For more than half a century, Waukesha Cherry-Burrell has been a leader in the design, manufacturing and application of external circumferential piston, positive displacement pumps.

Users of Waukesha PDs benefit from decades of continuing product improvement. Steady advances in design, metallurgy and fabrication techniques have yielded progressively higher levels of performance and service life.

Most of the pumps that have carried the Waukesha Cherry-Burrell name over this time were designed for heavy-duty pumping challenges.

The new Universal Lobe Pumps were specifically designed for a different challenge: lower cost and CIP (clean in place) applications.

While intended for lower cost, Universal Lobe Pumps are not “light duty.” They incorporate the advanced technology of the new Universal II PD that strengthens sanitary performance and extends pump life. They are capable of accommodating high temperatures and pressures up to 300 psi (20.7 bar).

Universal Lobe Pump Series utilize the Universal II gear case with 3-way mounting flexibility. It offers the full range of seal and port options and has Integral Speed Reducer (ISR) mounting capabilities.

**FEATURES AND BENEFITS**

**Sanitation Features**
- CIPable. Pump body has an internal flat profile and is free draining with vertical ports.
- Cover is free draining in horizontal or vertical port positions.
- Rotor/shaft connection sealed from product zone.
- Exclusive, non-galling Waukesha “88” alloy rotors standard; permits running at tighter clearances and higher efficiencies; 316 stainless steel lobe rotors also available.
- Mechanical seals standard. Single or flushed double.
- Seal flush optional: seal areas interconnected to improve circulation and draining of seal flush fluid. Steam-In-Place also is optional.
- Jacketed cover optional.
- 316 stainless steel pump body and cover; 316L optional.
- Electro-polish of product contact surfaces, optional.
- Stainless steel bearing frame optional.

**Long-life features**
- Precision rotor movement virtually eliminates vibration; extends seal life.
  - Rotor nut designed for extended service without loosening.
  - No bearing in product zone.
  - Larger diameter shafts in seal area for greater strength and stiffness.
  - Heavy duty bearing frame (stainless steel available as an option)
  - Double tapered roller bearings on all models. Contribute further to precise rotor movement and longer seal life.
  - Greased lubed bearings for positive lubrication to all bearings over entire speed, temperature and pressure range.
  - Body retaining screws for maintaining mechanical seal contact during inspection.
Typical product applications

Bakery
- Batters
- Flavorings
- Frostings
- Fats & Oils
- Sweeteners
- Yeast
- Slurry

Beverage
- Beer, Wort, Yeast Soft Drinks
- Fruit Drinks
- Juice Concentrate

Canning
- Baby Foods
- Soups
- Fruit Puree
- Puddings
- Jellies
- Salad Dressings
- Mayonnaise

Confectionary
- Syrups
- Cream Fillings
- Chocolate

Dairy
- Cream
- Milk Ice Cream Mix
- Yogurt

Cosmetics
- Face Creams & Lotions
- Hair Styling Gels
- Liquids Essential Oils
- Dyes & Alcohols

Chemical/Industrial
- Solvents
- Fuels
- Oils & Lubricants
- Soaps

Installation flexibility
- Bidirectional flow. Rotors, locked with belleville washers and torqued nuts, rotate securely in either direction. No more flow direction/shaft position specification.
- Interchangeable installation dimensions with Universal and Universal II PD pumps.
- Versatile 3-Way mounting of gear case, including vertical alignment of ports.
- Upper or lower shaft position.

- Extended outer seal life. A wave spring, instead of an o-ring, mechanically loads the seal.
- O-ring on inner seal, seals on clean surface as seal moves due to wear.
- 3 full-radius drive pin grooves reduce stress/increase durability of seals.
Higher pressure capability, up to 300 psi (20.7) bar.

Longer service life resulting from fresh engineering approach and high capacity components.

The right seal for every application, plus interchangeability when needed.

Metal rotor: exclusive Waukesha 88 non-galling alloy rotors provide close clearance; 316 stainless lobe rotors available.
FIELD INTERCHANGEABLE SEAL options for every service

316 stainless steel; design conforms to 3-A, BISSC, ASME standards

DOUBLE CONCENTRIC MECHANICAL SEAL*

Used with flushing fluid to cool, lubricate, flush away residue. Best arrangement for severe service.

SINGLE MECHANICAL SEAL*


Elastomer choices for “O” rings:
- Buna-N
- Fluoroelastomer (FKM)
- EPDM
- Silicone
- Perfluoroelastomer (FFKM)
- PTFE Encapsulated

*Mechanical seal material options:
- Carbon
- Ceramic
- Silicon Carbide
- Tungsten Carbide
**PRODUCT DIMENSIONS**

**EYE BOLTS, MODELS 060UL-320UL**

**PORT**

**SIDE MOUNT MOUNTING PAD**

**OPTIONAL MOUNTING PAD LOCATION**

**OPTIONAL LOWER SHAFT**

**STANDARD UPPER SHAFT**

**K-KEY**

**2X**

**NOTE:** CP1 will not apply to Model 320.

**NOTE:** Dimensions "X" and "2X" apply for Bevel Seat, "S"-Clamp, "Q"-Clamp, 15I and 14I fittings on Models 018 through 220.

Standard port is Bevel Seat.

Dimensions "X" and "2X" apply for 6" (152 mm) 150 lb. RF Flange on Model 320.

**PRODUCT SPECIFICATIONS**

**NOTE:** Contact application engineering for higher pressure and temperature applications.
OPTIONS AND ACCESSORIES

Ports

Male NPT and 150 lb. flanges optional on Models 018 through 220 size. 150 lb. RF flanges standard on Model 320.

Rotors

Alloy 88 Standard. 316SS Optional.

Rotor clearance standard for most applications up to 200°F (93°C).

Hot clearance rotor option for applications up to 300°F (149°C).

Contact application engineering for higher temperature applications.

Cover & Gearcase

Optional drain and/or vent connections

Shown with optional 3-wing cover nuts

Elastomer choices for “O” rings:

Standard
• Buna-N

Optional
• Viton
• EPDM
• Silicone
• Kalrez/PTFE Encapsulates

Seals

Mechanical seal material options:
• Carbon
• Ceramic
• Silicon Carbide
• Tungsten Carbide

Shaft Position

Top Shaft Position
Standard

Lower Shaft Position
Optional

Mounting

Optional Side Mount Gear Case for vertical fluid entry and free draining of body

Standard left hand shaft position shown (right hand optional)

Bases & Drives

• Plate with adjustable feet or Channel Bases
• 304 SS Plate Bases
• Portable Bases with Rubber Wheels
• Direct connected Gear Motors
• Mechanical and Electronic Variable Speed Drives
• Hydraulic Motor Drives

Optional Sanitary Clamp Type Variety of styles including S-Line, I-Line, Q-Line

Optional European Types; DIN, SMS, RJT