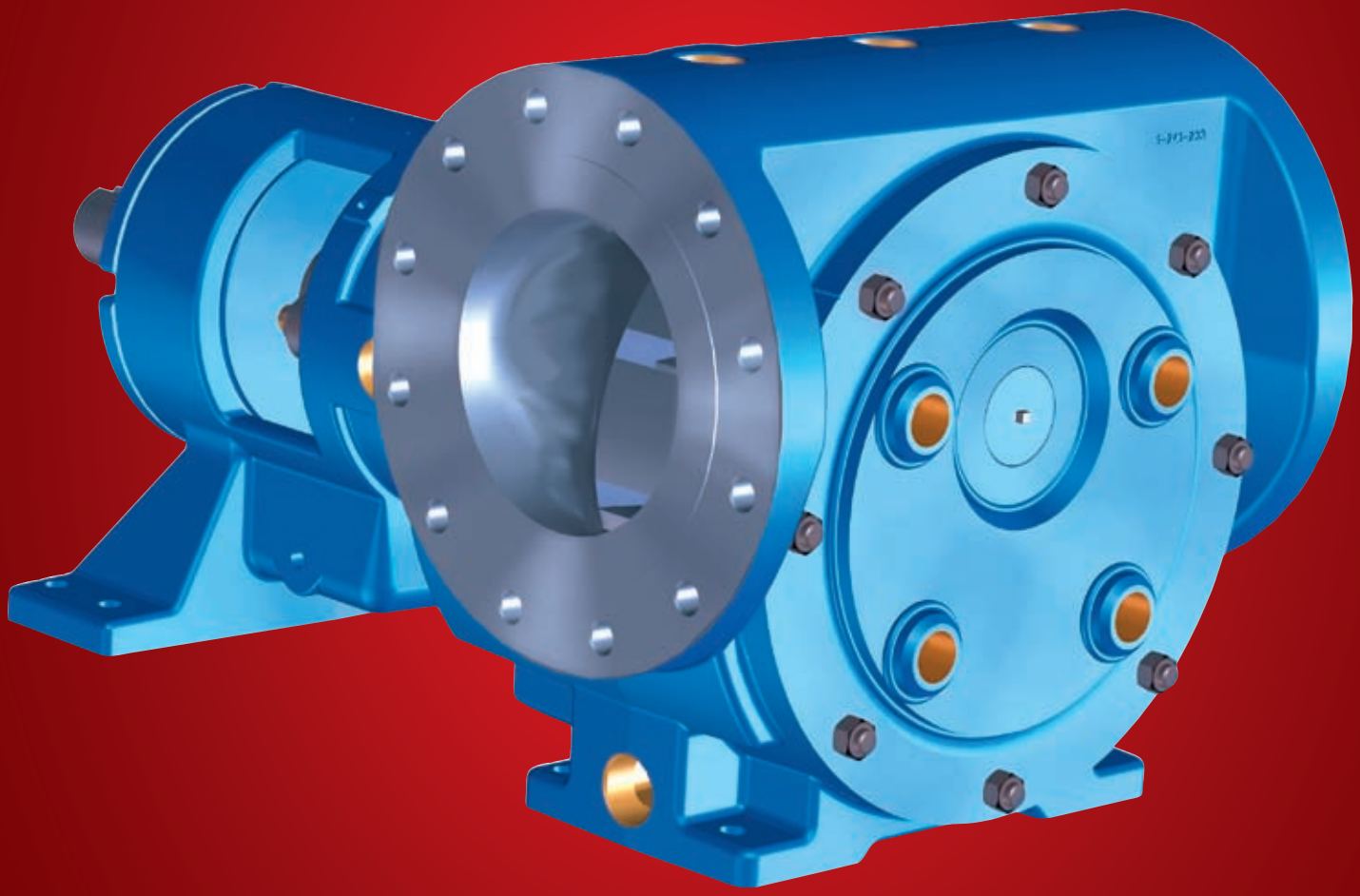
## Jacketed Internal Gear Pumps

# VIKING

***Serving Applications For:***

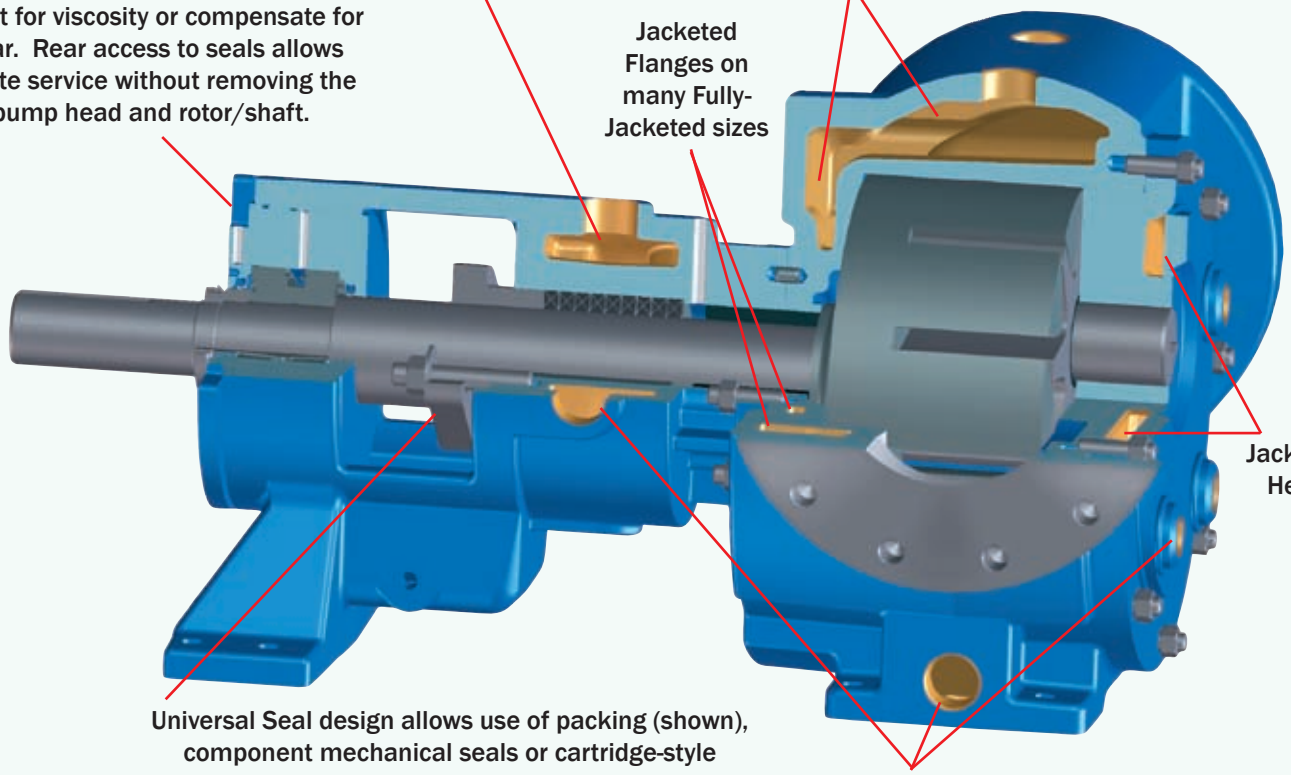
- ***Ambient-Temperature Solids***
- ***Temperature-Critical Processes***
- ***Extreme Environments***



***Flows: to 1500 GPM (340 m3/hr)***
***Pressures: to 280 PSI (20 Bar)***
***Viscosities: to 2,000,000 SSU (440,000 cSt)***
***Temperatures: to 800°F (425°C)***

IDEX CORPORATION

# Specially Designed for the *Most Demanding* Applications




***Fully-Jacketed pumps provide faster startup of cold processes, improving production efficiency. The internal gear pumping process, with only two fluid-contacted bearings, reduces maintenance, providing superior cost of ownership.***

## Typical Applications


Ambient-Temperature Solids


Temperature-Critical Processes


Extreme Environments

# The *Most Complete* Selection of Jacketed Positive Displacement Pumps in the World

## Standard-Jacketed Design

Standard-Jacketed pumps feature **jacketing on the head and bracket**, through which steam or heat transfer oil can be passed for "melting" ambient temperature solids, such as asphalt, to make them pumpable. Standard-Jacketed pumps are available in the economical General Purpose series and in the Heavy Duty Universal Seal series.

**Capacities**

Cast Iron: 12 sizes to 1500 GPM (340 $m^3$/hr)
Max. Displacement 24638 CC/Rev, 230 RPM Max.
Ductile Iron: 9 sizes to 500 GPM (114 $m^3$/hr)
Max. Displacement 3654 CC/Rev, 520 RPM Max.
Steel: 11 sizes to 1100 GPM (250 $m^3$/hr)
Max. Displacement 14881 CC/Rev, 280 RPM Max.
Stainless Steel: 11 sizes to 1100 GPM (250 $m^3$/hr)
Max. Displacement 14881 CC/Rev, 280 RPM Max.

**Port Types:**

125# or 150# Flange, NPT Threads (small sizes only)

## Fully-Jacketed Design

Fully-Jacketed pumps feature **jacketing on the head, casing and bracket, and even jacketed flanges** on many models**,** through which steam or heat transfer oil can be passed for *precisely maintaining a uniform, predetermined temperature*. Fully-jacketed pumps take less time to heat solid material in the casing to a pumpable state.

**Capacities**

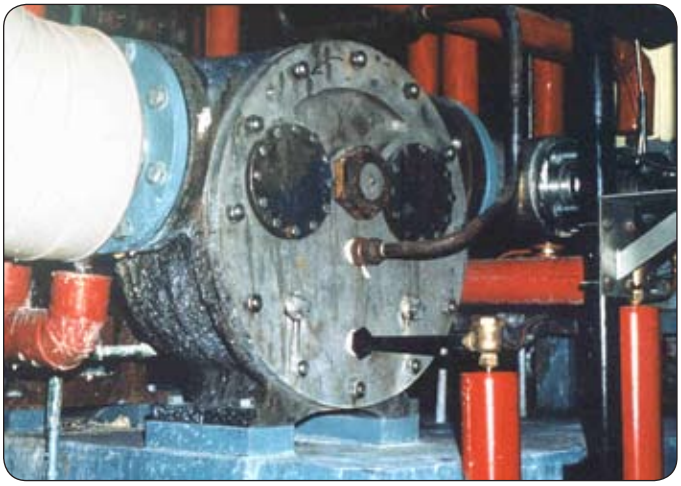
Cast Iron: 2 sizes to 600 GPM (136 $m^3$/hr)
Max. Displacement 6476 CC/Rev, 350 RPM Max.
Ductile Iron: 2 sizes to 600 GPM (136 $m^3$/hr)
Max. Displacement 6476 CC/Rev, 350 RPM Max.
Steel: 11 sizes to 1100 GPM (250 $m^3$/hr)
Maxl Displacement 14881 CC/Rev, 280 RPM Max.
Stainless Steel: 11 sizes to 1100 GPM (250 $m^3$/hr)
Max. Displacement 14881 CC/Rev, 280 RPM Max.

**Port Types:**

125#, 150# or 300# Flange

## Specifications

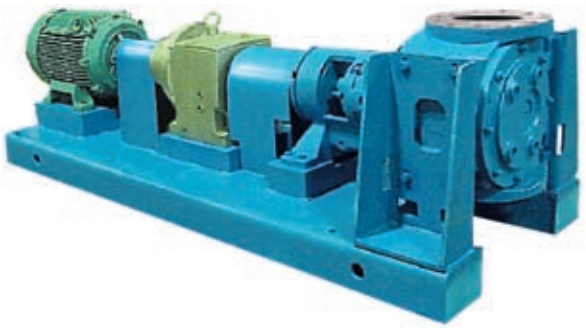
**Maximum Pressure:** 200 psi (14 bar) standard, 280 psi (20 bar) with special construction on selected models.
**Viscosity Range:** 28 to 2,000,000 SSU (1 to 440,000 cSt)
**Temperature Range:** -120°F to 800°F (-85°C to 425°C)
**Inlet Pressure Range:** Pulling from vacuum vessel to a maximum of 100 PSI (7 Bar)
**Max. Temperature of fluid in jackets:** Saturated Steam: 365°F (185°C) ; Heat Transfer Oil: 643°F (325°C)
**Max. Pressure of fluid in jackets:** Saturated Steam: 150 psig (10 Bar); Heat Transfer Oil: 150 psig (10 Bar)
**Port Arrangements:** Ports are Right Angle or Opposite. Ports may be rotated to different positions on most sizes.
**Direction of flow:** Either direction. Direction of flow may be reversed.



**Standard-Jacketed pump on hot resin service**

**Fully-Jacketed pump in cold climate application**

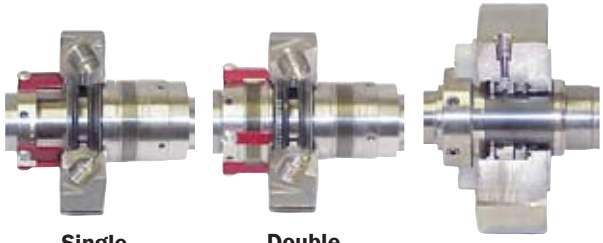
## Porting Flexibility



Viking offers a broad variety of porting options to solve difficult application problems, such as this top-suction, bottom-discharge, 500 gpm (114 m3/hr), 200 psi (14 bar) Fully-Jacketed pump, shown on baseplate with gear reducer and motor. Custom port sizes and configurations are available to fit nearly any application.

## Sealing Options

Viking simplifies shaft sealing, even at high temperatures, with a variety of sealing options from conventional braided packing to component mechanical seals located in the stuffing box or behind-the-rotor, or cartridge-style stuffing box seals shown below. Seal Plans, including Plan 53 and Plan 54, are available. For hazardous or volatile fluids, Viking Mag Drive® sealless, magnetically-coupled pumps are available in Standard-Jacketed and Fully-Jacketed versions.



**Single Mechanical Seal** | **Double Mechanical Seal** | **Triple Lip Seal**

# VIKING PUMP

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*An ISO-9001 and -14001 System-Certified Company*


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