# **GlobalGear®** Series





Process Pumps





Tuthill GlobalGear® pumps are a preferred solution to support lubrication applications in large natural gas compressors.

# >>> INDUSTRIES AND APPLICATIONS

# **CHEMICAL PROCESSING**

- ADDITIVES
- ADHESIVES
- CATALYSTS
- FIRE RETARDANTS
- GLUES
- MAGNESIUM HYDROXIDE
- PHOSPHORIC ACID
- PIGMENTS
- PLASTICIZERS
- POLYMERS
- POLYOL
- POLYVINYL ALCOHOL
- RESINS
- SILICONE OILS
- SODIUM HYDROXIDE

#### **CONSTRUCTION MATERIALS**

- ASPHALT
- CAULK
- CONCRETE ADDITIVES
- FILLED ASPHALT

#### OIL & GAS

- API 676 ROTARY PUMPS
- DIESEL FUEL
- DRILLING SUPPORT SYSTEMS
- FUEL OIL
- GREASE
- LUBE OIL
- MOTOR OIL
- ODORANT
- SYNTHETIC OILS
- TURBINE OIL

# AGRICULTURAL CHEMICALS

- BIOCIDES
- HERBICIDES
- UREA

# **ENERGY & POWER**

- BIODIESEL
- GLYCERIN
- WASTE OIL

#### PAINTS, COATINGS, & INKS

- ENAMEL
- INKS
- PAINT PIGMENTS
- SOLVENTS
- STAINS
- VARNISH

#### **PACKAGE SYSTEMS**

- COMPRESSOR OIL
- GLYCOL
- HEAT TRANSFER FLUIDS
- HOT OIL
- HYDRAULIC OIL

#### **PULP & PAPER**

- BLACK LIQUOR SOAP
- CLAY COATINGS
- STARCH
- TALL OIL

#### PERSONAL PRODUCTS

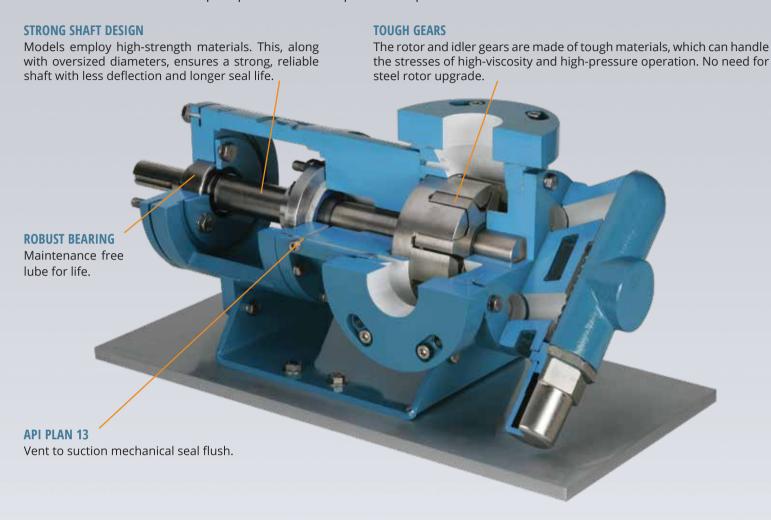
- DETERGENTS
- PARAFFIN WAX
- PERFUME
- SOAP
- SURFACTANTS

#### **FOOD & BEVERAGE**

- CANOLA OIL
- CARAMEL COLORING
- CHOCOLATE
- GLUCOSE
- HIGH FRUCTOSE CORN SYRUP
- HONEY
- HOT FRY OIL
- LARD
- LIOUID SUGARS
- MOLASSES
- MUSTARD
- PEANUT BUTTER
- SOYBEAN OIL
- SUCROSE
- TALLOW

### >>> BUILT ON A TIME-TESTED DESIGN & MORE THAN 90 YEARS OF GEAR PUMP ENGINEERING EXPERIENCE

Capable of tackling the toughest high-viscosity applications, GlobalGear® uses robust pump design together with tougher, stronger, and more reliable materials to extend the pump's life, reducing total cost of ownership. The result? An unbeatable pump that offers unparalleled performance.



# >>> THE INSIDE RELIABILITY STORY BEHIND GLOBALGEAR®

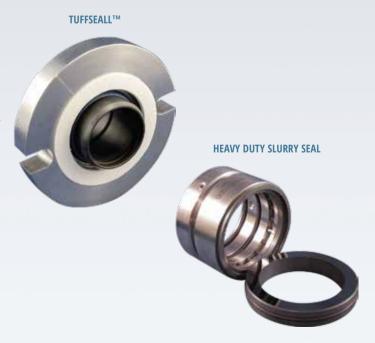
# THE PUMP DESIGNED FOR YOU!

Tuthill's GlobalGear® was developed based on customer input, and customer input in the process industries clearly points to the need for better gear pump reliability and specifically better seal reliability.

GlobalGear® was designed to accommodate a range of engineered sealing solutions with demanding, viscous applications in mind. Other pumps designed for packing combined with mechanical seals cannot compete with Tuthill's extended reliability.

# **GLOBALGEAR® DESIGN FEATURES FOR EXTENDED SEAL LIFE INCLUDE**

- Oversized Shaft & Bearing Diameters on Models GG130 GG550
- Large Bore Size for Stuffing Boxes
- Pressurized Fluid Paths for Seal Lubrication
- Options for Viscous Liquid Duty Seals
- In-Line Seal Maintenance

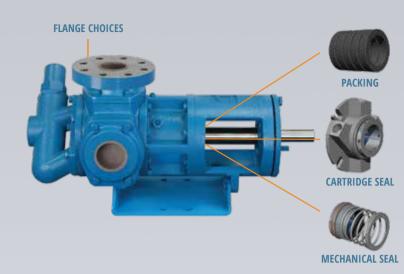


# >>> CUSTOMIZING YOUR GLOBALGEAR® PUMP

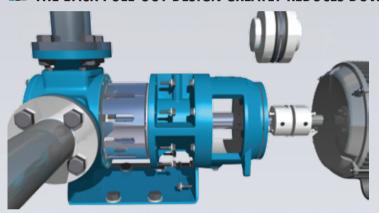
GlobalGear® pumps are versatile and can be customized to meet the requirements of specific applications.

#### **OPTIONAL FEATURES**

- Relief Valve
- Seal Choices
- Heat lackets
- Oversized and High Pressure Flanges
- Abrasive Fluid Special Construction
- High Temperature Construction
- Modular Port Options



# >>> THE BACK PULL-OUT DESIGN GREATLY REDUCES DOWN-TIME FOR SERVICE



#### **BACK PULL-OUT**

The back pull-out design greatly reduces down-time for service. The pump can be repaired without disturbing piping or shaft alignment.

#### TYPICAL DOWNTIME

- A. Replacing Complete Pump
- B. Replacing GlobalGear® Drive Module



# API 676 PACKAGES

Tuthill designs GlobalGear® pump packages to satisfy a growing customer base of large, international Oil & Gas end users with API 676 standard requirements\*. This standard is set forth by the American Petroleum Institute to establish guideline specifications for the use of rotary positive displacement pumps in petroleum, petrochemical, and gas industry services.

Tuthill can offer API 682 mechanical seals for API 676 configured pumps and allowable nozzle loads that are two times or more greater than the minimum allowable nozzle loads specified in API 676. Tuthill also offers the complete package of baseplate, electric motor, gear reducer, coupling, and guard that addresses API 676 features and specifications, along with other project specific requirements.



\* Tuthill's GlobalGear® series pumps meet the intent of API Standard 676 specifications in all cases with the exception of some specific points which are outlined on www.TuthillPump.com

# >>> GLOBALGEAR® MATERIALS AND SIZES ADDRESS A WIDER RANGE OF APPLICATIONS

#### **CAST IRON**



- Standard Carbon Steel Rotor Shaft
- Differential Pressures to 200 PSI (13.8 BAR)
- •Temperatures to 600 °F (316 °C)
- Viscosities to 1,000,000 ssu (220,000 cst)

## **STAINLESS STEEL**



- •Standard Gall Resistant, Nitronic 60 Rotor Head & Idler Gear
- Differential Pressures to 150 PSI (10.3 BAR)
- •Temperatures to 500 °F (260 °C)
- Viscosities to 1,000,000 ssu (220,000 cst)
- Max Differential Pressure is 100 PSI if fluid is < 100 ssu

# **CAST STEEL**



- Differential Pressures to 200 PSI (13.8 BAR)
- •Temperatures to 600 °F (316 °C)
- Viscosities to 1,000,000 ssu (220,000 cst)

#### **NOMINAL FLOW RATE**

MODEL	MAX RPM	GPM				M³/HR			
GG015	1800	15	@	1750	RPM	2.8	@	1450	RPM
GG030	1800	30	@	1750	RPM	5.7	@	1450	RPM
GG070	1500	50	@	1150	RPM	9.1	@	920	RPM
GG080	1500	60	@	1150	RPM	10.9	@	920	RPM
GG120	1200	75	@	780	RPM	20.0	@	920	RPM
GG130	1000	100	@	780	RPM	27.0	@	920	RPM
GG200	1000	135	@	640	RPM	31.0	@	640	RPM
GG210	800	140	@	520	RPM	32.0	@	520	RPM
GG250	640	200	@	640	RPM	45.4	@	640	RPM
GG350	750	350	@	750	RPM	79.5	@	750	RPM
GG550	500	550	@	500	RPM	124.5	@	500	RPM

MODEL	MAX RPM	GPM				M³/HR			
GG015	1200	10	@	1150	RPM	2.8	@	1450	RPM
GG030	1200	20	@	1150	RPM	5.7	@	1450	RPM
GG080	1000	40	@	780	RPM	6.9	@	920	RPM
GG130	640	65	@	520	RPM	9.1	@	920	RPM
GG210	520	110	@	420	RPM	10.9	@	920	RPM
GG250	520	160	@	520	RPM	36.3	@	520	RPM
GG550	350	350	@	350	RPM	80.0	@	350	RPM

MODEL	MAX RPM	GPM				M <sup>3</sup> /HR			
GG030	1800	30	@	1750	RPM	5.7	@	1450	RPM
GG130	1000	100	@	780	RPM	27.0	@	920	RPM
GG250	640	200	@	640	RPM	45.4	@	640	RPM
GG550	500	550	@	500	RPM	124.5	@	500	RPM

# >>> VISIT US AT WWW.TUTHILLPUMP.COM

# **OUR LIBRARY INCLUDES**

- Experience & Reputation
- Product Information
- Service Manuals
- Technical Information



# >>> VISIT WWW.TUTHILLPUMP.COM/PUMPGURU

Size, select and quote the right pump to meet your application needs.

# >>> LOCATIONS

# **TUTHILL PUMP GROUP**

12500 South Pulaski Road Alsip, Illinois 60803 USA phone: 1.708.389.2500

#### **TUTHILL UNITED KINGDOM**

Birkdale Close Manners Industrial Estate Ilkeston, Derbyshire DE7 8YA UK phone: 44.0.115.932.5226

# **TUTHILL CHINA**

Huaxin E World Block B Unit 102, 1777 Hualong Road, Qingpu District, Shanghai, P.R. China phone: 86.21.6989.8128



# THE HEART IS THE ORIGINAL PUMP

All of us are born with a pump inside – our hearts. At Tuthill, we don't just make pumps, meters, and vacuum systems & blowers, we make an invitation for the original pump – the heart – to come alive.

We've always been a company with heart. From our beginnings as a brick maker, we made the bricks that made Chicago. As the horses hauled clay from the quarry, it was too much for their hearts to bear. So Tuthill created an oil pump to power a truck, an innovation that saved horses and led to our first manufactured pump – made from the heart.

Today, we pump our hearts into everything we do: every cut, drill, and cycle, and everything we bring to you. We invite you to join us and find what makes your heart beat a little faster. Because when we all come alive, the world comes along.

