

FAQs: drylin® Delta Robots

drylin® delta robots use linear motion to position their legs, which are connected mechanically in parallel. The robot's kit with optional controls is a fantastic opportunity to lower overall costs for those experienced in machine building and integration projects.

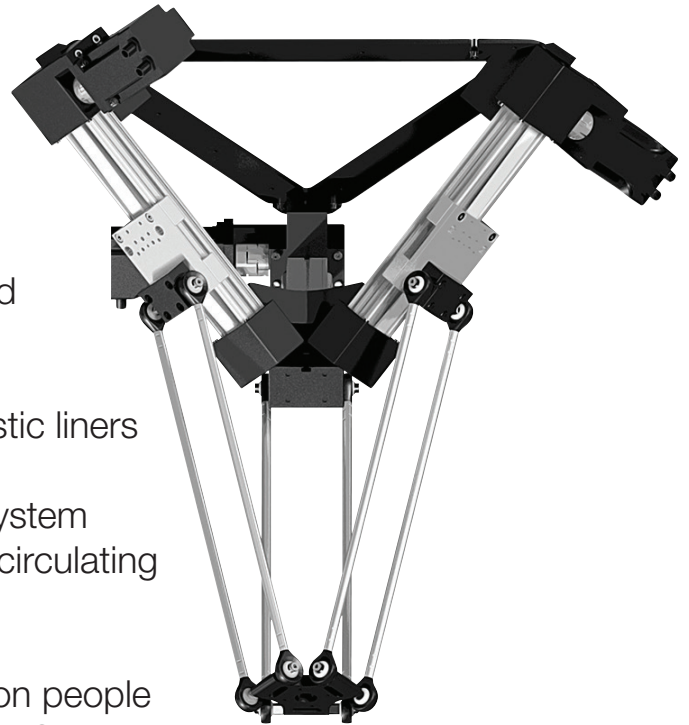
drylin® deltas are available in two sizes (360mm and 660mm) and offer these unique benefits:

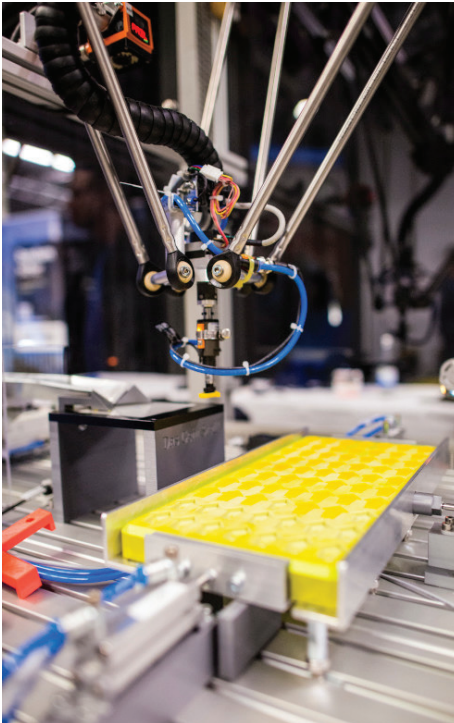
- Linear actuators with self-lubricating sliding plastic liners
- No external lubricants required
- Lightweight, maintenance-free, cost-effective system
- Quieter operation compared to systems with recirculating ball bearings

In addition to that, there is typically more information people want or need to know before giving our deltas a try. So, we've compiled a short list of our most frequently asked questions. Check it out.

1. What are the specs?

- Positioning Accuracy: $\pm 0.5\text{mm}$ (0.02")
- Workspace Diameter:
 - 360mm (14") at a height of 75mm (3")
 - 660mm (26") at a height of 180mm (7")
- Max Load: 5kg/11lbs
- Picks per Minute:
 - 360mm: 60 picks with a 500g Payload (Roughly 1lb)
 - 660mm: 30 picks with a 500g Payload (Roughly 1lb)
- Max Speed: 3 m/s (9.8 f/s) w/48 Volt/15-Amp Power Supply





2. How much does one cost?

drylin® delta robots start as low as \$5,351.58. Our competitors' price points are around \$20,000+, but their delta robots have higher pick rates and better positioning accuracy.

3. What are some application examples?

drylin® delta robots are ideal for:

- pick-and-place
- packaging
- sorting
- part inspection
- material handling

4. Do drylin® delta robots come with controls?

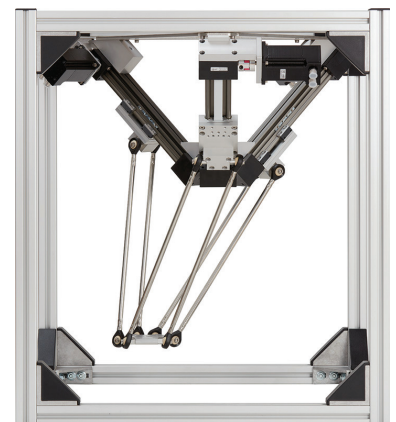
You can purchase our deltas in a variety of ways. Whether you need assembled or unassembled motors and/or drivers or no motors at all, we can customize a solution that works for you.

igus® offers the iRC (<https://www.igus.com/info/robot-control-system>), which can be used to program and control the delta with an easy-to-use graphical interface.

Features:

- Modular, control system based on top-hat (DIN) rail, easy to extend
- Smooth motion with 1/256 microstepping
- Energy saving operation with adaptive current control: Trinamics StallGuard2 and CoolStep Technologies
- Intuitive control and programming environment with interactive 3D user interface
- Programming commands like Joint, Linear, If-Then-Else, DigitalOut, Loop
- Interface to remote computer via TCP/IP
- ROS packages are available
- Options like control cabinet, pneumatic gripper etc. are available

If the igus® iRC does not work for your project, then we can help put you in touch with some recommended controls manufacturers



5. Do I need to purchase anything separately?



Yes. You'll need to buy power supplies, sensors and end of arm tooling. You'll also be responsible for robot safety requirements. Integration partners can help with these specifications.

igus® has a network of integration partners that can be contracted hourly or per project to assist with your delta implementation.



Visit our [webpage](#) to learn more about drylin® delta robots, access technical data sheets, or contact drylin® Product Manager Matt Mowry with any questions.

