

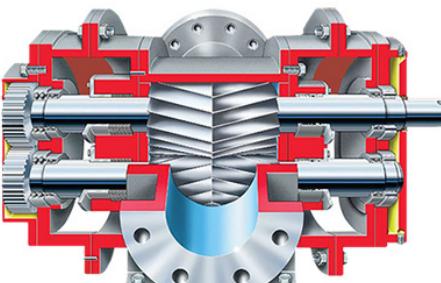
# IMO GEAREX SERIES HERRINGBONE GEAR PUMP

## High Capacity Pumping with Precision and Quiet Power

Extremely rugged and unusually compact for its high capacity and range, the Gearex rotary pumps are generally compliant with AP/ 676, second edition. Precision machined herringbone pumping gears provide low vibration, pulseless discharge while timing gears quietly and evenly transfer power to the driven rotors, ensuring minimal wear and long life.

## Precision Machined for Smooth, Pulseless Flow

### IMO Gearex Herringbone Gear Pump



### OPERATING PARAMETERS

- Flows to 180 m<sup>3</sup>/h (800 gpm)
- Pressures to 20 bar (300 psi)
- Temperatures from -50°C (-60°F) to 450°C (850°F)
- Speeds to 1800 rpm
- Viscosities to 32 to 1 million ssu

The Gearex pump is directly connected to motors up to 1800 rpm. They do not require a heavy foundation, belts or reduction gears, thereby minimizing their total cost of operation. Gearex timing gears transfer power to the rotors quietly and evenly. This design prevents metal-to-metal wear, promotes long pump life and reduces maintenance costs. The timing gears also make it possible to build external design Gearex pumps in stainless steels.

### VERTICAL MOUNTING CONFIGURATIONS\*

- Submerged sump configuration cold oil handling
  - Eliminates high suction lift
  - Conserves floor space
  - Ensures flooded suction without need for foot valves
- Pedestal configuration bolts to floor or wall and is ideal for commercial marine and navy service
  - Conserves space
  - Straight through flow
  - All parts are easily accessible

### KEY FEATURES AND BENEFITS OF IMO GEAREX SERIES PUMPS

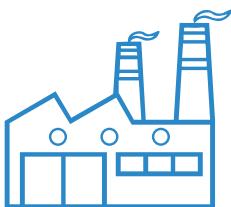
- External Timing Gears evenly transmit power to the rotors while eliminating rotor contact and promoting long pump life.
- Between Bearings Design virtually eliminates shaft deflection, even under highly viscous loads.
- Split Bracket Construction facilitates maintenance.
- Heavy-Duty Ball and Roller Bearings support the rotating element to prevent contact with the housing, thus reducing wear on the rotors and the body bore.
- Externally Lubricated Bearing design is well suited for corrosive, erosive, non-lubricating and run-dry services.
- Conventional Packing and Glands are standard, but mechanical seals are easily accommodated.
- Standard Motor Speeds can be used, eliminating V-belt drives and gear reducers.
- High Carbon Steel Shafts are machined and ground to close tolerances for accurate fit, symmetrical clearance and precise alignment.
- Directly Connected to motors up to 1800 rpm, Gearex pumps do not require heavy foundations, belts or reduction gears.

## INDUSTRIES:



### Power

- Combined Cycle
- Concentrated (Solar Power CSP)
- Biomass & MSW



### General Industries

- Pulp & Paper
- Food & Beverage
- Other Industries



### Oil and Gas

- Midstream Transportation



### Chemical

- Biofuels

## AVAILABLE OPTIONS:

- Special shaft lengths
- Water-cooled bearings
- Lantern rings
- Mechanical seals
- Internally lubricated bearings
- Jackshafts for V-belt drives
- Flange mounting brackets for engine mounting lube oil pump
- Portable, truck mounted design
- Jacketed bodies to prevent hardening of heavy liquids

## MATERIALS OF CONSTRUCTION:

Component	GA Series		GR Series		Gearex	
	Cast Iron	Cast Iron	Cast Steel	Cast Iron	Cast Steel	Stainless Steel
Body	ASTM A278, Class 30 Cast Iron	ASTM A48, Class 40 Cast Iron	ASTM A48, Class 1040 Carbon Steel	ASTM A48, Class 30 Cast Iron	ASTM A216 Grade WCB	316 ss
Bracket		-	-		ASTM A48, Class 30 Cast Iron	
Shaft	ASTM A 108, Class 1040 Carbon Steel	ASTM A108, Class 1040 Carbon Steel		AISI 1040 or 1060 Steel		
Rotor Spacers	-	-	-	Fine Grain Cast Iron		17-4PH SS
Bushing	Babbitted Carbon	Babbitted Carbon*		-	-	
Packing	Graphited Acrylic Yarn (GASP and GAFP Only)	Acrylic Yarn	Graphited	Carbon Filled TFE		PTFE
Pumping Gears	Highly Pearlitic Cast Iron	Cast Iron	Cast Iron	Sizes B and C: AISI 1040 or 1060 Steel; Sizes D and E: Fine Grain Cast Iron		316 ss
Timing Gears	-	-	-	AISI 4150 or 8620 Heat Treated Steel		



## FOR ADDITIONAL INFORMATION VISIT:

Website: [pumps.circor.com/contact](http://pumps.circor.com/contact) | Customer Care at [CC@circor.com](mailto:CC@circor.com)

[pumps.circor.com](http://pumps.circor.com)