

Specials are Our Standard



## High Durability, High Quality, Engineered Solutions –

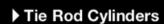
# For the Toughest Applications!



ISO 9001 REGISTERED

#### AUTHORIZED DISTRIBUTOR

JERRY WALLING Automation & Robotics Division Sales Manager jwalling@centrosolves.com 901-357-1261 | CentroSolves.com



- Imperial/NFPA & Metric/ISO
- Custom Cylinders
- Pumps/Power Units
- Intensifiers
- Industrial
  Manipulators
  - **ISO** Certified
  - SIL3 Certified \*
- \* Offered on request. Not available on all series, mounts.

## We Build Confidence.



## **Hydraulic Cylinders**





#### SERIES "H"

Heavy Duty Hydraulic Cylinders

- Steel construction
- 3000 psi hydraulic service
- 5000 psi non-shock service
- Standard NFPA mounting styles
- 1.5" 18" bores cataloged
- Larger bores available

#### SERIES "LH"

Medium Duty Hydraulic Cylinders

- Steel construction
- 750 1500 psi hydraulic service
- Standard NFPA mounting styles
- 1.5" 6" bores cataloged
- Larger bores available



#### SERIES "MH"

ISO Metric Hydraulic Cylinders

- Steel construction
- 210 bar hydraulic service
- Standard ISO mounting styles
- 25 mm 200 mm bores cataloged
- Larger bores available

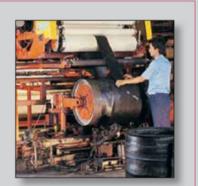


#### PRESS CYLINDER APPLICATIONS

From garbage compactors to cotton bailers – whatever the application, major press manufacturers rely on *Milwaukee Cylinder's* extensive experience.



OIL AND GAS INDUSTRY From 10,000 feet beneath the gulf, to the harshest environments of the tar sands, *Milwaukee Cylinder* products are used in the most demanding projects.



#### PLASTIC MOLDING AND RUBBER INDUSTRY

From garden furniture, to where the rubber hits the road, *Milwaukee Cylinder* is part of the process.



## **Pneumatic Cylinders**



#### SERIES "A"

Heavy Duty Pneumatic Cylinders

- Steel construction
- 250 psi air service
- Standard NFPA mounting styles
- 1.5" 16" bores cataloged
- Larger bores available
- Non-lube versions available



#### SERIES "MN"

Pneumatic/Hydraulic Cylinders - Aluminum

- Aluminum construction
- 250 psi air service/400 psi hydraulic
- Standard NFPA mounting styles
- 1.5" 8" bores



#### AUTOMOTIVE **APPLICATIONS**

Stamping, welding, clamping, or hydroforming, Milwaukee Cylinder keeps the production lines running.



#### MOTION CONTROL **APPLICATIONS**

For the most sophisticated, yet rugged needs in motion control, you can rely on Milwaukee Cylinder.



#### FOUNDRIES AND STEEL MILLS

Casting, rolling, or pickling ... whatever the demanding application - Milwaukee Cylinder products are on the job.



www.milwaukeecylinder.com





#### Position Sensing and Motion Control

Available for H, LH, A Series and Custom Cylinders

- Bores 1.5" and larger
- 1" rod diameter and larger
- Low friction seals available

#### **Proximity Switches**

Available for H, LH, A Series and Custom Cylinders

- 1.5" 4" bores are standard product
- Larger bores available

#### **RFID Tags: Simplify Maintenance**

Available for all Cylinders

- All needed information about the cylinder is stored electronically on the tag -never worry about finding identification information
- In addition, tags contain a read-write maintenance log

- Strokes to 16 feet
- Linear transducer with analog and digital outputs
- We will meet virtually any of your application requirements
- Non-contact switches detect the presence of the spud/cushion bushing
- AC/DC inductive switches
- Read/Write using ISO Standard15693 near-field readers
- **Durable in Industrial** Environments - IP 67 rated





#### Eliminate Alignment Problems. Install a Linear Alignment Coupler

Features:

- Reduces rod seal and bearing wear
- Prevents binding and erratic movement caused by misalignment

#### AMLOK<sup>®</sup> Type RCH Rod Clamp

- Provides power-off clamping of rods and shafts
- Clamps are actuated by a spring/collet mechanism and unclamped by hydraulic pressure

- Permits a greater tolerance between cylinder centerline and mating member
- Works equally well in "push" and "pull" applications

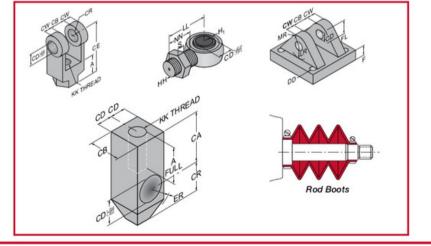


Designed to clamp components after the motion has stopped and to hold the position securely as long as the forces do not exceed the table values

SPECIAL CYLINDER ACCESSORIES

#### Rod End Styles

- Rod Clevis
- Rod Eye
- Clevis Mounting
- Trunnion Mounts
- Rod Boots
- And More!





4

STANDARD CYLINDER ACCESSORIES

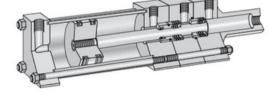
## Hydraulic – Pneumatic Devices

**Milwaukee Cylinder** offers additional products to help complete your system needs. **Pressure Boosters** are ideal for limited operation applications requiring intermittent high pressure when you only have low-pressure air. **Air Oil Tanks** supplement a booster system by providing a source of low pressure oil, while also providing an outlet for entrapped air. **Accumulators** can improve overall system efficiency.

#### **Pressure Boosters**

Available in Single Pressure and Dual Pressure Models

- Testing
- Fluid Transfer
- High Pressure from Shop Air
- Liquid Injection
- Holding Pressure



#### **Air Oil Tanks**

Available in Single Pressure and Dual Pressure Models

- Compensate for any oil loss in a hydraulic system
- Source of low pressure hydraulics which can be used for cylinder return movement
- Outlet for trapped air

#### **NA Series Piston Type Accumulators**

Available in Single Pressure and Dual Pressure Models

- Simplify circuit design
- Lower HP requirements
- Improve operation/ Increased Cycle operation

#### Manufacturing Processes

Milwaukee Cylinder **Pressure Boosters** and **Air Oil Tanks** solutions offer smoother power and space savings compared to pneumatic only systems, and cost savings compared to pump based hydraulic systems.

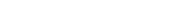
Call us for Application Assistance.

www.milwaukeecylinder.com









## **Power Units and Valves**



#### \* GEAR PUMPS

Maximum Pressure: 3000 psi

Flow Rates: .545-10.00 gpm

**Reservoir Capacities:** 10-30 gallons

Standard Motor: **TEFC 1725 rpm** 

\* VANE PUMPS

Maximum Pressure: 2000 psi

Flow Rates: 4-8 gpm

Reservoir Capacities: 20 gallons

Standard Motor: **TEFC 1725 rpm** 

\* Custom Designs Available!

Milwaukee Cylinder Power Units are powerful performers for your general hydraulic power unit needs. Available in either Gear Pump (3000 psi) or Vane Pump (2000 psi) designs, these units really deliver with standard features and options needed to do the job right. These units are fully featured to give you the performance and value that you need. Available options and directional valves help you to customize the power unit for your application.



Contact Milwaukee Cylinder for a quote on the power unit configuration that meets your application.





Vertical

NFPA/JIC Style



Low Profile





## **Industrial Manipulators**

## Pow'r Arm™

# Safe, convenient positioning of loads up to 2,000 lbs.

- Larger capacities available as specials
- Quick, easy lifting and positioning of heavy dies, tooling and parts
- One-person control
- Dual speed control
- Integrated hydraulic controls
- Modifications on request

## **Pow'r Reach**<sup>™</sup>

# For fast, easy lifting and precise positioning of tombstones, vises and materials.

- Up to 750 pound capacity
- 58-inch vertical travel, 8.5 foot reach and 350 degree rotation
- One-person control
- Dual speed control
- Integrated hydraulic controls
- Modifications on request

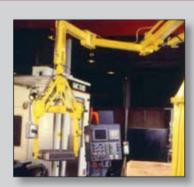






#### POW'R ARM

Large shear blades are used to cut steel bars and billets. When these blades become worn the Pow'r Arm™ performs speedy removal and replacement of the blades safely with minimal disruption to the process.



#### **POW'R REACH**

Parts are selected from pallets and moved to working stations. The smooth, positive hydraulic control of the Pow'r Reach™ permits picking and positioning of expensive parts safely and precisely.









5877 S Pennsylvania Avenue Cudahy, Wisconsin 53110-2456 USA

#### **MILWAUKEE CYLINDER offers:**

- SPECIALS / CUSTOM PRODUCTS
- HYDRAULIC CYLINDERS
- LOW PRESSURE HYDRAULIC CYLINDERS
- PNEUMATIC CYLINDERS
- ALUMINUM CYLINDERS
- HYDRAULIC PNEUMATIC DEVICES
  - PRESSURE BOOSTERS
  - AIR OIL TANKS
  - ACCUMULATORS
- CYLINDER ACCESSORIES
  - LINEAR ALIGNMENT TOOLS
  - AMLOK® ROD CLAMP
  - SPHERICAL ROD ACCESSORIES
- INDUSTRIAL MANIPULATORS
- POWER UNITS AND VALVES

Contact Milwaukee Cylinder for your application needs.

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## Specials

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Our

## Standard





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