Anywhere in the plant...

we have solutions for your bottleneck.

Injection Mold Preforms
- High Heat Air Dryer Cylinders

Soft Drop to Gaylord/Feed to Hopper
- Series RL Rotary to rotate bucket to unload preforms
- Series SD/SE Slides to lower bucket of preforms to gaylord

Descramble
- Series SxL/SxH Slides
- Series Tom Thumb® Cylinders

Stretch Blow Mold
- Series BCS, BCSU, or BCK Stretching Cylinders
- Series BCZ or BCZUS Nozzle Cylinders
- Series BST1 or BST2 Transfer Arms
- Eject Slides
- Unlimited Solutions®

Stretch Wrap
- ML304633 Zecchetti Replacement

Palletize
- Standard PHD Slides
- Unlimited Solutions®

Case Erect, Package and Shrink Pack
- Variety of Standard PHD Slides, Cylinders and Rotaries
PHD specializes in manufacturing standard blow molding replacements that provide longer life than the original components. In addition to our standard lines, unique solutions can be created for any machine in your plant that address production issues of downtime and service life.

**COMPONENTS DESIGNED FOR LONGER LIFE**

- **Continuous Extrusion**
  - Series BCN Needle Cylinders
  - Series CTS Needle Cylinders
  - Series CV Knockout Cylinders
  - Series AV Knockout Cylinders

- **Accumulate/Descramble**
  - Series SD/SE Slides
  - Series 1-8000 Rotaries
  - Series RIS Rotaries
  - Series Tom Thumb® Cylinders

- **Air-Veyor**
  - Series CV Cylinders
  - Series Tom Thumb® Cylinders

- **Eject/Divert**
  - Eject Slides and Cylinders

- **Fill/Label**
  - Series FCA Filler Cylinder
  - ML313370 & ML312828
  - Replacement Cam Follower Wheels

- **Depalletizer**
  - Slip Sheet Gripper

- **Keg Post-Fill Application**
  - Series RA Rotary Actuators
We understand your unique automation requirements

Focused on the specific needs of the plastic packaging industry, PHD offers many spare components for 'S' style and 'K' style machines such as stretching cylinders, nozzle and needle cylinders, and transfer arms. PHD also provides the added benefit of unique designs. Our built-to-need designs address your specific application issues.

Our components are the actuators of choice. Designed for long life, PHD products keep your blow molding lines running while increasing productivity and reducing downtime and scrap.

We also offer the added benefit of our rebuild program which refurbishes your existing PHD components, enabling even longer service life and savings.

To request literature, visit www.phdinc.com/resources/inforequest/
Solutions that Save

Easy Drop-in

With longer life, reduced maintenance, and reduced downtime

We offer a wide variety of components that match size and mounting for ‘S’ style, ‘K’ style, and other machines. Our drop-in components save you money by reducing costly production downtime and maintenance costs.

Many of our components provide up to twice the life of the original unit. This means longer up time for higher production and higher profits.

Superior Delivery

FASTER delivery than competitor

Excellent delivery saves you money by getting you back to business faster.

Unique Solutions

Special Requirements

PHD offers a variety of components already designed to fit unique requirements. If your application requires a modified component from outside our large database of designs, our team is ready to help. We welcome special requests, regardless of quantity or frequency of order.

Rebuild Program

Return to service

Our products can be rebuilt and put back in service for continued savings. Plus you will receive a “like new” warranty. See back page for more information.

www.phdinc.com
DESIGNED TO DROP-IN

BCSStretching Cylinder
Component for Series1 and Series2 machines
X27 PHD check valve option

BCSU Universal Stretching Cylinder
Component for Universal machines
X27 PHD check valve option

BCZ Nozzle Cylinder
Component for Series2 CSD & Heat Resistant machines
Valve manifold assembled to cylinder available as standard

BCZUS Nozzle Cylinder
Component for Universal machines
FDA approved seals

BCZUD 3 Position HR Nozzle Cylinder
Component for Universal machines
FDA materials used on all internal components

Series1 Pneumatic Nozzle Cylinder (SB02-SB06)
Simplified design and maintenance
Provides energy savings with enhanced sealing technology

BST1 Transfer Arm
Component for Series1 machines
Significantly more robust and precise than other transfer arms
Designed to operate over 20 million cycles

Articulated Transfer Arm
Component for Series1 S8010 machines
Removable jaw stop for easy field repair
ML315189

BST2 Transfer Arm
Component for Series2 machines
Vertical height adjustment eliminates need for shims
Designed to operate over 20 million cycles

BST2 Transfer Arm Head
Component for Series2 head for arm
Replaceable wear components
Ball bearings increase precision

BST2 Transfer Arm Jig
Jig designed to verify and assist in rebuilding transfer arms as needed in the field
Designed to fit in a standard 6 inch vise

Preform/Bottle Eject Slide
Component for Series2 machines
Consistent preform/bottle ejection
Minimizes stress on transfer arm jaws

Bottle Eject Slide
Direct valve manifold provides quicker response with higher kinetic energy capacity

BST Transfer Arm Preferential Head

BST2 with vertical height adjustment

Series2 Transfer Arm Head

BST2 Transfer Arm Jig

Preform/Bottle Eject Slide

Bottle Eject Slide

Universal/Matrix®

Designed to drop-in
Longer life
Reduced maintenance
Reduced downtime
Superior delivery
‘K’ Style

DESIGNED TO DROP-IN

Transfer Arm Head
ML311628

2 Position Filler Cylinder
ML313378, ML312828
55 & 60 mm bolt spacing
Replaces failure-prone diaphragm with simple piston design

FCB Filler Cylinder
Reliable, field-tested design provides consistent performance
Food grade seal

BCK Stretching Cylinder
Simplified pneumatic system

OTHER SOLUTIONS

BCN Needle Cylinder
Continuous extrusion blow molding needle actuators replacement component
Significantly longer life
Reduces maintenance and downtime

BCT Needle Cylinder
Needle Cylinders for Continuous Extrusion Bottle Blow Molding
Non-rotating shaft to keep needle tip in correct orientation
High flow version (BCT2) available to increase run time between cleaning of "plate out" material

Fill Line Eject Slide
Repeatable ejection
High kinetic energy capacity
Uses proven PHD thruster slide technology

Slip Sheet Gripper
Modular assembly consisting of a clamp, slide and transition plate
Clamp provides a wide opening so slip sheets are not missed
Quick installation and easy maintenance

CV & AV Knockout Cylinders
Significantly longer life
Reduces maintenance and downtime

Cam Follower Wheels
Competitive pricing
Longer life than OEM
Available in variety of materials
Rebuild Program

REBUILD REPAIR RECYCLE
Return your old units for rebuilding

Get a 12 Month “Like New” Warranty

Plastic Packaging Components such as Stretching Cylinders, Transfer Arms, Blow Nozzles, Filler Cylinders, Slip Sheet Grippers, and Eject Slides are rebuildable.

REBUILD IT YOURSELF OR ALLOW PHD?

PHD’s rebuild program can save your facility training, additional work load, possible tool requirements, and facility space to perform the rebuilds. In addition, you will receive a 12 month “like new” warranty.

After: This stretching cylinder was rebuilt and returned to service.

PHD’s Rebuild Program refurbishes your existing PHD products with all new wear items.

Rebuilt units offer the same PHD quality that you’re used to, but for a fraction of the cost of a new unit, reducing your total cost of ownership.

Rebuilt units are placed back into service, thus reducing your total cost and saving valuable components from scrap.

All PHD factory rebuilt units receive a 12 month “like new” warranty.