

August 21, 2025, 10 AM EST

STANDARD & CUSTOM SOLUTIONS

When to Consider Custom-Designed Rotary Actuators

HOST

Sonja Buczek, Marketing Specialist, Donald Engineering

SPEAKERS

Norman Lane, President, Rotomation

Jim Kortman, Vice President Technical Sales, Donald Engineering



WELCOME

STANDARD & CUSTOM SOLUTIONS: WHEN TO CONSIDER CUSTOM-DESIGNED ROTARY ACTUATORS

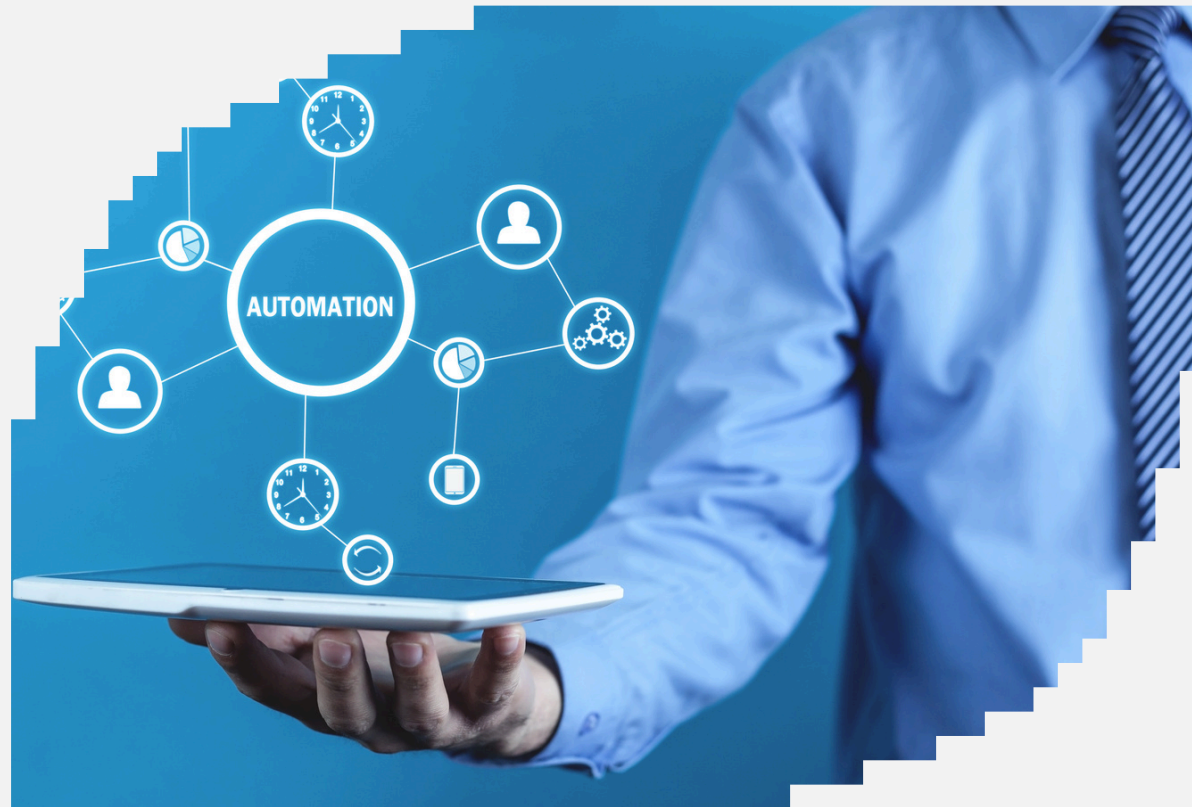


Today we have Rotomation Inc., a leading manufacturer of durable rotary actuators since 1967, and Donald Engineering, a premier distributor and solutions provider in automation, fluid power, and motion control since 1963.

We are excited to present you with this value-add webinar.



AGENDA



Standard Vs. Custom Solutions: When to Consider Custom-Designed Rotary Actuators

- Introductions
- The Collaboration Process in Finding Custom Solutions
- Identifying the Need for Custom Solutions
- Case Studies and Real-World Solutions
- Speaker & Participant Q&A
- Closing Remarks

INTRODUCTION TO ROTOMATION INC



Since 1967, Rotomation has been at the forefront of designing and manufacturing high-quality, extremely configureable, and fully rebuildable pneumatic actuators for automation.

- Norman Lane, President of Rotomation
- Our Expertise In Creating Innovative Actuation Solutions
- Importance Pneumatic Rotary Actuators
- Key Industries Served (Semiconductor, Pharma, Assembly and Packaging, CPG, Robotics, Agriculture, and Automotive)
- Benefits of Custom-Designed Solutions
- Collaboration Process Insights



INTRODUCTION TO DONALD ENGINEERING



Based in West Michigan, Donald Engineering offers *partnership driven solutions* for industrial, marine, medical automation, and mechatronic applications.

Committed to quality and value, we supply hydraulic, pneumatic, and electric components with turnkey solutions to lower ownership costs.

- Jim Kortman, *Vice President Technical Sales*
- 30+ years industry experience
- Certified Functional Safety Expert SGS-TUV Saar, Cert#12
- Certified Fluid Power Master Technician, Cert#8873

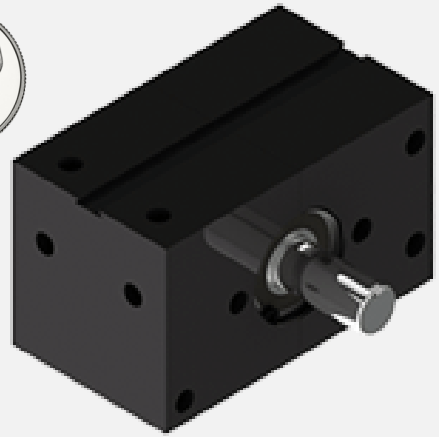


THE COLLABORATION PROCESS IN FINDING SOLUTIONS

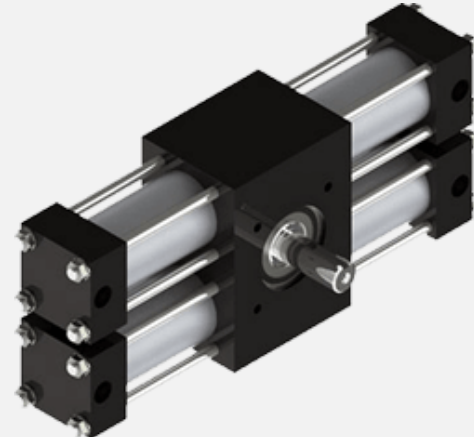


THE COLLABORATION PROCESS IN FINDING SOLUTIONS

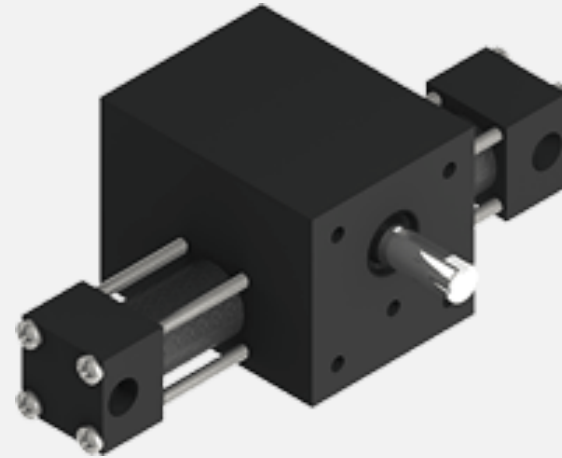
(Dime for size reference for
Compact Rotary Actuator)



Compact Rotary Actuators

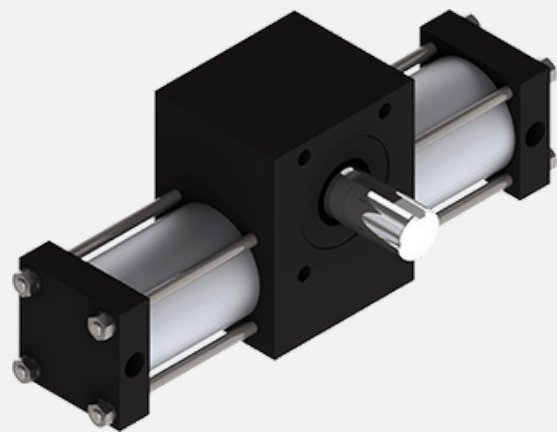


Multi-Position Actuators

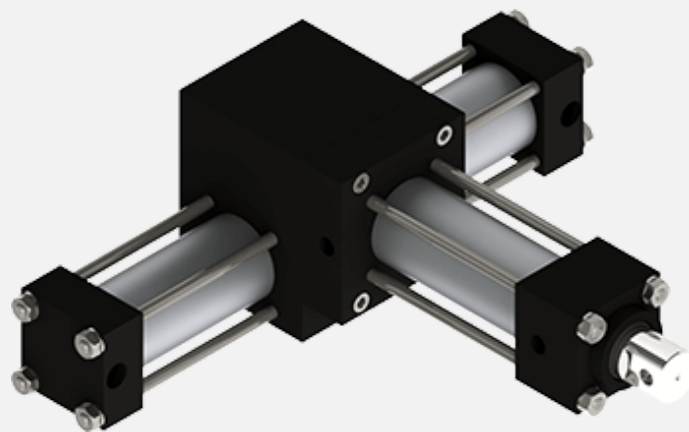


Indexing Actuators

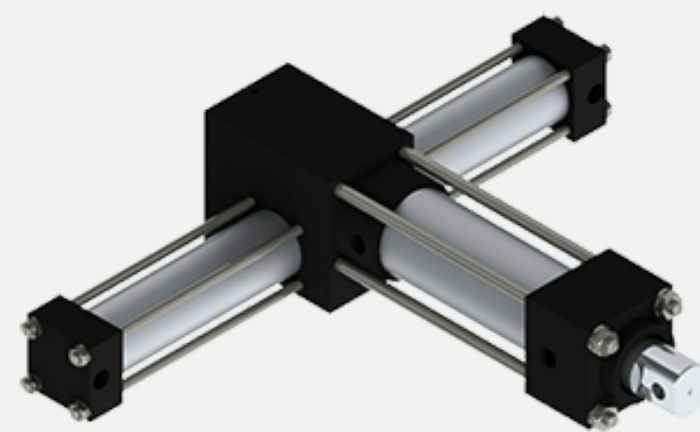
- Fundamentals of Technology
- Pneumatic Rotary Actuators
- Configured Meets The Application's Needs
- Customized May Make Vast Improvements
- Custom Designed From The Ground Up (Proprietary/OEM)



Stepping Actuators

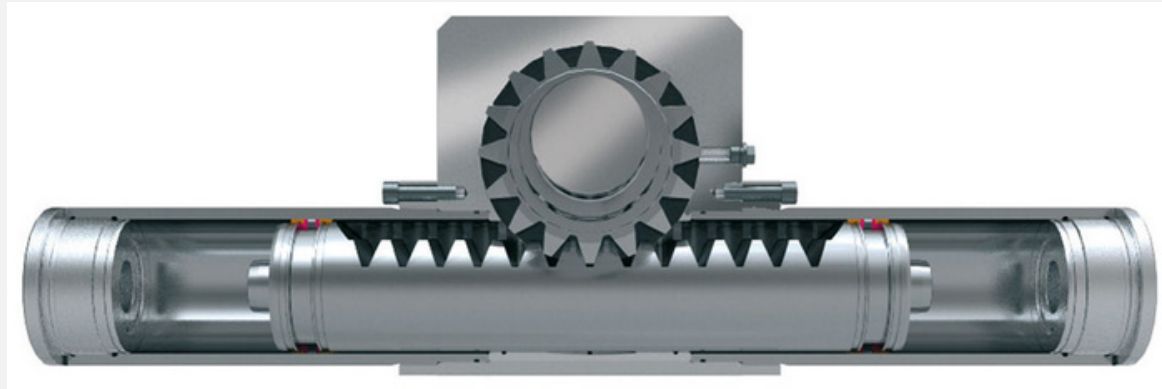


Multi-Motion Actuators (Pick & Place)

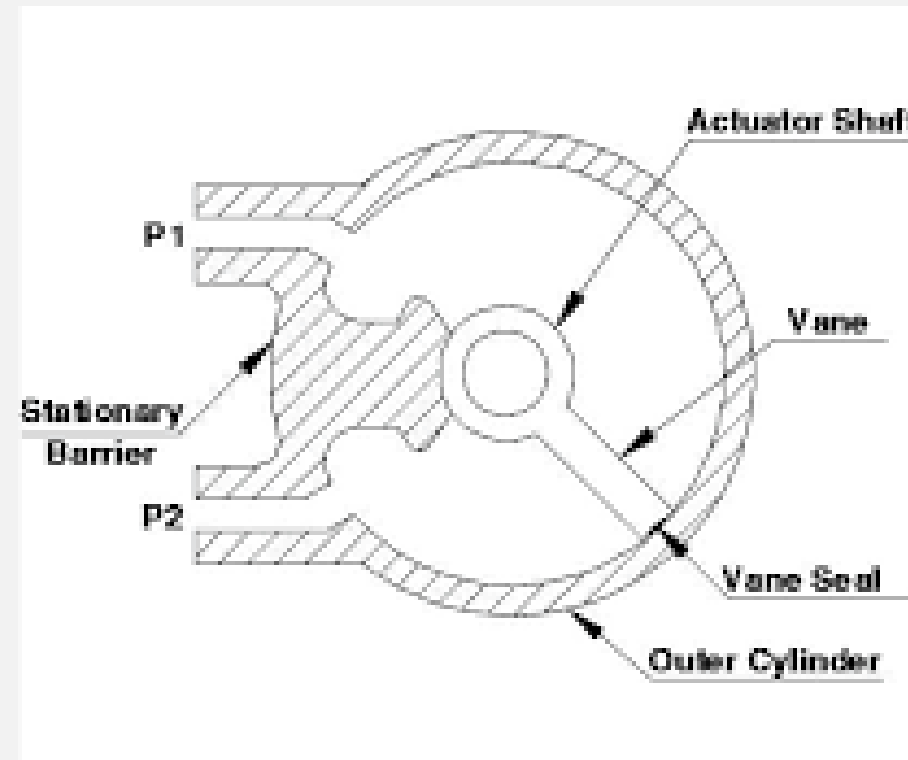


Nitpicker Actuators

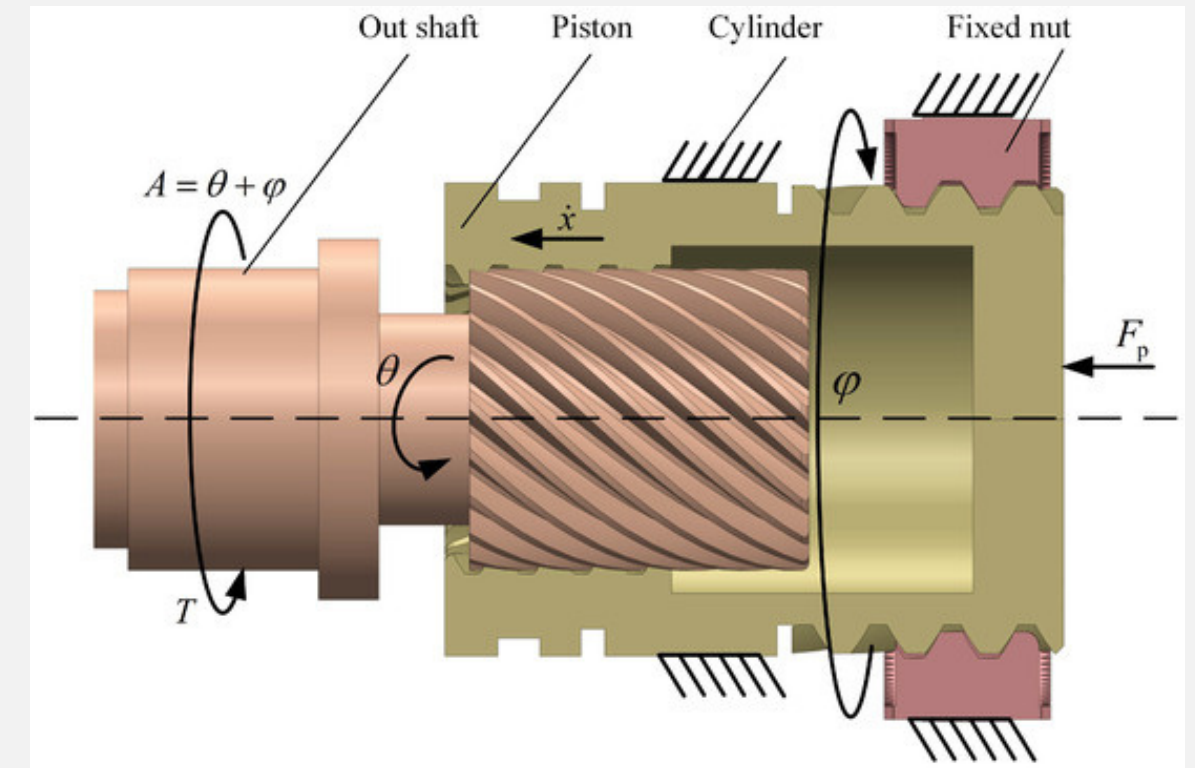
THE COLLABORATION PROCESS IN FINDING SOLUTIONS



Rack & Pinion



Vane Actuator

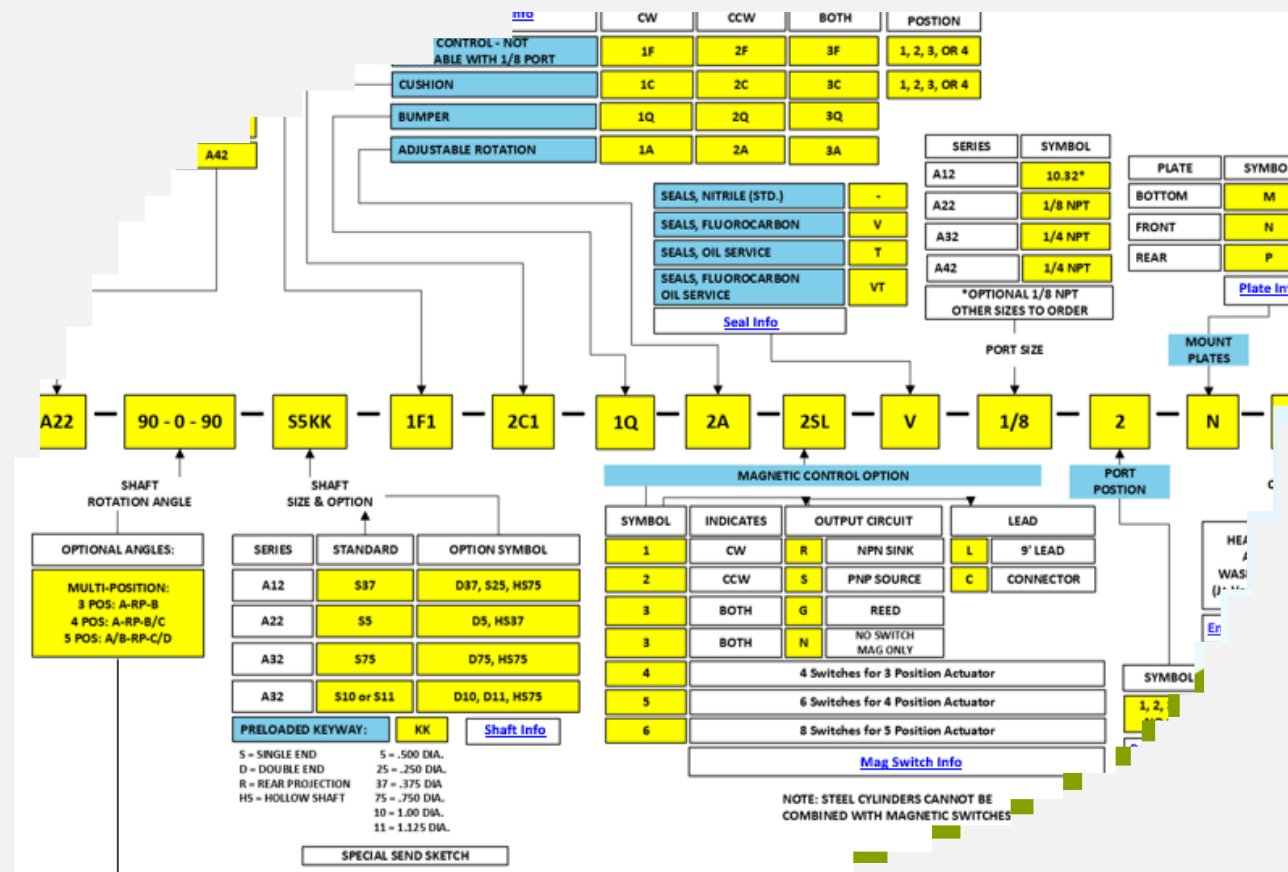


Helical Gear

IDENTIFYING THE NEED FOR CUSTOM SOLUTIONS

Configured (Catalogued Options) and Customized

- Rotomation has billions of standard configurations
- Configured solutions quick turnaround
- Download CAD
- We inventory parts that make it easy to customize standard products

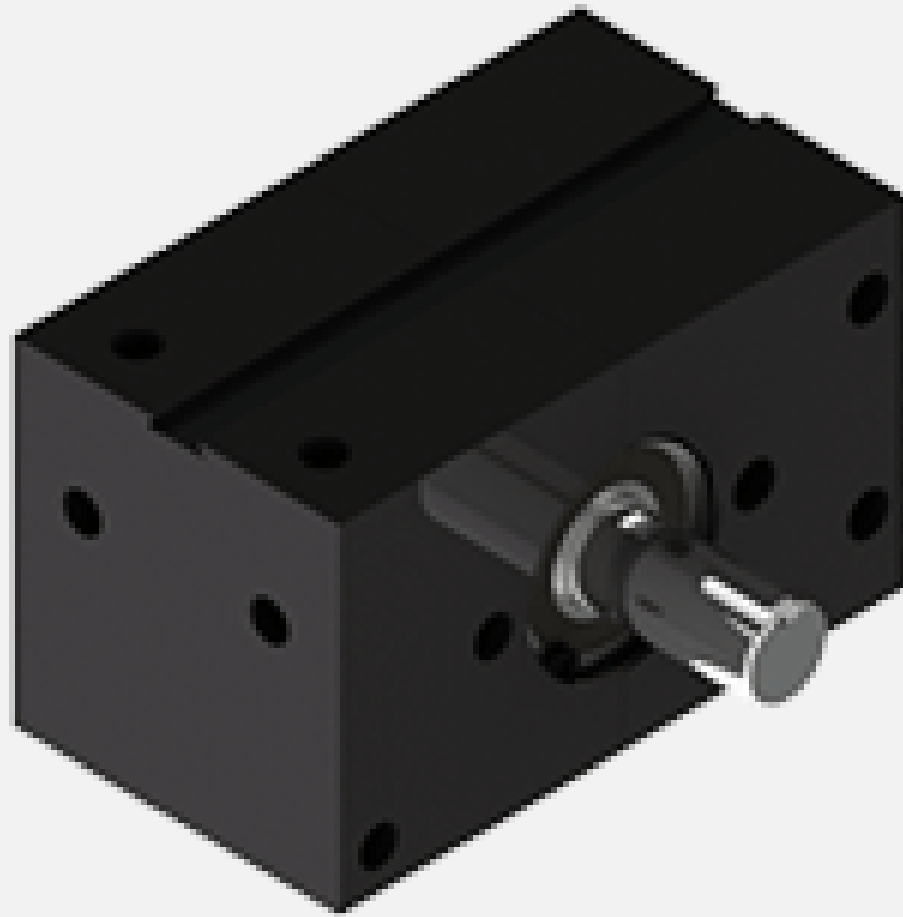


CASE STUDIES & REAL WORLD SOLUTIONS

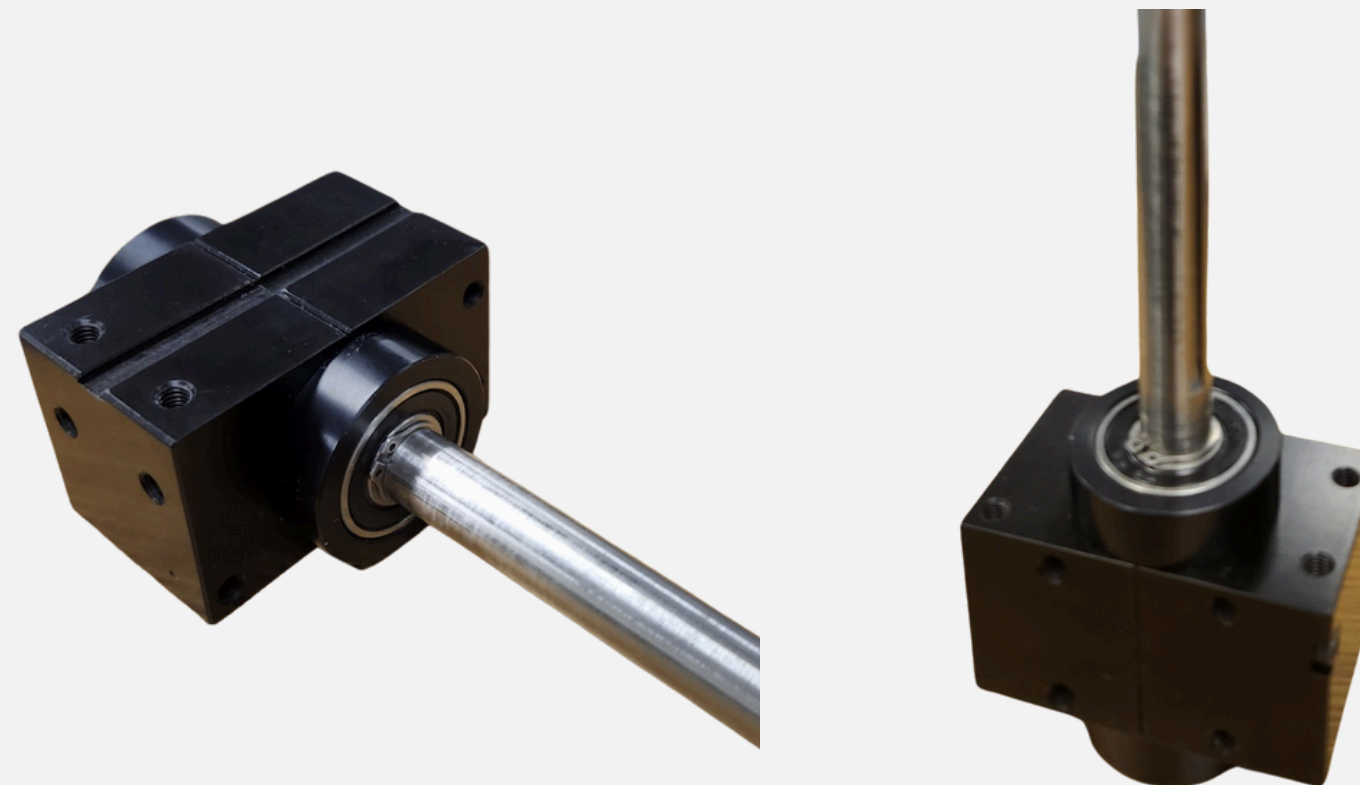
LIVE DEMO

Custom A032 Compact Rotary Actuator

- An A032 with a very long, extra-large diameter shaft and external bearings for a paint spraying application.



Standard A032 Compact Rotary Actuator



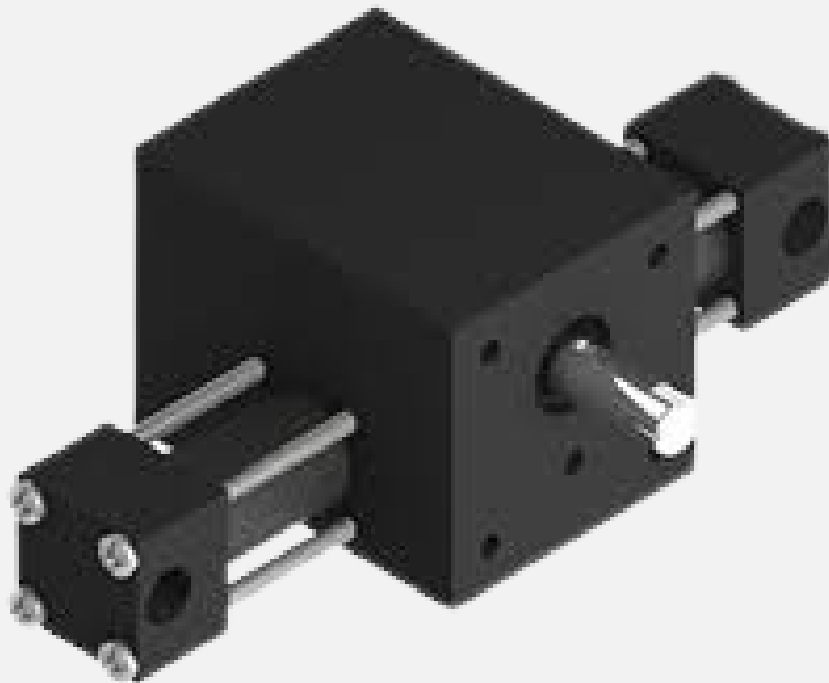
Custom A032 Compact Rotary Actuator

CASE STUDIES & REAL WORLD SOLUTIONS

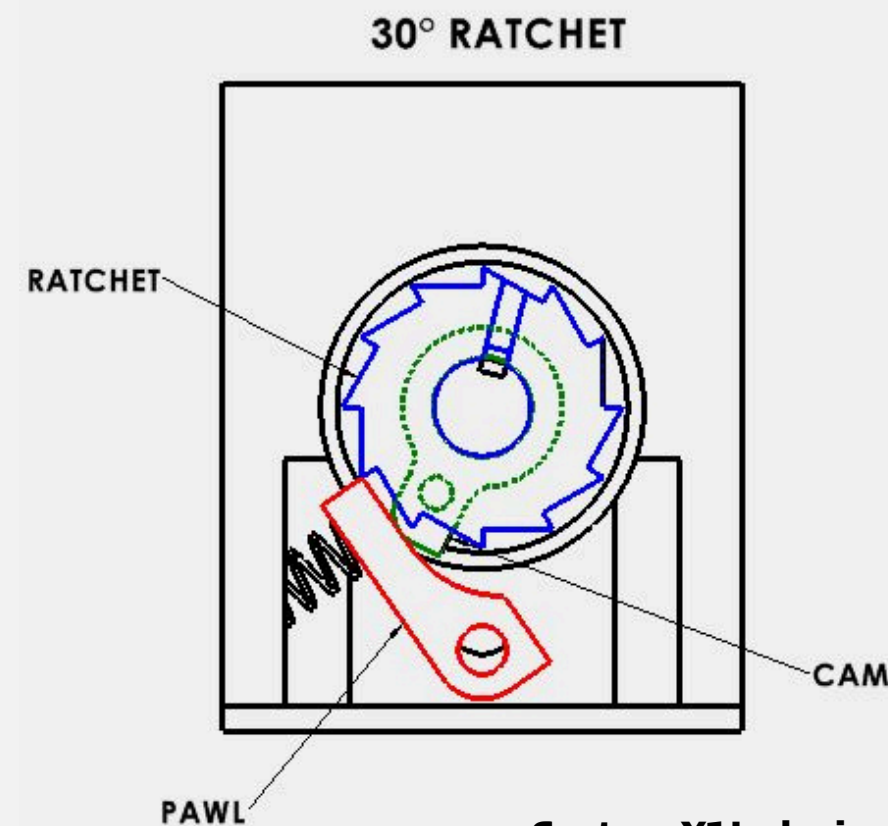
Custom X1 Indexing Actuator Short Stroke

Indexing a carousel of crucibles under a pipet for filling and weighing. The carousel went into an oven, and then the crucibles were re-weighed.

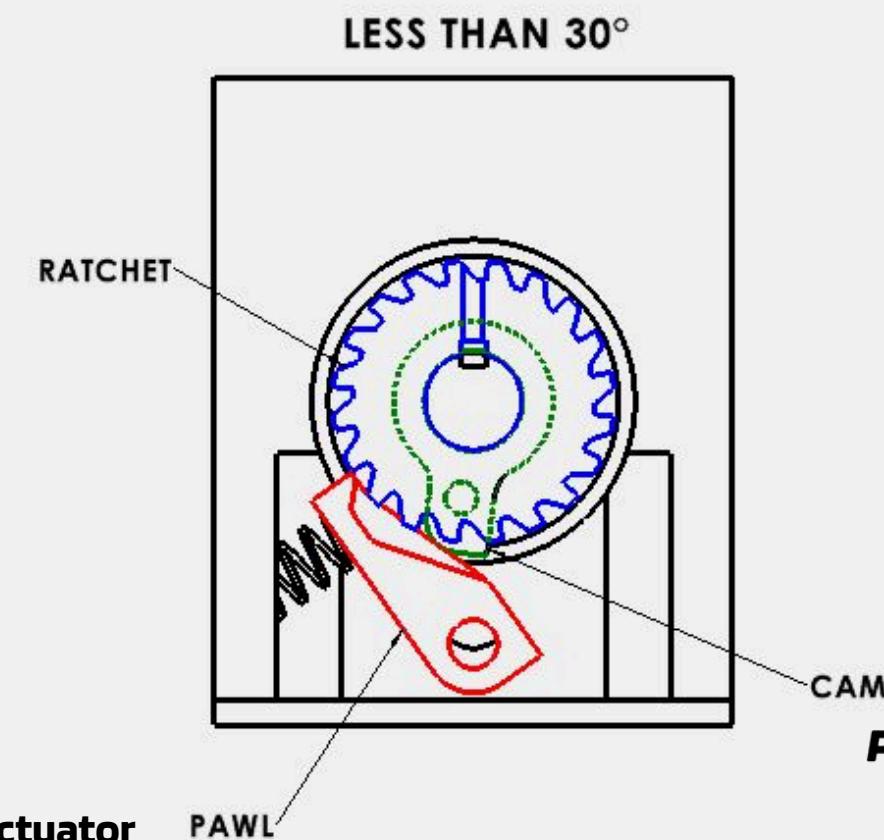
- The rotomation indexer was limited to a maximum of 12 stops per revolution. The customer needed 20 stops.
- Redesigned ratchet and pawl mechanism to accommodate more stops.
- Evolved into standard product offerings of 12.5, 15, 18, and 22-degree steps.



Standard X1 Indexing Actuator



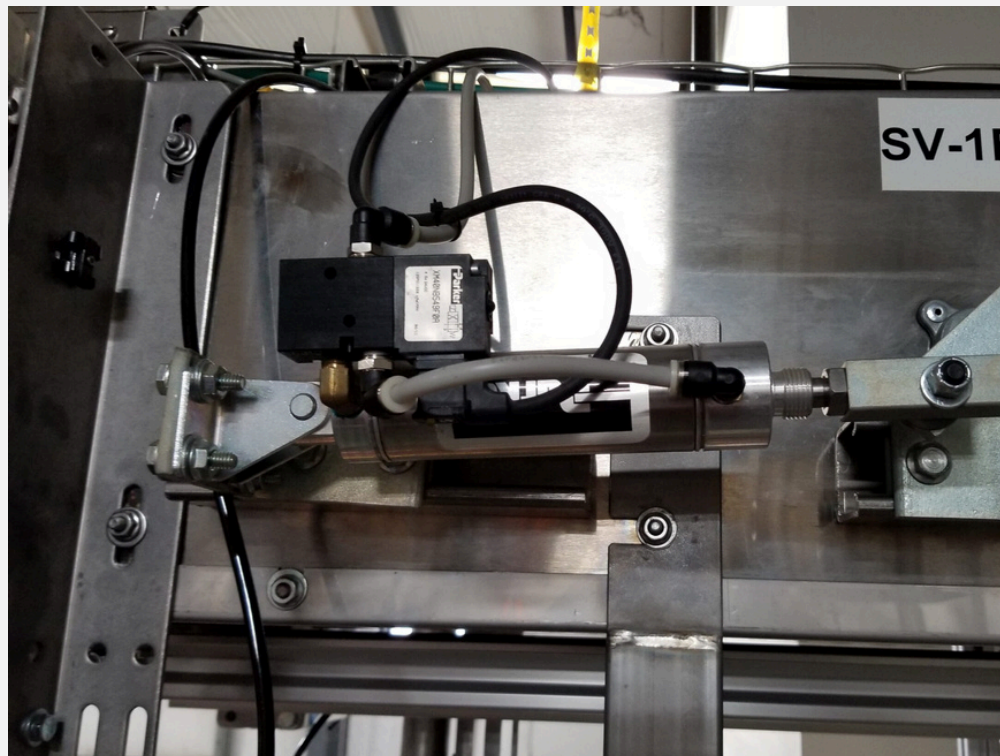
Custom X1 Indexing Actuator



CASE STUDIES & REAL WORLD SOLUTIONS

Custom Designed for OEM – Damper Actuator for AMT

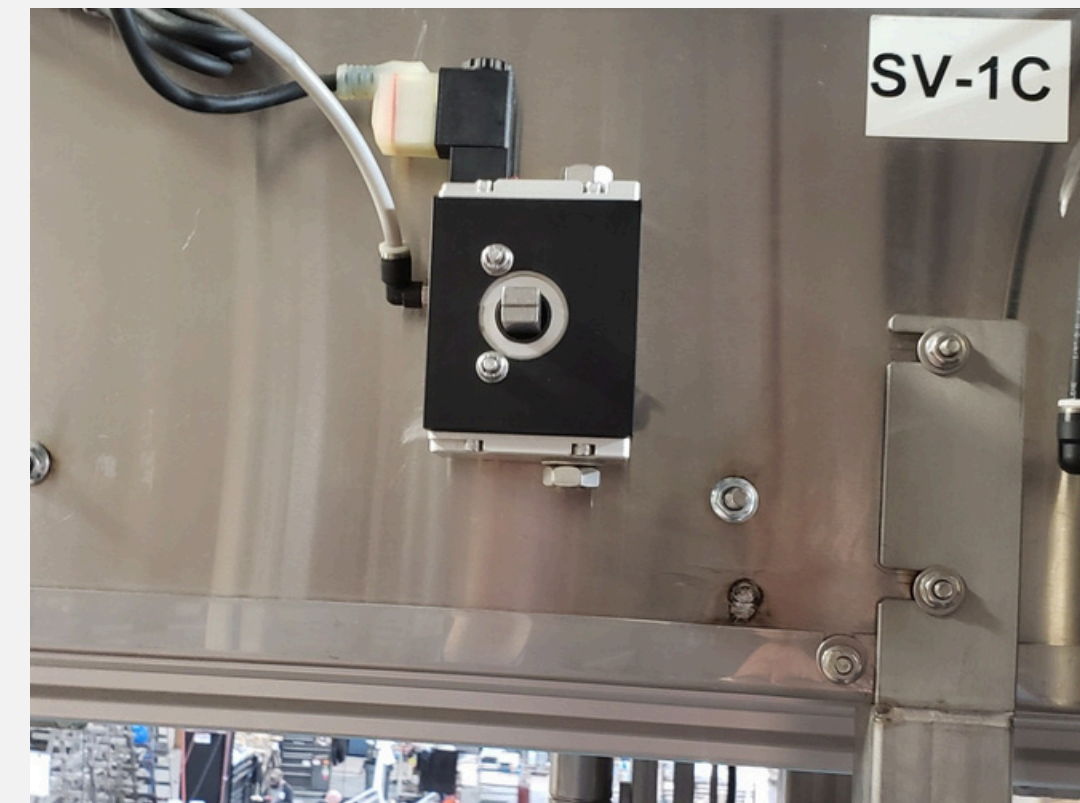
- Complete custom unit with built-in valve.
- Replaced complex mechanism with pitch points.
- Sealed for washdown and requires only two connections.



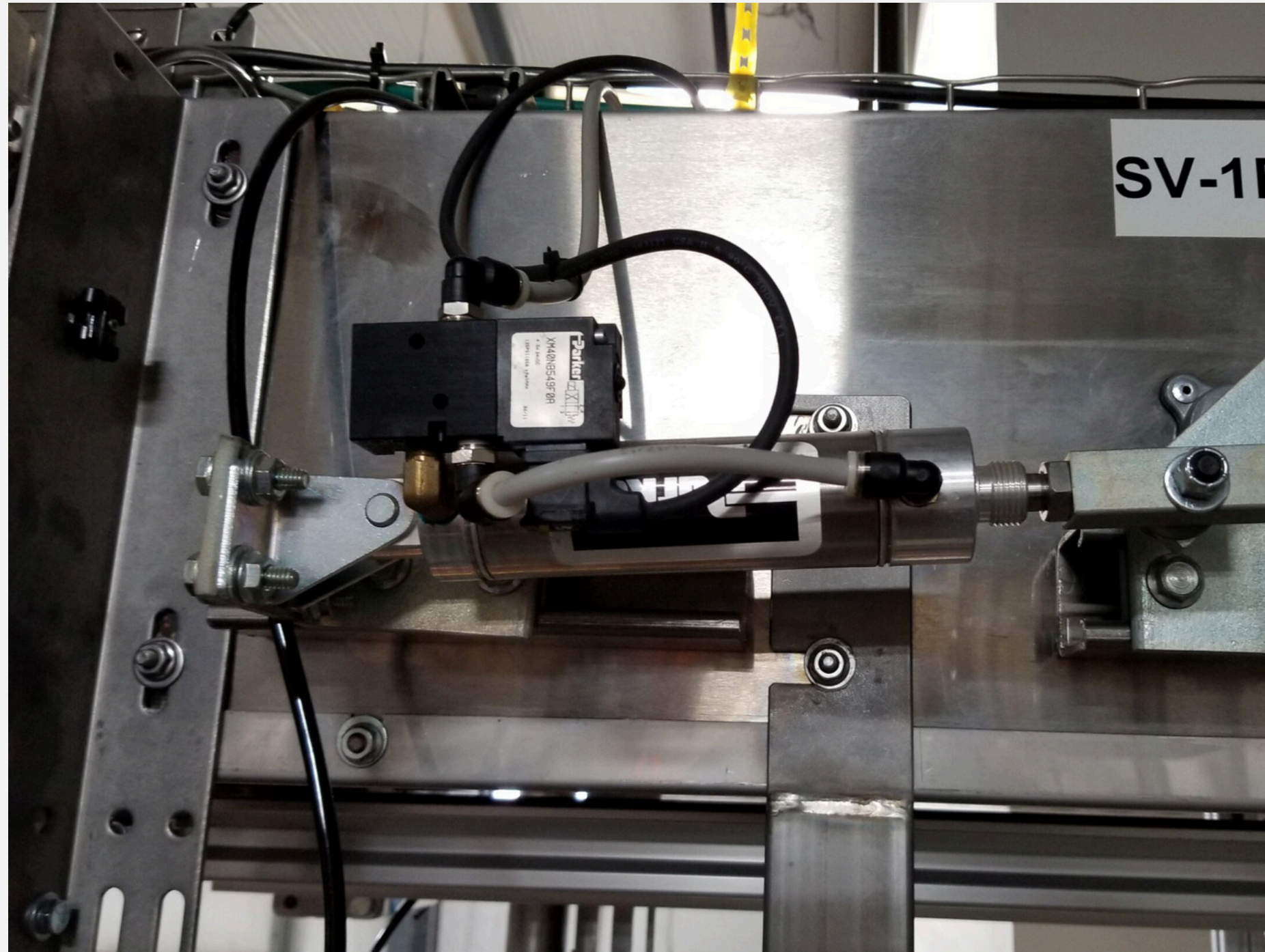
Original Solution



Original Design with Pinch Guard



Rotomation's Final Design



Original Solution

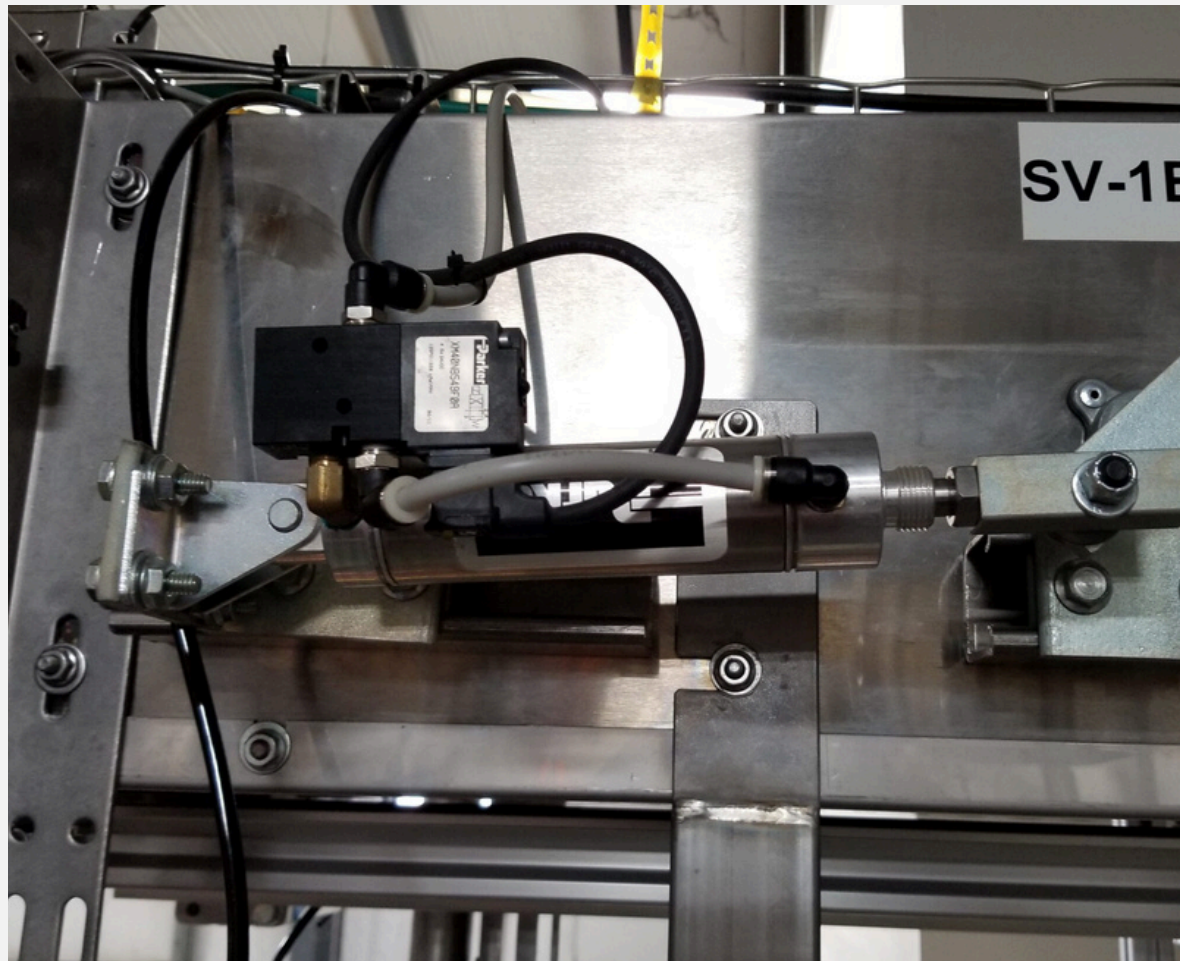


Original Design with Pinch Guard



Rotomation's Final Design

Before

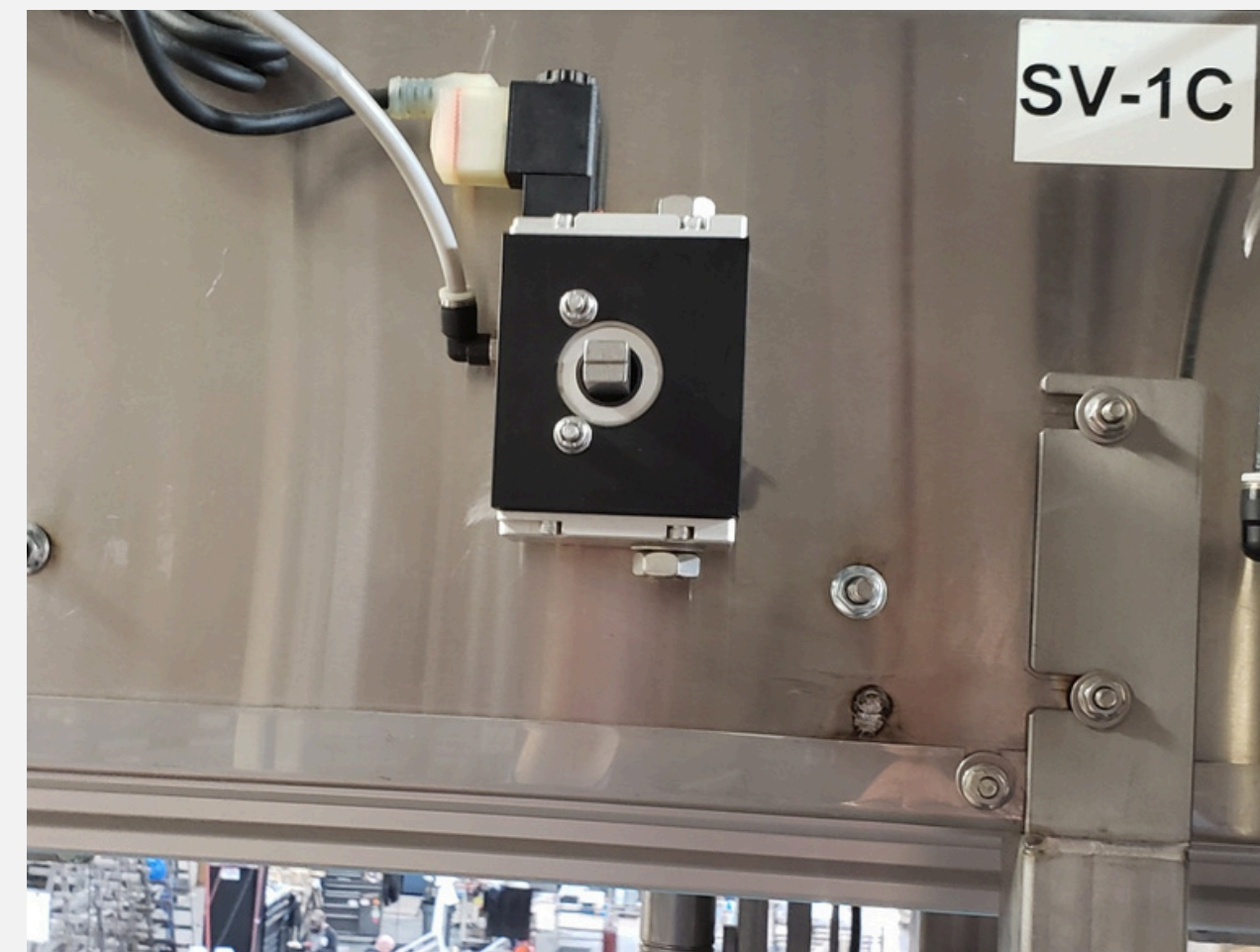


Original Solution

After



Original Design with Pinch Guard



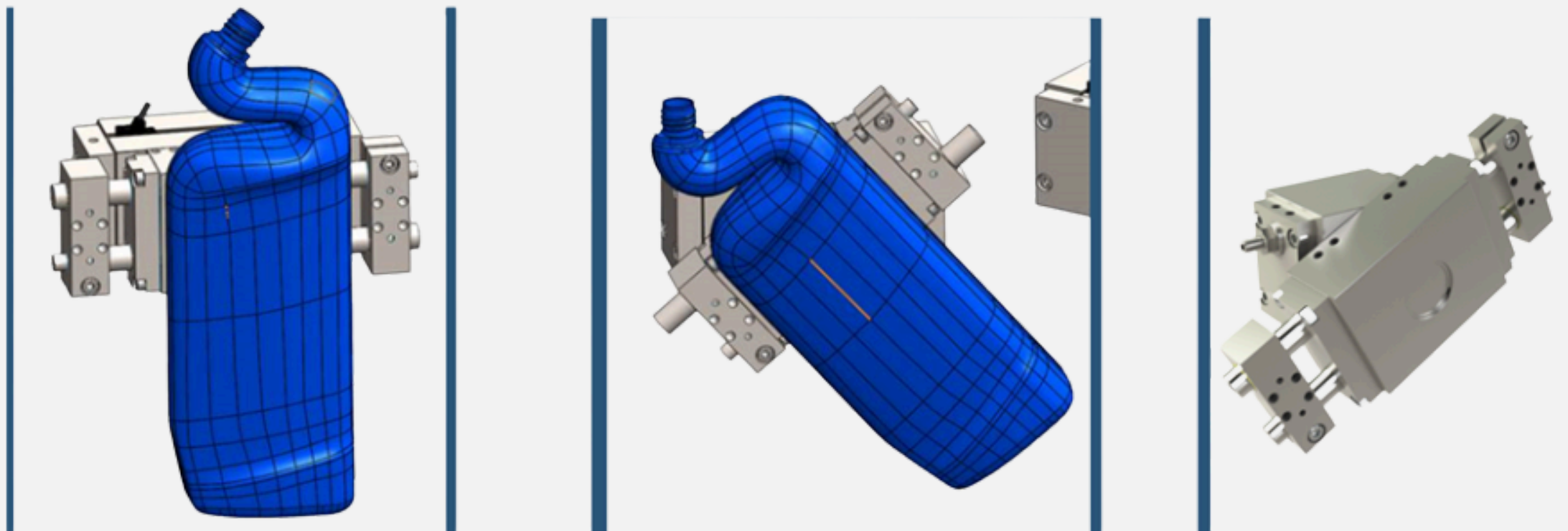
Rotomation's Final Design

CASE STUDIES & REAL WORLD SOLUTIONS

LIVE DEMO

Custom Designed: GP08 stainless steel gripper/rotator

- Replaced complex mechanism with pitch points that grip the toilet bowl cleaner bottle and rotate for filling and capping.
- All 316 stainless steel to resist corrosive cleaning solution.



Stainless Steel Gripper/Rotator

QUESTIONS & ANSWERS



THANK YOU!

HOW TO CONTACT US



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