

Empowering Automation

The TOYO Robotics Portfolio

ABOUT US

Exceeding Your Expectations

Established in 2000, TOYO Robotics was founded on the principles of integrity, technology, and service to exceed our customers' needs and maximize value for our customers and society.



OUR MISSION



Empowering Global Automation

To be the industry's most reliable technical partner by delivering high-performance robotics and expert support that drive global productivity.

OUR VISION



Standardizing Sustainable Precision

To lead through green energy design and intensive R&D, reaching the highest technological standards for a sustainable industrial future.

OUR VALUES



Quality, Speed, and Client Success

We prioritize professional responsibility and a customer-oriented approach, balancing high-standard quality with rapid delivery and cost-efficiency

WHAT SETS US APART

Aggressive Price-to-Performance:

Precision-engineered hardware that matches other brands on performance, while beating them on price. This enables you to hit technical specs & reduce your bill of materials cost.

Application-Specific Portfolio:

From ultra-low-profile stages to heavy-duty industrial gantries, our expansive catalog ensures you specify the exact actuator for your needs — never over-paying for capability you won't use.

Quick Lead Times:

Our vertical integration allows us to ship finished products faster than most competitors can return a formal application review, keeping your schedule on track.

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I've been doing quality audits for years and over the hundreds of audits I've done, your factory has scored the second highest score I have ever graded.

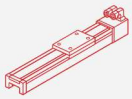




QUALITY ASSURED

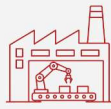
Our commitment to excellence is anchored by a triple-certified management system, including ISO 9001 for rigorous quality control and ISO 14001 for sustainable environmental practices. Complemented by our OHSAS 18001 compliance, these global standards ensure that every TOYO product is manufactured in a safe, efficient, and consistently high-quality environment. This integrated framework provides our partners with the ultimate assurance of reliability and world-class industrial integrity.

150k +



Proven at Scale
Over 150,000 units shipped annually

400k +



Built for Demand
400,000+ Ft² of manufacturing space

25 +



Here for the Future
25+ Years of linear systems

10 +



Award Winning
10+ Taiwanese Excellence awards

WHERE YOU'LL FIND OUR SOLUTIONS

TOYO's motion technologies are the heartbeat of high-performance machinery across a vast array of global industries. From heavy-duty automotive assembly to the sub-micron demands of semiconductor fabrication, our solutions are engineered to solve the complex automation challenges of modern manufacturing. Whether your application requires high-speed throughput or compact, space-saving designs, TOYO provides the reliable foundation for your next industrial breakthrough.

Core Industries & Applications

- **Electronics & Semiconductor:** High-speed pick-and-place, wafer transport, and PCB inspection.
- **Medical & Laboratory:** Precise liquid handling, sample sorting, and diagnostic imaging systems.
- **Automotive Manufacturing:** Heavy-duty gantry systems, battery cell assembly, and precision welding.
- **Packaging & Logistics:** High-cadence case packing, palletizing, and automated sorting.
- **Solar & Green Energy:** Panel coating, glass substrate cutting, and precision tracking.
- **General Industrial Automation:** 7th-axis COBOT positioning, automated grippers, and CNC machining.

Linear Actuators & Positioners

Versatile belt and ball screw driven linear actuators engineered for smooth motion, high rigidity, and reliable positioning across a wide range of automation applications.

- High-speed belt drive & precision ball screw drive options
- 3m Travel with dual rail or integrated wide bearing designs
- Ideal for transfer, positioning, gantry, inspection, & more



Product Series	Thrust Range (N)	Speed Range (mm/s)	Stroke Range (mm)	Profile Range (Sizes)	Drive Train
GTH	352 - 1388	480 - 1600	500 - 1250	3, 5, 8, 12	Ball Screw
GLTH	352 - 1200	480 - 1440	500 - 1250	3, 5, 8, 12	Ball Screw
ETH	1388 - 2563	1920 - 2400	1050 - 1500	13, 14, 17, 22	Ball Screw
ETH2	1130 - 6382	1440 - 2400	1500 - 2100	14, 17, 22, 30	Ball Screw
ETB	100 - 367	Up to 2400	3050 - 3500	14, 17, 22	Belt Drive
GLTB	53 - 116	1600 - 3000	Up to 3000	5, 8	Belt Drive
MK	220 - 765	1833 - 2000	4800 - 5000	65, 85, 110	Belt Drive
MG	113 - 282	Up to 3500	Up to 3700	50, 65, 85	Belt Drive
ETK	276 - 1773	2400 - 3600	Over 5000	15, 22, 30	Rack & Pinion

Electric Cylinders

Compact, high-rigidity electric cylinders engineered for smooth, accurate, and reliable linear motion.

- Integrated linear guide design for added rigidity & alignment
- High-speed ball screw drive with excellent repeatability
- A range of frame sizes for diverse automation needs
- Ideal for pressing, positioning, & pick-and-place systems



Product	Max. Thrust (N)	Max. Speed (mm/s)	Max. Stroke (mm)	Profile Width (mm)	Drive Train
Y43	410	720	500	43	Ball Screw
Y62	1405	720	700	62	Ball Screw
Y80	Coming Soon	Coming Soon	Coming Soon	80	Ball Screw
Y95	6250	600	800	95	Ball Screw
GTY4	854	720	500	42	Ball Screw
GTY5	1008	1200	600	54	Ball Screw
GTY8	1388	1200	800	82	Ball Screw
GTY12	2326	1920	800	120	Ball Screw
YH95	20500	250	800	95	Roller Screw

Linear Motor & Precision Stages

Direct-drive linear motor systems engineered for ultra-smooth motion, nanometer-level positioning, and exceptional dynamic performance.

- Ironless & iron core linear motor configurations
- Dual rail, integrated bearing, and air bearing options
- High-speed acceleration with ultra-precise repeatability
- Ideal for semiconductor, photonics, laser processing, and more



Product Series	Cont. Thrust Range (N)	Speed Range (mm/s)	Stroke Range (mm)	Profile Range (Sizes)	Linear Motor Type
LGTW	136 - 251	Up to 2500	Up to 3000	20, 35	Iron Core
LGNW	136 - 251	Up to 2500	Up to 3000	20, 35	Iron Core
LTF	59 - 1064	2500 - 3500	Up to 4688	2, 3	Iron Core
LNF	59 - 1064	2500 - 3500	3018 - 4920	2, 3	Iron Core
LGF	20 - 60	Up to 2500	1540 - 2520	5, 15	Iron Core
LBT	104 - 139	1500 - 2000	Up to 500	210, 275	Ironless
LTS	192 - 251	Up to 2000	Up to 1000	22	Ironless

Compact Miniature Positioners

Ultra-compact miniature stages engineered for precise positioning and smooth motion in space-constrained automation environments.

- Compact, lightweight designs optimized for small spaces
- Precision ball screw drive systems with smooth motion
- Ideal for laboratory automation, electronics assembly, & more



Product	Max Thrust (N)	Max. Speed (mm/s)	Max. Stroke (mm)	Profile Width (mm)	Motor Type
CPSG20	53	320	100	38	Stepper
CPSG25	320	400	100	44	Stepper
CPSG35	747	600	150	60	Stepper
DMG25	160	480	100	70	Stepper
DMG40	427	360	100	80	Stepper
DMH25	160	480	100	56	Stepper
DMH40	427	360	100	78	Stepper

Electric Grippers

Compact electric grippers engineered for precise, reliable part handling with programmable force and smooth motion control.

- Adjustable force, speed, and positioning control
- Integrated linear guide for long service life
- Multiple styles available for cobots and automation systems
- Ideal for assembly, packaging, and pick-and-place applications



Product	Gripping Force (N)	Speed Range (mm/s)	Stroke Range (mm)	Profile Range (Sizes)	Design Type
CHY2	30 - 90	Up to 200	80 - 150	80, 150	Linkage
CHZ2	44 - 262	32 - 72	10 - 22	10, 14, 22	Linkage
CHB6	2.4 - 7	Up to 100	11 - 14	11, 14	Cam
CHS2	48 - 509	33 - 70	12 - 68	12, 20, 40, 68	Ball Screw
CHG2	15	150	30	30	Cam

Additional Solutions...

TOYO also offers a full range of motion components including servo and stepper motors, precision linear components, rotary direct drive systems, gearboxes, and advanced motion drives for complete automation integration. Vertical integration allows TOYO to provide some of the best components like:

- Servo motors, closed-loop steppers, and drive systems
- Precision ball screws and linear rail guide components
- Direct drive rotary stages for high-performance motion control
- Gearboxes and accessories for complete system solutions



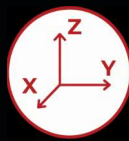
Complete Multi-Axis Motion & Automation Solutions



From compact XY positioning systems to standard desktop robots and fully customized high-precision automation platforms, TOYO delivers scalable multi-axis solutions engineered for speed, accuracy, and seamless machine integration.

- Standard XY, XYZ, and gantry systems for fast deployment
- Desktop robots and Cartesian systems for flexible automation
- Custom-engineered solutions for demanding industrial applications
- High-precision platforms for photonics, semiconductor, and more

Basic XY Systems



Easily create XY, XYZ, and gantry systems for fast deployment

Standard Desktop Robots



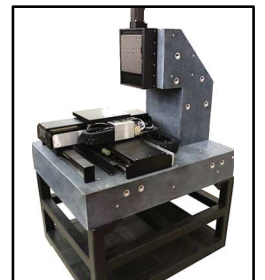
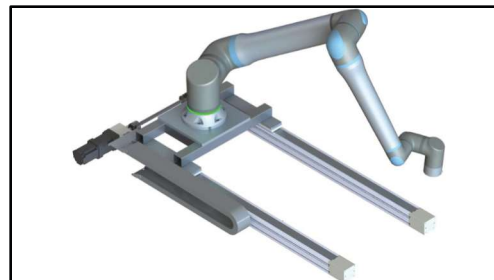
Standard desktop robots & cartesian systems for quick solutions

Tailor Fit Solutions



Custom designed solutions for a wide array of applications

MULTI-AXIS SOLUTIONS FOR ANY APPLICATION





Global Reach. Local Expertise.

With state-of-the-art manufacturing facilities across Asia and a rapidly expanding operational footprint, TOYO Robotics delivers world-class motion control technology on a global scale. In North America, we back our precision engineering with an elite network of certified distribution partners, ensuring that expert technical support and quick deliveries are always within your reach. Whether you are scaling a single production line or designing a complex multi-axis system, our team is ready to help you move forward.

Discover our full range of solutions & connect with a regional specialist by visiting our website.



TOYOROBOTICS.COM

