Custom Built Solutions from the Market Leader

Today’s complex processing environments demand greater integration of equipment and application. Since 1932, Haight® has been recognized as the leading innovator and manufacturer of rotary gear, positive displacement pumps custom built for your operational needs and cost requirements.

As part of the Baker Manufacturing family, Haight has extensive metallurgical expertise, premier research and development capabilities, access to a high-tech foundry, and deep technical knowledge of pump applications.

Haight is committed to providing reliable, versatile, and quiet products designed to meet your needs.

Fewer parts mean reduced wear, less maintenance, longer life, compact size and reduced noise.

With the Haight gear within a gear design, both rotating parts are hydraulically balanced along the shaft axis, so there is no need to adjust end plates.

The internal gear design does not subject the rotating members to overhung load problems, allows for fluid feed on both sides of the gears and functions as an internal gear reducer, slowing down the large rotating gear. These features result in reduced wear, less maintenance, compact size and lower noise.

Internal Gear Pump

External Gear Pump

Bed Plate Assemblies

Custom Gear Pump

Centrifugal Pumps

Variety of Settings
- Bolt on reversible relief valve

Mounting Options
- Pipe plug inserts provide access for mounting optional gauges and tank return feature

Geared to Last
- Patented Haight gear and rotor for more efficient positive displacement pumping

Rugged Design
- Top quality ductile iron bodies with iron bearings

Superior Flow
- Three-tooth contact for smoother discharge. Extra deep gear mesh greatly reduces noise, avoids trapping
How it Works
Haight’s Gear Within a Gear Principle

The most reliable of today's internal gear pumps are based on the gear within a gear principle pioneered Haight in 1932.

Design Benefits

**Lower initial investment**
Haight pumps operate at standard motor speeds, eliminating the need for expensive gear boxes, even for heavier fluids

**Less maintenance**
Save time with fewer parts, no thrust bearings and end plates to maintain

**Easier to install**
Smaller than conventional gear pumps designs, Haight close-coupled motor mounting eliminates pump and motor alignment problems, and reduces bedplate installation costs

**Extended life**
The rotor is rotating at a fraction of the motor speed which reduces wear and noise, and improves fluid flow into the gears

**Superior flow**
True, three tooth engagement between the rotor and pinion provides superior flow characteristics

1. The liquid being pumped (dark blue) Enters the pump through the inlet (suction) port. In this example, the inlet (suction) port is on the left.

2. As the inner (pinion) and outer (rotor) gears rotate, the liquid flows around both sides of the rotor into the gears. The crescent divides this flow and serves as a positive seal between the inlet (suction) and outlet (discharge) ports.

3. In this illustration, the pump is almost completely filled with the liquid which is about to be discharged through the outlet (discharge) port on the right. Note that the exclusive Haight three-tooth gear contact assures smooth discharge flow.

4. The pump is now completely filled. The liquid being pumped flows in through the inlet (suction) port, moves through the pump, and leaves through the outlet (discharge) port in a continuous flow.
Distinguishing Pump
Pump Characteristics

Standard Pump Attributes

Haight pumps are self-priming and will develop up to 27” of vacuum. NOTE: depending upon actual application conditions, it is sound engineering practice to keep vacuum to a minimum.

Although suction conditions are a factor in determining pump speed, normally for liquids with viscosity’s over 10,000 SSU, reduced speeds and larger line sizes are recommended to avoid cavitation and diminished pump capacity.

Capacity Range
Viscosity Range
Pressure Range
Non Lubricating
Lubricating
Temperature Range
-100 PSI
650 PSI*
-80°F to 620°F*

*High temperature/high pressure applications
Consult factory for temps over 300°F and pressure over 200 psi.

Bolt-On Relief Valve (Optional)

The bolt-on relief valve can easily be added in the field without the need for special tooling. The relief valve can function in either a return to suction mode or return to tank mode. Offered with several different spring tensions, the relief valve operates smoothly and effectively over a broad range of setting values.

Duralon® Liner (Optional)

Self-lubricating, corrosion and moisture resistant barrier to eliminate metal to metal contact improving pump longevity.

Configurations
Standard & Optional

Bolts

Bearing Gramix iron bearings are standard. Options:
- DU® Metal-Polymer
  Used mainly in higher pressure (above 100 psi) or modestly lubricated applications.
- Carbon Graphite
  Used in high temperature, solvent or acid pumping applications which make standard bearing incompatible.
- Bronze
  Used primarily in low pressure (below 150 psi) applications; self-lubricating and cost effective.

Seals

Buna-N lip seal is standard. Options:
- Viton® Lip Seals
  Viton is typically used for processes which are not compatible with Buna®. These include temperatures above 300°F and for diesel fuel applications.
- Neoprene Lip Seals
  Neoprene is commonly used for refrigerant/oil pumping applications.
- Teflon® Lip Seals
  Teflon seals are commonly used for a more chemically inert seal requirement or for hot oils up to 400°F.
- Teflon® Packing Seals
  Used in high temperatures and liquids which make Viton or Buna-N® seals incompatible.
- Grafoil® Packing Seals
  Suitable for use with heat transfer (up to 585°F) applications.
- Type 21 Mechanical Seals
  Available with Buna-N, Viton or Neoprene elastomers.
- Type 9 Mechanical Seals
  Available with Teflon or Kalrez® seals in high temperature applications.
- Type 2 or Type 2B Mechanical Seals
  Used in high pressure (above 250 psi) applications, available in Viton, Buna or Neoprene elastomers.

Mounting Configurations
Bedplate, close-coupled, and hub mount are standard configurations. Options:
- Outboard Ball Bearing
  Used to provide extra stability for belt drive or PTO assemblies.
- Additional options and custom design orders available. Contact us for details.

Rotor Gears

Ductile iron is standard. Options:
- Delrin®
  Used in non-lubricating liquids or sacrificial abrasive fluid applications when noise reduction is desired.
- Teflon
  Used in highly corrosive applications which make Delrin® incompatible.
- Ni-Resistant #2
  Used in mildly corrosive liquid applications.
### Gear Pumps by Material

<table>
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<tr>
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### Gear Pumps by System

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- **Typical Applications**: Custom mounting, Direct drive, DC drive, Pneumatic drive, Hydraulic drive, Custom mounting, Special sealing designs.

- **Applications Specific Adaptations**: Custom mounting designs, Hardened and corrosion resistant designs, High temperature designs, Special pump designs.
Series DIU
Ductile Iron Universal Pumps

The Ductile Iron Universal Pump design combines the innovation of our UniverSeal shaft seal, the rugged simplicity of Haight’s proven gear within a gear internal gear configuration, with the flexibility of a bolt-on integral relief valve assembly. This combination of pump features offers you unsurpassed flexibility to adapt your pumps to changing system requirements.

Ductile Iron Universal Relief Valve - The relief valve assembly can be added at any time, even in the field without special tools. The valve can function in either the return to suction mode, or return to tank mode. Available with a variety of tension springs, the relief valve operates smoothly and effectively over a broad range of setting values.

Gear within a Gear Internal Gear Design - Since 1932, this design has demonstrated its effectiveness in handling a broad range of applications while operating at standard motor speeds, and reducing wear.

Minimize your overall capital investment and on-going operating expenses with innovative Haight design.

UniverSeal

Advanced Gear Pump Design
The UniverSeal incorporates standard, easily available seal components with a readily adaptable pump geometry. The pump can be easily converted in the field from lip to mechanical to packed gland shaft seal type without even disconnecting the piping. Flow direction in the pump can also be changed without disrupting the attached piping, or needing special tools.

Benefits
• Reduce maintenance expenses - simple, quick seal changes
• Less production disruption and downtime - perform maintenance in place rather than in the shop
• Reduce maintenance inventory - one pump can be adapted to meet many application requirements
• Provide future adaptability - easily change the pump as your needs change
• Reduce replacement parts costs, no special custom design parts
• Interchangeable with existing Haight pumps without modification
• Pumps specified with an integral relief valve can be quickly and easily changed to perform in either suction return, or tank return mode. The relief valve can be readily changed to operate in either clockwise or counterclockwise flow direction.

Series DIU
Round Hub
Size 1, 3, 5, 6, 7, 8 & 9 gpm Models

Round hub Series DIU pumps are available with an optional bolt-on relief valve which can function in either the return to suction or return to tank mode. Compact rugged, and easy to maintain, these pumps are ideal for close-coupled mounting or direct mounting to the motor.

Features
• Operation at standard motor speeds, meant for direct drive, designed for continuous 4 pole 1800 rpm motor speed operation.
• Involute gear design offers excellent suction characteristics, minimizes noise and reduces internal bypassing
• Various bearings, seals and rotor materials available which allow effective operation up to 620°F and 600 psi.
• Universal seal design that can be changed in the field.
• Optional mounting brackets which are designed for in-line mounting with standard NEMA frame size motors, or with a bedplate mount.
• Designed for operation in clockwise, counterclockwise, or bi-rotational; manufactured to be easily changed in field. Fabricated from the selection of one of three iron harness ratings.
• All pumps made to order.
• Magnetic couplings available.

Bracket  
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Series DIU
Square Flange
Size 10, 15, 20, 24, 30, & 40 gpm Models

Compact, rugged, and easy to maintain ductile iron housing, square flange Series DIU pumps are ideal for close-coupled mounting to the motor or footed mounting. Haight’s bolt-on footed brackets match standard NEMA motor height, eliminating pump or motor shimming. Each bracket size is designed to align the pump and motor shaft heights without shim blocks.

Features
- Operation at standard motor speeds, meant for direct drive, designed for continuous 4 pole 1800 rpm motor speed operation.
- Involute gear design offers excellent suction characteristics, minimizes noise and reduces internal bypassing.
- Various bearings, seals and rotor materials available which allow effective operation up to 620°F and 600 psi.
- Universal seal design that can be changed in the field.
- Optional mounting brackets which are designed for in-line mounting with standard NEMA frame size motors, or with a bedplate mount.
- Designed for operation in clockwise, counterclockwise, or bi-rotational; manufactured to be easily changed in field. Fabricated from the selection of one of three iron harness ratings.
- All pumps made to order.
- Magnetic couplings available.

Pump

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Series DIU
Double Pumps
Size 44, 54, 60, 70, & 80 gpm Models

Choose from five sizes and a variety of optional seal, bearing and rotor materials when ordering the Double Pump series. The Double Pump Series offers exceptionally compact design, plus low shear and noise characteristics. Compact, rugged and simple, these pumps are ideal for close-coupled mounting, which eliminates the need for expensive gear boxes, and prevents coupling alignment problems.

Features
- Operation at standard motor speeds, meant for direct drive, designed for continuous 4 pole 1800 rpm motor speed operation.
- Involute gear design offers excellent suction characteristics, minimizes noise and reduces internal bypassing.
- Various bearings, seals and rotor materials available which allow effective operation up to 620°F and 600 psi.
- 300# ANSI flange and 2” NPT inlet/discharge points.
- Universal seal design that can be changed in the field.
- Optional mounting brackets which are designed for in-line mounting with standard NEMA frame size motors, or with a bedplate mount.
- Designed for operation in clockwise, counterclockwise, or bi-rotational; manufactured to be easily changed in field. Fabricated from the selection of one of three iron harness ratings.
- All pumps made to order.
- Magnetic couplings available.
Series DIU
Double Pumps Size 120, 180, & 240 gpm Models

Large flow Double Pumps series is designed to handle flow rates from 120-240 gpm

Features
- Operation at standard motor speeds, meant for direct drive, designed for continuous 4 pole 1800 rpm motor speed operation.
- Involute gear design offers excellent suction characteristics, minimizes noise and reduces internal bypassing
- Various bearings, seals and rotor materials available which allow effective operation up to 620°F and 600 psi.
- 3” ASNI Flange; inlet and discharge ports.
- Universal seal design that can be changed in the field.
- Optional mounting brackets which are designed for in-line mounting with standard NEMA frame size motors, or with a bedplate mount.
- Designed for operation in clockwise, counterclockwise, or bi-rotational; manufactured to be easily changed in field. Fabricated from the selection of one of three iron harness ratings.
- All pumps made to order.
- Magnetic couplings available.

Standard Construction Features
- Ductile iron housing
- Steel shaft and pinion gears
- Iron rotor and carbon graphite bearings
- Buna-N lip seals and elastomers

Options
- Alternate shaft seal and O-ring elastomer materials – neoprene, silicone, Teflon or Viton
- Lip seals
- Type 21, 2B, and 2 mechanical seals
- Venting options include: clockwise, counter-clockwise, and bi-rotational
- Duralon liner
- Thread in relief valve available - additional plumbing is required on installation.

Applications
- Petroleum Products
  (fuel transfer/bulk transfer)
- Lubrication Systems
- Food Processing
- Soap
- Detergent Products
- Paper Products
- Ship Building
- Mining

Performance curves for reference only.

Contact us to custom build what you need.
haightpump.com

(800) 871-9250 • haightpump.com
Series US
Stainless Steel
Size 6, 7, 8, 9, 10, 15 & 20 gpm Models

Haight combined its versatile DUI Ductile Iron Universal Series pump design with stainless steel and corrosion resistant materials to meet your ever-changing process needs.

Features
- Gear within a gear design for quiet operation
- Built in gear reduction, fully supported, through-shaft design, utilizes standard motor speeds
- UniverSeal built in shaft seal flexibility
- Only two moving parts reduces maintenance and wear
- Closed coupled or foot mounted bracket designs
- Readily accepts magnetic drive option
- 6 gpm - 9 gpm models; 3/4” inlet/discharge ports
- 10 gpm - 20 gpm models; inlet/discharge ports accept 1”, 1.25” and 1.5” NPT and 150# flange connections
- 100 psi discharge pressure capability
- Non-metallic rotor eliminates galling problems, even with thin fluids including water
- 10 gpm, 15 gpm, and 20 gpm models; integral relief valve with “no leak” adjustment, and tank return operation capability

Standard Construction Features
- 316L (CF3M) Stainless Steel housing for maximum corrosion resistance
- Waukesha 88° pinion gear and 440C hardened, polished shaft assembly
- Delrin AF rotor gear
- Carbon graphite shaft sleeve bearings
- Viton elastomers

Options
- Alternate shaft seal and O-ring elastomer materials – Neoprene, Silicone, Teflon or Kalraz®
- PTFE Teflon rotor gear
- Vespal shaft sleeve bearings
- 10 gpm - 20 gpm; 316L integral relief valve up to 100 psi
- Magnetic couplings available on all models

Applications
- Chemical Processing
- Pharmaceutical
- Wastewater Treatment
- Textile
- Plastic
- Tanning
- Soap
- Rubber
- Photographic
- Plating
- Injection and Transfer of Acidic, Corrosive Fluids and Solvents

For additional information, visit haightpump.com.

Performance curves for reference only.

(800) 871-9250 • haightpump.com
Series UB

Bronze Sizes 24-240 gpm Models

Haight combined its versatile DUI Ductile Iron Universal Series pump design with bronze and corrosion resistant materials to meet your ever-changing process needs.

Features
- Operation at standard motor speeds, meant for direct drive, designed for continuous 4 pole 1800 rpm motor speed operation.
- Involute gear design offers excellent suction characteristics, minimizes noise and reduces internal bypassing
- Various bearings, seals and rotor materials available which allow effective operation up to 620°F and 600 psi.
- Universal seal design that can be changed in the field.
- Optional mounting brackets which are designed for in-line mounting with standard NEMA frame size motors, or with a bedplate mount.
- Designed for operation in clockwise, counterclockwise, or bi-rotational; manufactured to be easily changed in field.
- Inlet/discharge ports accept 1.5" NPT and 150# flange connections (24-40 gpm) and 2" NPT, 150# & 300# Flange Connections (44-80 gpm), 300# 3" Flange 250 PSI discharge pressure capability.

Standard Construction Features
- 863 Bronze housing for maximum corrosion resistance
- Bronze C905 pinion gear and 440C hardened, polished shaft assembly
- Bronze C905 rotor gear
- Carbon graphite shaft sleeve bearings
- Viton elastomers

Options
- Alternate shaft seal and O-ring elastomer materials – neoprene, silicone, Teflon or Kalrez, Buna-N
- PTFE Teflon rotor gear, Delrin
- Teflon or Vespel shaft sleeve bearings
- Magnetic drive available on all models

Applications
- Chemical Processing
- Pharmaceutical
- Wastewater Treatment
- Textile
- Plastic
- Tanning
- Soap
- Rubber
- Photographic
- Plating
- Marine

Z56RO Bracket 24-40 gpm
Squared Flanged Bronze Pump

Z213D Bracket 44-80 gpm
Bronze Pump

Bronze Haight® Pump 24-40 gpm

Bronze Haight® Pump 44-240 gpm
Close Coupled Mounting
For Haight Pump Series DIU

Designed for compactness, close coupled mounts require less space and lower overall height, making it easier to use in small spaces.

Close coupled mounts are designed for compactness, requiring less space and lower overall height, permitting use where space is at a premium. Mounts may be used with all NEMA “C” faced motors as shown in the drawings and charts below.

The “Z” brackets utilize footed motors, “Y” brackets (not shown) utilize footless motors. Pump, bracket, coupling and electric motor can be furnished. Open Drip-proof, totally enclosed, wash-down duty and explosion-proof motor enclosures are available.

Z56RO Bracket 1 - 9 gpm Pumps - 56-145 Frame Footed Motor

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*“D” Dimension will vary with motor enclosure

Available motor enclosures:
- Open drip-proof
- Totally enclosed
- Washdown duty
- Explosion-proof

Z182S Bracket 10-40 gpm Pumps for 182/184 Frame Footed Motors

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*“D” Varies with Frame Used
Bed Plate Assemblies
For Haight Pump Series DIU

- Designed specifically for mounting on bedplate or machinery plates.
- Motor height or close couple brackets eliminate the need for mounting blocks.
- Include flexible couplings, mounting bracket, coupling guard, and rigid steel bedplate.
- Meets a wide variety of requirements, works with Haight pumps of all sizes.

*Consult factory for drawings

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Unique Pump Configurations
Developed for OEM Customer Applications

Series X Skeleton Pumps
These custom-designed pumps are ideal for built-in lubrication applications on air compressors, gear boxes, engines, and other rotating equipment when a casing is not required. Series X pumps feature compactness, positive displacement and through drive and no casing is required.

The Series X Skeleton pump shown is an example of the Haight's ability to meet a customer's job specifications and production requirements. Haight engineers will meet with you to determine your specific needs for a non-standard design. They will then translate your needs into a positive displacement pump to meet your requirements.

Dual Pumps
Save valuable space and cost for system designers with dual pump designs on a common shaft.

Choose from 85 possible flow combinations, up to 40 GPM flow capacity for each pump.

Encased, Flange Mounted, Reversible Pumps
These custom pumps provide an enclosed gear set coupled with flange mounted, direct drive design features.

Save space, weight, and cost by incorporating this pump into your system.

E - Series
For use in direct drive, hub mounted configurations where size, weight, and cost are crucial performance criteria in an application.

Economical, high performance hot oil pump.

Rugged design, proven to work in high temperature applications throughout the world.

Available with limited option selection, contact your local distributor for additional information.

G - Series
Affordable, high performance design series.

Utilizes the dynamic crescent, Gerotor gear configuration that provides exceptional suction capability, and compact size at a competitive price.

Currently available in two sizes, with limited options, these pumps are physically interchangeable with existing U and E series pumps.
Marine & Industrial
Centrifugal Pumps  HK, HZ, HR Series

- Heavy-wall construction with tight manufacturing tolerances.
- High-efficiency design with fully-shrouded, dynamically-balanced impellers.
- Close-coupled on JM, 56J, IEC frame motors.
- The standard seal is a T21 single mechanical with ceramic seat, carbon rotating element, Buna elastomers and 304SS metallics. Various other seal options are available.
- ABS (American Bureau of Shipping) type approval available.
- Capacities from 5-3,000 gpm, 1-690 m³/h.
- Bearing frame mounting available.

Applications
- Commercial saltwater applications
- Reverse osmosis
- On-board vessels
- Engine cooling, condenser cooling, refrigeration and fire pumps
- Effluent wastewater, brackish water

HK Series
Nickel Aluminum Bronze
316 stainless steel
Duplex 2205
- Pressure up to 150 psi, 10 bar
- Temperatures up to 225°F, 105°C
- Multiple seal options

HZ Series
Nickel Aluminum Bronze
316 stainless steel
Duplex 2205
- Pressure up to 175 psi, 12 bar
- Temperatures up to 250°F, 105°C
- Multiple seal options
- Internal seal flush
- Replaceable wear rings

HR Series
Nickel Aluminum Bronze
316 stainless steel
- Self-priming up to 25 ft, 7.6m
- Pressure up to 175 psi, 12 bar
- Temperatures up to 225°F, 105°C
- Multiple seal options

Marine & Industrial
Available Alloys

Haight offers pumps in nickel aluminum bronze, 316 stainless steel, and Duplex 2205 stainless steel construction. All three alloys are in stock and available for delivery within 10 days. Haight Pump application engineers will help select the right alloy for the application.

Nickel Aluminum Bronze  HZ, HK, & HR
- Corrosion / erosion resistance to saltwater is far superior to stainless steel or standard bronzes.
- Cost effective material for saltwater, brackish water, and wastewater.
- The U.S. Navy has been using CDA958 in saltwater applications for over 40 years.
- Haight Pump’s HZ, HK, and HR series pumps have been used on most of the U.S. Army’s reverse osmosis systems since the 1980’s.

316 stainless steel  HZ, HK, & HR
- High resistance to corrosion from many chemical solutions.
- The material of choice in food and beverage processing applications.

Duplex 2205  HZ & HK
- Recommended for saltwater applications with higher salinity (over 35,000 ppm), higher temperatures, and high concentration of hydrogen sulfides (such as pumping from a deep seawater well).
- Superior resistance to effects of cavitation.
- Strong resistance to wear from abrasive media such as diatomaceous earth or ethanol.

Reverse Osmosis & Desalinization
Haight pumps are commonly used in difficult applications in wastewater and desalinization industries.
HAC Series

Industrial Stainless Steel Pumps

HAC/HAC+ pumps are in compliance with 3-A Sanitary Standards, Inc. and offer these additional advantages:
- Low cost
- AC parts are 100% interchangeable with other brands
- 316L stainless steel construction
- Stainless steel adapters are standard
- Optional NPT or flange connections
- 10 day delivery

Applications - HAC/HAC+
- Bottled Water
- Poultry Industry
- Marinade Solutions
- Red Water Chillers
- Carbonated Beverages
- Juice
- Dairy
- Pharmaceutical

HAC Series Sanitary

HAC pumps are in compliance with 3-A Sanitary Standards, Inc. and offer these additional advantages:
- Low cost
- HAC parts are 100% interchangeable with other leading brands
- 316L stainless steel construction
- Stainless steel adapters are standard
- Optional NPT or flange connections

Applications - HIC+
- Hot Water
- Cold Water
- Glycol
- Light Chemicals
- Water With Particles

HIC+ Series Industrial

HIC+ pumps are based on the HAC+ design, but intended for non-sanitary applications.
- Pumps are constructed of 316L stainless steel
- Glass beaded finish with standard NPT connections and flanges optional
- Type 21 mechanical seal with multiple material options
- External dimensions are the same as the HAC/HAC+ pumps
- Hydraulic performance is identical to HAC/HAC+ pumps
- Every HIC+ pump includes a standard stainless adapter

Bearing Frame HAC/HAC+/HIC+ Pumps
- Dual deep groove ball bearings
- Cast iron bearing frame
- Dimensions are not equivalent to Tri-Clover SP-Series bearing frame
- D, DG, E, and Type 21 seals only, the bearing frame does not accommodate commercial double mechanical seals
- Casing, backplate, adapter, and seals are interchangeable

HAC+ Series Sanitary

HAC+ pumps are the first significant improvement in the traditional “HC Series” style of pumps in over a quarter of a century. These pumps offer an improved shaft design comparable to more expensive sanitary pumps, while retaining the hydraulic characteristics and external dimensions of the HAC product line.
- Clamped stub shaft and threaded impeller nut provide more stable performance
- External dimensions are the same as HAC pumps - no need to change piping
- Hydraulic performance is identical to the HAC pumps
- Casing, backplate, adapter, and seals are interchangeable
We pride ourselves on outstanding product quality, excellent lead times, and exceptional customer service. To serve you quickly and efficiently, please provide the pump model number and quotation reference number.

Consider the following factors when determining your pump requirements:

- Liquids you will be pumping
- Flow rate
- Operating pressure
- Suction conditions
- Temperature
- Duty cycle
- Seal type

Questions? Contact us
(800) 871-9250
www.haightpump.com

Type D External Balanced Seal
Well suited for multi-purpose use, this seal is designed to give long service life. Typical applications include:

- Dairy products
- Tomatoes
- Beverages

Applicable for: acid cleaning solutions and detergents.
Seal materials: External balanced seal. Carbon/stainless steel

Type DG Seal/Seat
This long lasting seal assembly utilizes standard Type D rotating seal components plus choice of silicon carbide, ceramic or tungsten carbide stationary seal seat. For maximum corrosion resistance in pure water applications with abrasive or non-lubricating products. Stationary seal is reversible for quick changeover if one side is damaged. The standard seal material is silicon carbide.

Type E Water Cooled Balanced Double Seal
This water cooled balanced double seal can be pressurized to contain coolants or sealants which can be piped directly to drain. It is used in slurries, heavy duty vacuum applications (to 28" Hg), tacky products or products at temperatures up to 212°F.

John Crane Type 21 Industrial Seal
Single internal mechanical seal assembly. Standard combination is ceramic versus carbon seal faces with buna elastomer; other combinations are available. CIP supply and return for non-3-A or USDA applications.

Construction materials: All models are made of 316L stainless steel