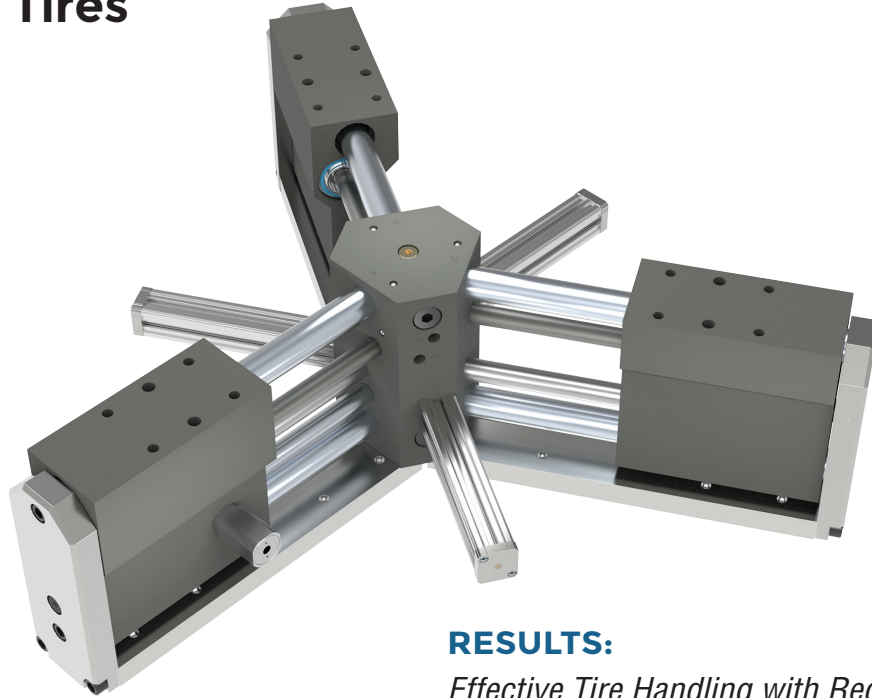


CUSTOM SOLUTION CASE STUDY

High-Moment Gripper Enables Reliable Handling of Heavy-Duty Tires



APPLICATION:

Large Tire Handling

A pneumatic gripper is used to pick up large tires and place them onto a conveyor belt for downstream processing.

CHALLENGE:

Application Generated High Moment Loads

A tire manufacturer needed a gripper capable of handling high moment loads generated by the size, weight, and movement of the tires it was moving. Standard grippers lacked the strength and durability required for this demanding application. In addition, delivery timelines were critical, as any delay in implementation could disrupt production schedules and throughput.

SOLUTION:

Custom Three-Jaw Gripper with High Moment Capacity

PHD Inc. partnered closely with the customer to develop a custom 3-jaw gripper engineered specifically for high-moment capacity. Reflecting PHD's mission-focused mindset and commitment to customer intimacy, the design incorporated an additional extrusion to support increased moment load demands, ensuring stability and long-term performance. Through a collaborative approach and a never settle mentality, PHD delivered a robust solution within the required timeframe—helping the customer maintain operational continuity without compromising on quality or reliability.

RESULTS:

Effective Tire Handling with Reduced Downtime and Long Actuator Life

The custom PHD gripper delivered strong, measurable benefits:

- Effective and efficient handling of large, heavy tires
- Reduced downtime due to improved reliability
- Lower actuator replacement and rebuild costs
- Consistent performance in a demanding application environment

By combining engineering expertise with a deep understanding of the customer's needs, PHD Inc. provided a solution that enhanced both productivity and confidence on the production floor.

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