Solutions for the Food Industry
Bakeries, Dairies, Frozen Foods, Poultry, Meat Processing, Packaging, Bottle Blowing

Long life replacement actuators to reduce downtime and increase productivity

Packaging
Material Handling
Product Dispensing
Palletizing
Labeling
Warehousing
food industry solutions to reduce downtime and increase production.

Preparation, processing, or packaging - if your process falls in any of these areas of the food industry, then PHD likely has automation solutions just for you. We specialize in actuators constructed from corrosion resistant materials and platings. With various FDA approved metals and plastics, we can manufacture devices with special functions, motions, and capabilities for the most demanding applications and environments.

Many of our actuators are capable of being operated with FDA approved lubricants or even no lubrication at all! From heavy duty slides designed of 100% corrosion resistant metals, to grippers made of PET and designed for picking and placing ice cream cones, PHD has extensive experience in engineering actuators for a vast variety of purposes with very customer specific requirements.

Whether it's cylinders, rotary actuators, slides, or grippers, PHD’s Unlimited Unique Solutions engineers have years of experience assisting customers with a wide variety of application needs.

From snack food packaging slides to doughnut flipping rotary actuators, PHD has it all.
ML307562 Polymer PET Long Jaw Travel
- Synchronized jaw travel
- Long jaw travel
- PET plastic body
- Stainless steel jaws
- Low profile

ML308000 Plastic Cylinder
- FDA compliant polymer and stainless components

ML308838 Polymer PET Plastic
- Designed for part production in a deionized water environment
- Fully field repairable
- Simple design, long life
- Double-acting
- Longer bearing surface when compared to other cylinders

ML308000 Plastic Cylinder with Hollow Rod
- Double hollow rod for vacuum
- Chrome-plated piston rod
- Light weight

ML310600 Plastic Cylinder
- Direct drop-in to an existing gripping device
- 0 degree closed/16 degrees open
- Food grade lubrication
- Stainless steel tooling included
- Integrated push to connect fittings
- Wafer ice cream cone gripper

ML310385 2 Jaw Gripper
- Designed for part production in a deionized water environment
- Fully field repairable
- Simple design, long life
- Double-acting
- Longer bearing surface when compared to other cylinders

ML310665 Plastic GRW Gripper
- Resistant to most chemicals
- Stainless steel hardware
- Can be made adjustable

ML309208 Corrosion Resistant Plastic Rotary
- Constructed of PET and stainless steel materials especially for wash down environments
- Direct drop-in replacement for triangle check weigher rotaries
- Repairable
- Reduced downtime due to reliability and long life
- Reduced product waste

ML305001 Plastic Volumetric Pump
- Resistant to most chemicals
- Stainless steel hardware
- Can be made adjustable

ML307562 Polymer PET Long Jaw Travel
- Synchronized jaw travel
- Long jaw travel
- PET plastic body
- Stainless steel jaws
- Low profile
stainless steel

ML310393 IP67 Servo Electric Slide (Ingress Protected)
- Designed for high-speed actuation in a typical food industry, caustic wash-down environment
- Meets IP67 rating
- All stainless steel construction
- Stainless steel fasteners, pulleys and connectors
- Suitable for horizontal and vertical applications
- Suitable for push operation

ML311176 GRA Gripper with Stainless Steel Jaws
- Food grade stainless steel jaws in place of standard GRA jaws
- Food grade lubricants

ML310717 All Stainless Steel with Unique T
- Food grade stainless components
- Food grade lubricants

ML304096 Food Grade Actuator
- Complete stainless steel cylinder with stainless steel cover
- Valve attached to cylinder
- Stainless steel cover protects the valve from caustic wash down

ML309923 4 Jaw Gripper
- Food grade grease
- Unique FDA compliant plating and materials
- Stainless jaws

Series ECP Ingress Protected Electric Cylinder
- IP69K with stainless steel components for food grade washdown environments
- Made with food grade compliant materials and lubricants
- Rotating and non-rotating rod options
- Three sizes: 32, 40, and 50

ML302007 Volumetric Pump
- 303 stainless steel body, piston, piston rod, adjustment screws, and fasteners
- Adjustment screw for volume adjustment
- Additional Buna-N quad seal for added and protection
- Use for filling viscous materials

ML309923 All Stainless Steel

For more information visit phdinc.com/industries

(800) 624-8511
ML308600 Case Erector Replacement Cylinders with Direct Mount Valve
- Direct drop-in to existing competitor’s cylinder
- Bore is 32 mm diameter
- PHD Cylinder ML# 308600 mounts into the same space and bolt pattern as the FABCO cylinder
- Double rod for added bearing support provides greater rigidity
- Longer life, reduced downtime
- Fast acting case erector/box drop cylinder

SD/SE Slide
- Thruster style slides with up to 28” [700 mm] of standard travel
- Typical loads up to 50 lb [223 N]
- High performance, many options and low price

Series 160 Escapement
- Ideal for isolating and feeding individual parts from vibratory feeders, magazines, hoppers, or conveyors
- Internally ported design requires only one 4-way valve
- Next day delivery

Series 8400 Gripper
- Compact size
- Stainless steel jaws and components
- Rugged design for long life

ML307268 Tamp Cylinder
- Cylinder with built-in vacuum chamber
- Extra long bearings on front of slide for increased support
- Used for tamping and blow off release of labels

ML302550 Slide Gate Cylinder
- Direct drop-in to existing competitor’s cylinder
- Bore is 32 mm diameter
- Strokes designed are 6, 7, 8, 9, and 11 inches
- Other strokes are available
- All units include a fastener kit which contains all hardware for replacement
- Incorporates a 12 mm oversized rod for durability
- Smooth deceleration and quiet operation
- Hundreds in service

ML311161 Bottle Gripper
- 10° Jaw opening with 3 point contact
- Used to grip glass bottles internally
- Molded rubber tips on jaws

CV Cylinder
- Conforms to ISO 6432, 6431 and VDMA 24562 specifications
- Available in eight bore sizes

ML302704 Ball Valve Rotary Actuator
- Pneumatic ball valve
- Corrosion resistant option
- Higher torque

Tom Thumb® Cylinders
- Low cost
- Repairable
- Multiple bores and strokes

For more information visit phdinc.com/industries
conveyor solutions

ML307246
Corrosion Resistant Compact Heavy Duty Slide
- 100% corrosion resistant
- Long life and field repairable
- One size guide shafts
- Heavy duty, rugged
- Stainless steel stop collars
- Bumpers

Series SxL, SxH Slide
- Compact
- Lightweight
- High side loads
- Travel adjustment and shock pads
- Ideal for labeling and packaging

Dual Series SIP Slide
ML#310659
- Slide with FDA-approved materials/plating
- Uses vacuum cups to pick food off of conveyor
- Two independent rail-guided slides for high speed product picking
- Safety guard to keep rail on body in case of impact

For more information visit phdinc.com/industries
(800) 624-8511
bottle blowing

For more information visit phdinc.com/industries

BCS Stretch Rod Cylinders
- Now available with -X27 check valve
- ‘S’ Style Series1 and Series2 components
- Mounts into the same space and bolt pattern
- Superior delivery
- Longer life and reduced maintenance

BCZ Nozzle Cylinder
- ‘S’ Style Model Series2 CSD & Heat Set component
- Valve manifold assembled to cylinder available as standard
- Longer life

Series1 Heat Set Nozzle Cylinder
- Cylinder built like ‘S’ Style Series2 Cold Set

Series1 Pneumatic Nozzle Cylinder (SB02-SB06)
- Mounts into the same space and bolt patterns
- Longer life, less downtime
- Simplified design and maintenance
- Provides energy savings with enhanced sealing technology

Needle Cylinders
- Direct replacement
- Mounts into the same space and bolt patterns
- Significantly longer life, reduces downtime
- Reduces “suckback”
- Improves exhaust

Replacement Cam Follower Wheels
- Significantly longer life than competitor wheels
- Can be made in a variety of materials and sizes

Replace Filler Cylinder
- Directly interface on ‘K’ Style filling machinery
- Significantly longer life
- High precision

Replacement Filler Cylinder
- Direct replacement of competitor unit
- Significantly longer life
- Reduces maintenance and downtime

For more bottle blowing information, request the PPC Binder.

(800) 624-8511
PHD Standard Products

PA Swing Arm Clamp
Ideal for a wide variety of automated part holding and transfer applications

PEC Arm Over Clamp
Superior part holding for assembly and welding applications
Up to 900 in-lb [102 Nm] torque

PLK Pin Locating Clamp
For part holding and positioning in weld areas
Enclosed finger design keeps weld slag out
50 mm bore

PB Swing Arm Clamp
Ideal for part holding and transfer welding applications

CR and CT Cylinders
Compact size
8 bore sizes from 12 to 63 mm

CV Cylinder
Conforms to ISO 6432, 6431 and VDMA 24562 specifications
Available in eight sizes

RA Rotary
Retains zero backlash
5 sizes and 6 standard rotations

RIS Rotary
Eliminates external air lines
High torque
High axial load capacity

SFM Slide
Multiple midstops
Space saving rodless slide design
Lowest deflection and highest moment capacity combination in the industry

SHP Slide
Low profile design utilizes rail bearing technology for smooth precision movement
Multiple mounting surfaces
3 sizes with up to 2.95" [75 mm] of travel
Typical loads up to 4.5 lb [20 N]

SD/SE Slide
Thruster style slides with up to 28" [700 mm] of standard travel
Typical loads up to 50 lb [223 N]
High performance, many options and low price

SFP Slide
Space saving rodless slide design
Lowest deflection and highest moment capacity combination in the industry
2 bore sizes with standard travel lengths up to 3400 mm

GRM Clamp - 13 jaw styles available
Sheet metal handling applications
Three sizes
Modular designed tips
Simple design, long life, high clamp force
Fully field-repairable

GRW Gripper
Low profile to fit limited space applications
Jaw covers help prevent contamination
Rugged jaw support, hardened jaws, and hardcoated bearing surfaces for long life
4 sizes with grip forces up to 116 lb [516 N]

GRS Gripper
Low profile, high force
Rugged jaw support, hardened jaws and hardcoated bearing surfaces
8 sizes
2 jaw travels each size

GRB Gripper
Three total jaw rotations are available
60°, 90°, and 180°
6 sizes
Grip forces up to 549 lb [2443 N] at 1.90" [48.3 mm] from pivot

GRK Gripper
Highest grip force in its class
Precision jaw movement wear compensating over life of unit
High moment capacity for longer tooling and greater part weights

GRF Gripper
Low profile to fit limited space applications
Jaw covers help prevent contamination
Rugged jaw support, hardened jaws, and hardcoated bearing surfaces for long life
4 sizes with grip forces up to 116 lb [516 N]

SIP Slide
Low profile design utilizes rail bearing technology for smooth precision movement
Multiple mounting surfaces
3 sizes with up to 2.17" [55 mm] of travel
Typical loads up to 2.53 lb [11.25 N]

SHP Slide
Compact design utilizes rail bearing technology for smooth precision movement
Multiple mounting surfaces
3 sizes with up to 2.17" [55 mm] of travel
Typical loads up to 2.53 lb [11.25 N]

SFP Slide
Space saving rodless slide design
Lowest deflection and highest moment capacity combination in the industry
2 bore sizes with standard travel lengths up to 3400 mm

SM Slide
Precision ball or polymer bushings
Smooth linear motion at twice the thrust of a single bore cylinder
5 bore sizes with travel lengths up to 6" [150 mm]
Typical loads up to 70 lb [311 N]
Long life

RIS Rotary
Eliminates external air lines
High torque
High axial load capacity

SM Slide
Precision ball or polymer bushings
Smooth linear motion at twice the thrust of a single bore cylinder
5 bore sizes with travel lengths up to 6" [150 mm]
Typical loads up to 70 lb [311 N]
Long life

RIS Rotary
Eliminates external air lines
High torque
High axial load capacity

SM Slide
Precision ball or polymer bushings
Smooth linear motion at twice the thrust of a single bore cylinder
5 bore sizes with travel lengths up to 6" [150 mm]
Typical loads up to 70 lb [311 N]
Long life

PEO Arm Over Clamp
Superior part holding for assembly and welding applications
Up to 900 in-lb [102 Nm] torque

PLK Pin Locating Clamp
For part holding and positioning in weld areas
Enclosed finger design keeps weld slag out
50 mm bore

PB Swing Arm Clamp
Ideal for part holding and transfer welding applications

CR and CT Cylinders
Compact size
8 bore sizes from 12 to 63 mm

CV Cylinder
Conforms to ISO 6432, 6431 and VDMA 24562 specifications
Available in eight sizes

RA Rotary
Retains zero backlash
5 sizes and 6 standard rotations

RIS Rotary
Eliminates external air lines
High torque
High axial load capacity

SFM Slide
Multiple midstops
Space saving rodless slide design
Lowest deflection and highest moment capacity combination in the industry

SHP Slide
Low profile design utilizes rail bearing technology for smooth precision movement
Multiple mounting surfaces
3 sizes with up to 2.95" [75 mm] of travel
Typical loads up to 4.5 lb [20 N]

SD/SE Slide
Thruster style slides with up to 28" [700 mm] of standard travel
Typical loads up to 50 lb [223 N]
High performance, many options and low price

SFP Slide
Space saving rodless slide design
Lowest deflection and highest moment capacity combination in the industry
2 bore sizes with standard travel lengths up to 3400 mm

GRM Clamp - 13 jaw styles available
Sheet metal handling applications
Three sizes
Modular designed tips
Simple design, long life, high clamp force
Fully field-repairable

GRW Gripper
Low profile, high force
Rugged jaw support, hardened jaws and hardcoated bearing surfaces
8 sizes
2 jaw travels each size

GRS Gripper
Low profile, high force
Rugged jaw support, hardened jaws and hardcoated bearing surfaces
8 sizes
2 jaw travels each size

GRB Gripper
Three total jaw rotations are available
60°, 90°, and 180°
6 sizes
Grip forces up to 549 lb [2443 N] at 1.90" [48.3 mm] from pivot

GRK Gripper
Highest grip force in its class
Precision jaw movement wear compensating over life of unit
High moment capacity for longer tooling and greater part weights

GRF Gripper
Low profile to fit limited space applications
Jaw covers help prevent contamination
Rugged jaw support, hardened jaws, and hardcoated bearing surfaces for long life
4 sizes with grip forces up to 116 lb [516 N]