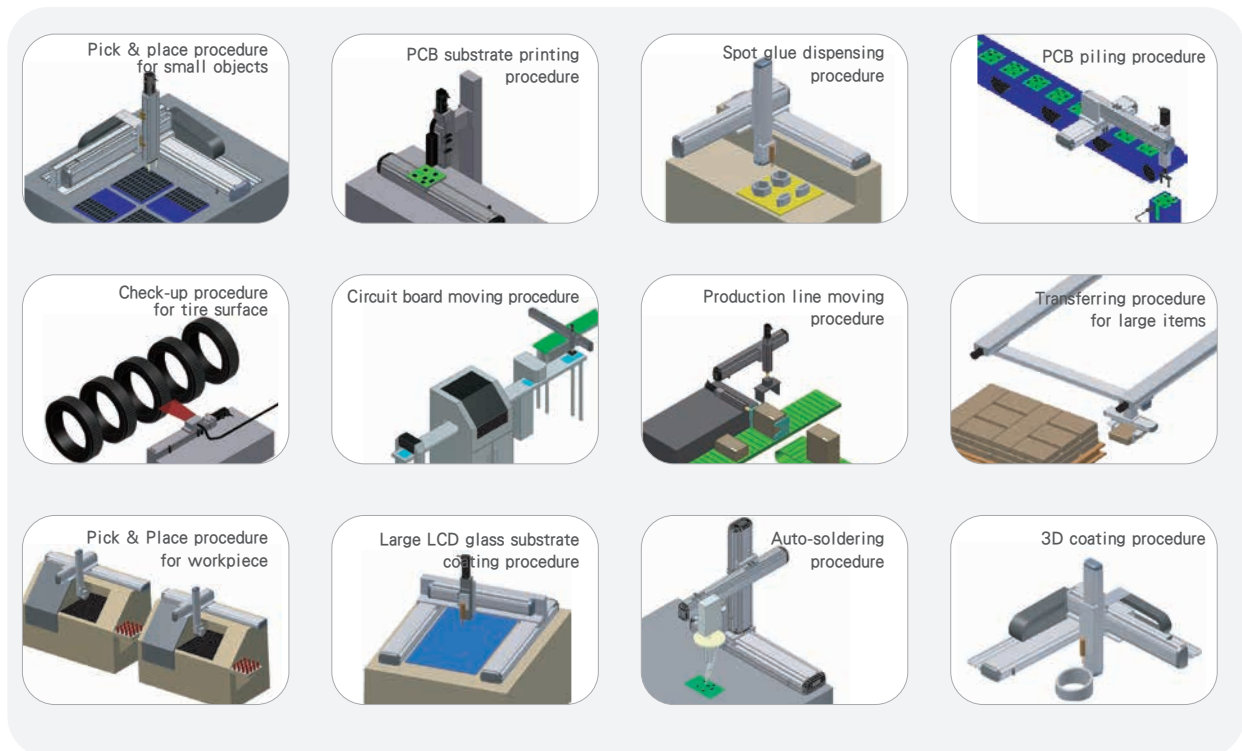
Application

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

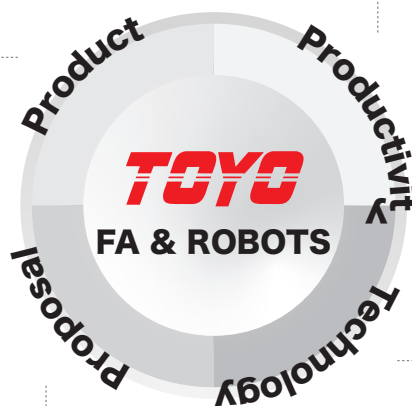


From automotive to machine tool, 3C electronics, food and medical supplies, the use and application of automatic robots are versatile and broad. Since Toyo begun to manufacture and sell robots with control systems in Taiwan, it has **improved value of domestic supply chain with market leading product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



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



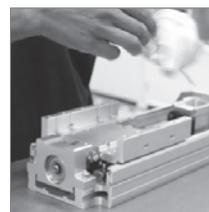
Exhibition car

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.



Sharing of technical tips

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



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



9001 14001 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



LM4/CPSG Series
Got 2023 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.

24 Taiwan : 0800-800-893
24 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

ETH
Ballscrew type

ETH13 ETH22
ETH14 ETH17M
ETH17 ETH22M



IP66 waterproof type

GPH
Ballscrew type

GPH5
GPH8
GPH12



standard type

ETB
Belt Type

ETB5 ETB14M
ETB6 ETB17M
ETB10 ETB22M



European type

M
Belt Type

MH65/80
MK65/85/110
MG65



Clean-room type

ECH
Ballscrew type

ECH14 ECH17M
ECH17 ECH22M
ECH22



Clean-room type

ECB
Belt Type

ECB5 ECB14
ECB6 ECB17
ECB10 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



Multi-axis Actuator (Without motor)

Compatible with motors manufactured by other brands

Mult Axis Ball screw Type

XYTH
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

XYTH760-F



XY Type
F-Type

Mult Axis Belt Type

XYTB
Belt Type

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



Arm Type
A-Type

XYTB870-G
XYTB876-G



Gantry Type
G-Type

Built-in Linear Motion Guide

Mult Axis Type
XYGT
Ballscrew type

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



2axis



3axis

Arm Type
A-Type

Servo Cylinder

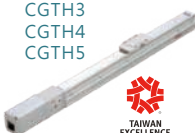
The best option for pneumatic cylinder replacement

Closed-loop stepping motor

Built-in Guideway Cylinder-Slide Type

CGTH

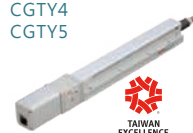
CGTH3
CGTH4
CGTH5



Built-in Guideway Cylinder-Rod Type

CGTY

CGTY4
CGTY5



Built-in Guideway Cylinder-Cleanroom Type

CGCH

CGCH4
CGCH5



Miniature Cylinder

CS

CSH20
CSF20
CSS20



high rigidity
miniature cylinder

CSG

CSG25



New
Released

Electric Gripper

CH

CHS2-S12
CHS2B-S20
CHS2B-S40
CHS2B-S68
CHS2C-S20(Clean room Type)
CHB6-S11
CHB6-S14
CHB6T-S14(3 jaw centering)

CHZ20
CHZ25
CHG2
CHY2B-S80
CHY2B-S150



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



Toyo Product Lineup

TOYO ROBOT Search
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

Built-in linear guide-
ways type linear motor robot

LGW
Clean Room Type
LAW EXCELLENCE
LAW17
LAW22
New Released
Class 100



Built-in linear guide-
ways type linear motor robot

LGF
Clean Room Type
LAW EXCELLENCE
LGF5
LGF15
Class 100




With iron-
core flat type linear motor robot

LTF2
Flat type Standard type
LTF2-15
LTF2-20
LTF2-30
LTF2-45
LTF2-75
NEW



With iron-
core flat type linear motor robot

LNF2
Flat type Closed type
LNF2-15
LNF2-20
LNF2-30
LNF2-45
LNF2-75
NEW



Closed type with iron
core flat type linear motor robot

LCF2
Flat type Clean Room Type
LAW EXCELLENCE
LCF2-15
LCF2-20
LCF2-30
LCF2-45
LCF2-75
Class 10
NEW



With iron-core flat type linear motor robot

LAF/LSF
aluminum body aluminum iron body iron
LAF7/LSF7
LAF15/LSF15
LAF20/LSF20
LAF30/LSF30



without iron core U type linear motor robot

LAU
U type
LAU3
LAU5



Single Robot

3 highly reliable and trustworthy
specifications

Built-in Linear Guide Robot-Rod Type

SGTY
Ballscrew type
SGTY5
SGTY8
SGTY12
NEW



Built-in Linear Guide Robot-Slide Type

SGTH/STH
Ballscrew type
SGTH4
SGTH5
SGTH8
SGTH12
STH17
NEW



Rotary Cylinder

SNT
SNT85
SNT130
SNT200



Cartesian Coordinates Robot

U shaped, 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
Desktop Robot

JTHD
JTHD-200
JTHD-300
JTHD-400
JTHD-500
JTHD-500D



Linear motor-driven
Desktop Robot

JTL
JTL-500



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

TC100
XC100
LC100



4 axis Controller

TSC

TSC400



Automatic Guided Vehicle

MES compatible to achieve industry 4.0

Basic Type AGV Unit
UWR20B



Standard Type AGV Unit
UWR30B



Basic Type AGV Unit
SWR



Standard Type AGV Unit
AWR11



Servo Controller
ABH3



Basic Type AGV Cart
Pickup-85D



Standard Platform AGV Cart
Pickup-E64



Lift Type AGV Cart
Carry-K65



Drive Kit

Automatic Guided Vehicle

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	GTH Series	GTY Series	GCH Series	GCH Series	GCH Series	GCH Series
						
	Repeatability $\pm 0.005\text{mm}$	Repeatability $\pm 0.01\text{mm}$	Repeatability $\pm 0.005\text{mm}$	Repeatability $\pm 0.005\text{mm}$	Repeatability $\pm 0.005\text{mm}$	Repeatability $\pm 0.01\text{mm}$
	110 kg	110 kg	110 kg	110 kg	110 kg	110 kg
Ball Screw Standard Actuator	ETH Series	Y Series	ECH Series	ECH Series	ECH Series	ECH Series
						
	Repeatability $\pm 0.005\text{mm}$	Repeatability $\pm 0.01\text{mm}$	Repeatability $\pm 0.005\text{mm}$	Repeatability $\pm 0.005\text{mm}$	Repeatability $\pm 0.005\text{mm}$	Repeatability $\pm 0.005\text{mm}$
	150 kg	110 kg	150 kg	150 kg	150 kg	150 kg
Belt Drive Standard Actuator	ETB Series	M Series	ECB Series	ECB Series	ECB Series	ECB Series
						
	Repeatability $\pm 0.04\text{mm}$	Repeatability $\pm 0.1\text{mm}$	Repeatability $\pm 0.04\text{mm}$	Repeatability $\pm 0.04\text{mm}$	Repeatability $\pm 0.04\text{mm}$	Repeatability $\pm 0.04\text{mm}$
	85 kg	200 kg	85 kg	85 kg	85 kg	85 kg
	50~2200 mm	50~800 mm	50~1250 mm	50~800 mm	50~2400 mm	50~4050 mm
					Max. Payload	Max. Payload
					Stroke Range	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



X · Y · Z axis Repeatability $\pm 0.01\text{ mm}$

22 kg

Max. Payload

1500×1050×550 mm

Stroke Range

XYCH Series



22 kg

1500×1050×550 mm

Combination



Arm Type
A-Type



Gantry Type
G-Type



Polar coordinate
Type P-Type



XY Type
F-Type

Belt Type Cartesian Robot

XYTB Series



X · Y axis Repeatability $\pm 0.04\text{ mm}$

22 kg

Max. Payload

3500×750×550 mm

Stroke Range

XYCB Series



22 kg

3500×750×550 mm

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



Position Control 127 Points



Pulse Control LD/OC



Communication Control RS485



Input Voltage DC24V



New
EtherCAT

TC100 Controller

Built-in Guideway Cylinder

CGTH Series



Repeatability $\pm 0.005\text{mm}$

30 kg

50~1050 mm

CGTY Series



Repeatability $\pm 0.01\text{mm}$

30 kg

50~600 mm

CGCH Series



Repeatability $\pm 0.005\text{mm}$

30 kg

50~1050 mm

Max. Payload

Stroke Range

Miniature Cylinder

CSF Series



Repeatability $\pm 0.02\text{ mm}$

6 kg

30/50 mm

CSH Series



Repeatability $\pm 0.02\text{ mm}$

6 kg

30/50 mm

CSS Series



Repeatability $\pm 0.02\text{ mm}$

6 kg

30/50 mm

CSG Series



Repeatability $\pm 0.01\text{ mm}$

9 kg

50/75/100 mm

Max. Payload

Stroke Range

Electric Gripper

CHZ Series



Shft Type

Repeatability $\pm 0.02\text{mm}$

98 N

10 / 14 mm

CHB Series



Came Type

Repeatability $\pm 0.02\text{mm}$

7 N

11 / 14 mm

CHS2B Series



BallScrew Type

Repeatability $\pm 0.01\text{mm}$

509 N

68 mm

CHS2C Series



Class 100

Clean room Ball Screw Type

Repeatability $\pm 0.01\text{mm}$

509 N

68 mm

Max. Gripping Force

Max. Open-Close Stroke

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

Built-in Guideway Cylinder

DGTH Series



Repeatability $\pm 0.005\text{mm}$

30 kg

50~1050 mm

DGTY Series



Repeatability $\pm 0.01\text{mm}$

30 kg

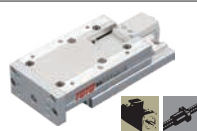
50~600 mm

Max. Payload

Stroke Range

Mini Cylinder

DMG Series



Repeatability $\pm 0.01\text{ mm}$

15 kg

50/75/100mm

DMH Series



Repeatability $\pm 0.01\text{ mm}$

15 kg

50/75mm

Max. Payload

Stroke Range

Controller Built-in Electric Gripper

CHG2



Repeatability $\pm 0.05\text{mm}$

15 N

30 mm

CHY2B Series



Repeatability $\pm 0.05\text{mm}$

90/30 N

80/150 mm

DHY Series



Repeatability $\pm 0.05\text{mm}$

150/90 N

80/150 mm

Max. Gripping
Force
Max. Open-
Close Stroke

TM Plug & Play Solution

Built-in Controller (CHY2)

- Gripper and controller integrated, one piece design.
- With optional fange, CHY/CHG2 gripper can connect robot end directly.
- Plug and play.
Saving time and convenience.



Rotary Switch Settings



Closed-Loop
Stepping
Motor



Input
Voltage
DC24V



Communication
Control
RS485



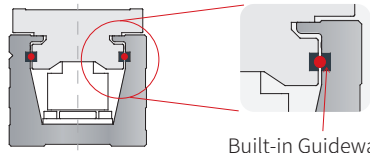
03



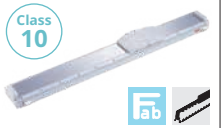
Linear Motor Robot Series



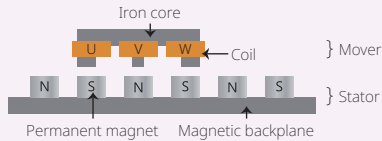
Linear Motor Robot

With motor & controller



Built-in Guideway Linear motor Robot	<div>LGW Series</div> <div><div>TAIWAN EXCELLENCE 2022</div><div>Class 100</div><div>G</div></div> <div>Repeatability $\pm 0.002\text{mm}$</div> <div>20 kg</div> <div>240~2520 mm</div>	<div>LGF Series</div> <div><div>TAIWAN EXCELLENCE 2021</div><div>Class 100</div><div>G</div></div> <div>Repeatability $\pm 0.002\text{mm}$</div> <div>15 kg</div> <div>160~1540 mm</div>	<div><div>LGF Series</div><div>Built-in Guideway</div></div>
	Max. Payload		
	Stroke Range		

Flat Type Linear Motor Robot	<div>LTF2 Series</div> <div><div></div></div> <div>Repeatability $\pm 0.002\text{mm}$</div> <div>120 kg</div> <div>202~4688 mm</div>	<div>LNF2 Series</div> <div><div></div></div> <div>Repeatability $\pm 0.002\text{mm}$</div> <div>120 kg</div> <div>202~3053 mm</div>	<div>LCF2 Series</div> <div><div>Class 10</div><div>fab</div></div> <div>Repeatability $\pm 0.002\text{mm}$</div> <div>120 kg</div> <div>202~3053 mm</div>	<div>Max. Payload</div> <div>Stroke Range</div>
	Max. Payload			
	Stroke Range			

Flat Type Linear Motor Robot	<div>LAF Series</div> <div><div>Aluminum</div></div> <div>Repeatability $\pm 0.002\text{mm}$</div> <div>50 kg</div> <div>110~1600 mm</div>	<div>LSF Series</div> <div><div>Iron</div></div> <div>Repeatability $\pm 0.002\text{mm}$</div> <div>50 kg</div> <div>110~1600 mm</div>	<div>Inner strcture of Flat Type Linear Motor with iron core</div> <div><div>Iron core</div><div>U V W</div><div>Coil</div><div>N S N S N S</div><div>Permanent magnet</div><div>Magnetic backplane</div><div>Mover</div><div>Stator</div></div>
	Max. Payload		
	Stroke Range		

Linear Motor Robot

With motor & controller



LC100 Controller

NEW
EtherCAT

U Type Linear Motor Robot

LAU Series



Repeatability $\pm 0.002\text{mm}$

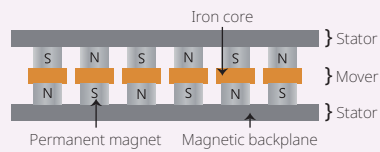
15 kg

Max. Payload

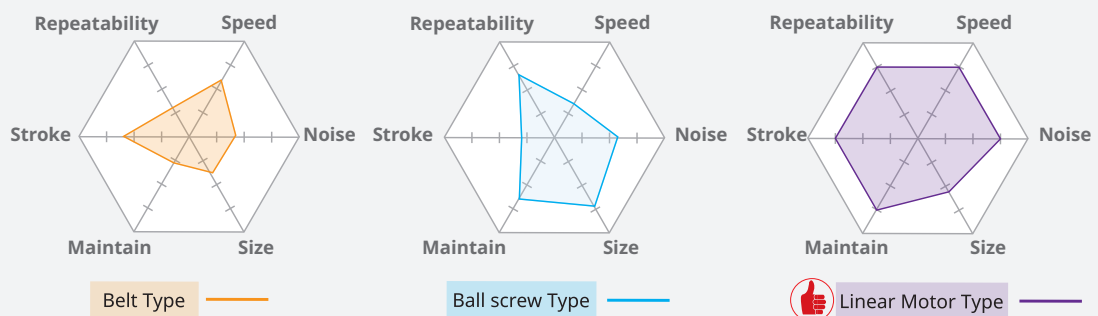
90~1290 mm

Stroke Range

Inner structure of U Type Linear Motor without iron core



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



04

Desktop Robot Series

Desktop Robots



ballscrew drive



linear motor drive



Max. stroke
500-500mm



Max. speed
1000mm/s



Z axis
payload



Built-in
controller
TSC400



repeatability
±0.01



512 sets
of programs



10000
points

Optional double X axis



Economical desktop robot

JTHC



JTHD



X.Y.Z axis : Repeatability ±0.005 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 ±0.005 mm

X : 10 Z : 5 kg

X : 15 Z : 8 kg

Max. Payload

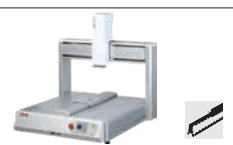
X.Y : 150/250/350/450 mm
Z : 100 mm

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

Stroke Range

High speed desktop robot

JTL



X.Y axis : Repeatability ±0.002 mm
Z axis : Repeatability ±0.005 mm

X : 15 Z : 8 kg

Max. Payload

X.Y : 470 mm
Z : 100 mm

Stroke Range

Applications

Soldering



Dispensing



Screw fastening



Vision inspection



Desktop Robots



ballscrew
drive



Max. stroke
500-500mm



Max. speed
1000mm/s



Z axis
payload



Built-in
controller
TSC400



repeatability
 ± 0.01



512 sets
of programs



10000
points



Ballscrew drive Cartesian desktop robot

XYCGT



XYSGT



X.Y.Z axis Repeatability ± 0.01 mm

Z:5.5 kg

Z:12 kg

Max. Payload

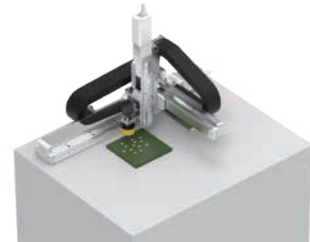
1100×300×100 mm

1250×450×100 mm

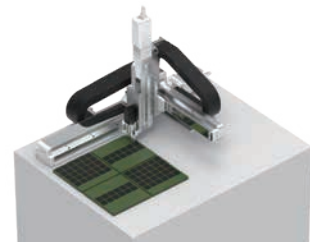
Stroke Range

Applications

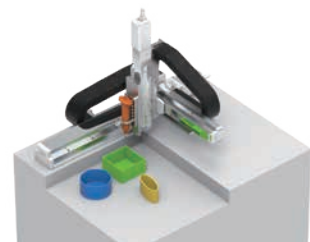
CCD Machine Vision Inspection



Pick-and-place for Small-sized Workpieces



Dispensing for Small-sized Workpieces



05

Automatic Guided Vehicles

AGV Drive Kit

With motor & controller



Drive Kit

UWR20B



DC24V

600 kg

5~50 m/min

UWR30B



DC24V

900 kg

5~50 m/min

Battery Voltage

Max. Payload

Max. Speed

Drive Kit

SWR Series



DC24V

700 kg

5~54 m/min

AWRII Series



DC24V/DC48V

3800 kg

5~60 m/min

Battery Voltage

Max. Payload

Max. Speed

Controller



ABH3



+



+



Automated Guided Vehicle

With motor & controller



Pickup Cart

Pickup-B62	Pickup-B62	Pickup-A59	Pickup-A59-RB
			
DC24V/26AH	DC24V/50AH	DC24V/65AH	DC24V/65AH
500 kg	100 kg	150 kg	5 kg
5~30 m/min	5~50 m/min	5~50 m/min	5~50 m/min

Battery Voltage

Max. Payload

Max. Speed

Pickup Cart

Pickup-I62	Pickup-F53J	Pickup-E64
		
DC24V/26AH	DC24V/50AH	DC24V/100AH
250 kg	500 kg	500 kg
5~30 m/min	5~30 m/min	5~48 m/min

Battery Voltage

Max. Payload

Max. Speed

Carry Cart

Carry-E64	Carry-F58	Carry-K65
		
DC24V/80AH	DC24V/50AH	DC24V/50AH
1000 kg	500 kg	300 kg
10~30 m/min	10~60 m/min	10~30 m/min

Battery Voltage

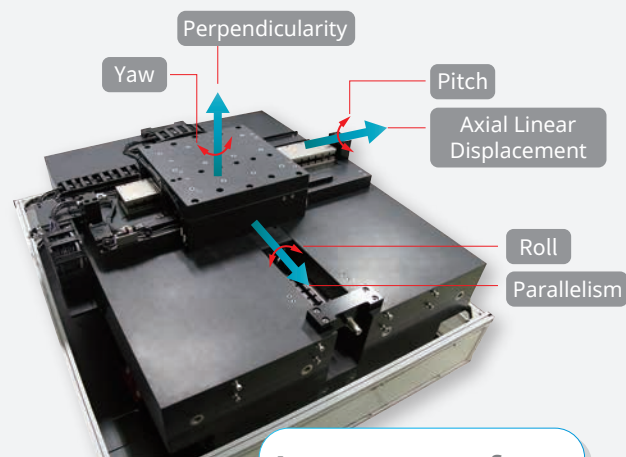
Max. Payload

Max. Speed

06


Air Bearing Linear Stage

Air Bearing Linear Stage

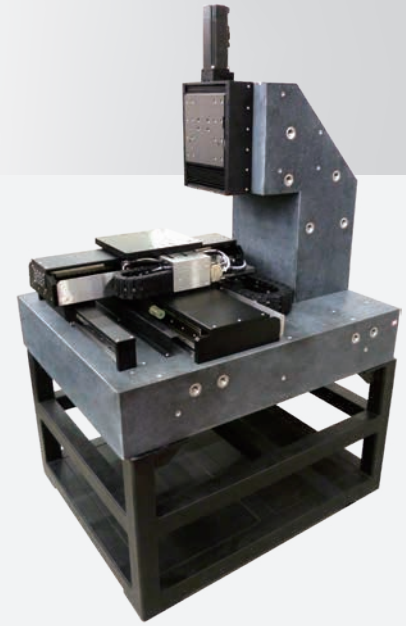










Large range of motion, high precision **6**

Air Bearing Stage	Single Axis	Dual-axis Direct-drive	
			
	400mm	1200mm	Stroke
	<1μm	<1μm	Repeatability
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

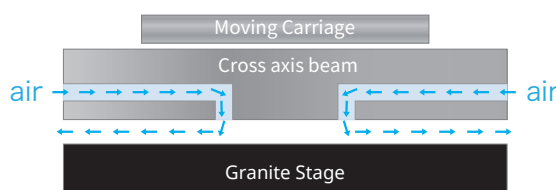
Brand	Air Bearing Type	Design	Module Components	Assembly & Maintenance	Load Capacity	Stiffness
Other Brand	(Air Pad)	Complex	More and complex	Hard and time-consuming	low	Average
TOYO	Built-in Air bearing (TOYO)	Simple	Fewer and simple	Quick and easy	High	High 

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

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

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 XYZ 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 XYZ series officially started

2009 Development of Cartesian multi-axis robot completed
Production of single axis robot officially started
Development of single axis industrial use robot completed

2008 }
2000 Distribute logistics and gripper-related automation components
Distribute relative robots

Global Services



	Taiwan	China	Japan	South East Asia	Korea	Europe	America
Production Fab	●	●	●		●		
Overseas Branches		●Shuzhou ●Shenzhen		●Thailand			
Technology Center	●		●		●		
Agency	●	●	●	●	●	●	●

TOYO Global Network

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



The website has undergone significant changes.
For more information, please scan this QR code.

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TOYO Automation Co., Ltd.

No. 55, Xinji 3rd Rd., Annan Dist., Tainan City 709, Taiwan.

T.+886-6-2021347 F.+886-6-2025974

TOYO NANO SYSTEM CORPORATION.

No. 67, Sec. 1, Bade Rd. Hukou Township, Hsinchu County 303117, Taiwan.

T.+886-3-5696060 F.+886-3-5696161

TOYO Robot (Shuzhou) Co., Ltd.

No 586, Zhenxin East Road, Zhangpu Town, Kunshan City, Jiangsu Province, China.

T.+86-512-86890880 F.+86-512-86890881

EMAIL: cn67803@toyorobot.com

TOYO Automation (Shenzhen) Co., Ltd.

1208 Mingjun Business Center Huarong Road, Baoan District, Shenzhen City, China.

T.+86-755-81713415 F.+86-755-81713435

EMAIL: allen@toyorobot.com

TOYO Robot (Thailand) Co., Ltd.

118/27 Moo 18 Klong Nueng Klong Luang Pathumthani 12120 THAILAND.

E-mail: stanley@toyorobot.com

TOYO Japan

1651-1 Umemitsumachi, Kurume City, Fukuoka 830-0048 Japan.

E-mail: service@toyorobot.com



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