

Manufacturer & Exporter of  
**INDUSTRIAL**  **PUMPS**



**CORPORATE OFFICE**

615, 6th Floor, Girivar Glean Mall, Odhav Road,  
Odhav, Ahmedabad 382415 Gujarat.

**MANUFACTURING UNIT**

Plot No. A-77, Swadheen Industrial Park,  
Kothiya, Ahmedabad-Indore Highway,  
Ta. Daskroi, Dist. Ahmedabad 382433 Gujarat.

Tel: +91 79 22970453 | M. +91 95374 19590 | M. +91 70698 03256  
info@globeseal.com | inquiry@globeseal.com | [www.globeseal.com](http://www.globeseal.com) | [www.globepump.com](http://www.globepump.com)



**MEMBER OF**



## ABOUT US

Globe Star Engineers (India) Pvt. Ltd. is an ISO 9001:2015 certified manufacturer of industrial pumping solutions, backed by 23+ years of engineering and manufacturing experience, serving India and international markets.

Headquartered in **Gujarat, India**, we design and manufacture **industrial pumps, mechanical seals, and system** for highly corrosive and demanding applications. Our product range includes **AODD Pumps, metallic and non metallic chemical process centrifugal pumps, Sewage and Dewatering Pumps, Pressure Booster Systems, and Firefighting Systems.**

Founded by **Mr. Dhiraj Siddhapura**, Globe Star Engineers operates with a strong focus on technical expertise, structured engineering practices, and ethical business values. Our solutions support process-driven sectors such as oil & gas, chemicals, pharmaceuticals, textiles and more, delivering reliable, application-driven performance with long-term operational confidence.



Our vision is to improve the performance, reliability, and efficiency of existing systems through our products and solutions, which add value to your business.



Our mission is to reduce total operating costs while increasing production capacity. We aim to become the top leaders in the pumping equipment industry.



System & Process, Walk the talk, Agility and Quality.



SINCE  
**2002**

**580+**  
SUCCESSFUL  
PROJECTS

**45+**  
PRODUCTS  
RANGE

**3200+**  
HAPPY CLIENTS

**22+**  
EXPORT  
COUNTRIES

ISO 9001:2015  
CERTIFIED COMPANY



## GADP SERIES OVERVIEW

### AIR OPERATED DOUBLE DIAPHRAGM PUMP

The GADP Series by GLOBE STAR is a comprehensive range of **Air Operated Double Diaphragm (AODD) Pumps**, combining the advantages of compact and heavy-duty process designs. These pumps are engineered for safe, reliable, and maintenance-friendly operation in chemical, industrial, oil and gas, petrochemical, solvent and utility applications.

The GADP Series is ideal for handling corrosive, abrasive, viscous, shear-sensitive, and solid-laden fluids, offering leak-free and stall-free performance.

### Applicable Design & Compliance Standards

#### Design & Manufacturing

- Designed for Air Operated Double Diaphragm Pump (AODD) service
- Non-electric operation for safe use in hazardous areas
- Modular construction for easy servicing
- Safe for petroleum, oil, petrol, HSD

#### Compliance & Certifications (Optional)

- ATEX compliant versions available for hazardous environments
- CE compliant construction
- Food-grade configurations available for hygienic applications

#### Flange & Connection Standards

- ANSI B16.5 – Class 150
- DIN EN 1092-1 – PN10 / PN16
- Threaded Connections: BSP / NPT

### Pump Applications

The GADP Series is suitable for a wide range of industries and fluid handling duties:

#### Chemical Processing

- Acids, alkalis, solvents
- Chemical transfer and dosing

#### Paints, Inks & Coatings

- Pigmented fluids
- Solvent-based and water-based paints

#### Pharmaceutical & Cosmetics

- Creams, lotions, suspensions
- Hygienic fluid transfer

#### Food & Beverage

- Syrups, sauces, concentrates
- CIP and utility transfer

#### Wastewater & Slurry Handling

- Sludges and solids-laden fluids
- Filter press feeding

#### Oil, Gas & Petrochemical

- Lubricants and additives
- Fuel and chemical transfer

### Pump Design & Construction

#### Design Concept

Positive Displacement, Air Operated Double Diaphragm Pump

Utilizes compressed air to alternately move diaphragms for smooth, controlled flow

Self-priming and capable of running dry without damage

### AIR OPERATED DOUBLE DIAPHRAGM PUMP

### Key Construction Features

#### Compact & Pro Duty Designs

- Compact models for OEM and utility use
- Pro models for continuous industrial duty

#### Air Distribution System

- Low air consumption
- Stall-free operation

#### Bolted or Clamp Band Construction

- Leak-free sealing
- Safe handling of hazardous fluids

#### Check Valve System

- Ball or flap valve designs
- Efficient solids handling

### Pump Specifications

PARAMETER	SPECIFICATION
Pump Type	Air Operated Double Diaphragm Pump
Maximum Flow Rate	Up to 1000 LPM
Maximum Discharge Pressure	8.3 bar (120 psi)
Maximum Suction Lift	8.3 m (dry)
Maximum Solid Size	Up to 9.5 mm
Air Supply Pressure	Max 6-7 kg/cm <sup>2</sup>
Fluid Temperature	Up to 120°C (material dependent)
Viscosity Handling	Up to 50,000 cP
Self-Priming	Yes
Dry Run Capability	Yes

### Materials of Construction

#### Pump Body, Manifold Options

- Aluminium
- Stainless Steel (SS 304)
- Stainless Steel (SS 316)
- Polypropylene (PP)
- PVDF (Kynar)

#### Diaphragm Options

- PTFE
- Santoprene
- Buna-N
- EPDM

#### Valve Ball & Seat Options

- PTFE
- Stainless Steel
- Santoprene

### Design Advantages

- No electricity required – safe for hazardous areas
- Self-priming and dry-run capable
- Handles corrosive, abrasive & viscous fluids
- Gentle pumping for shear-sensitive liquids
- Simple installation and maintenance
- Variable flow control via air pressure

### Typical Industries Served

- Chemical & process industries
- Paints, inks & coatings
- Pharmaceuticals & cosmetics
- Food & beverage
- Mining & wastewater
- Oil & gas

### Installation Options

- Wall mounted
- Skid mounted
- Portable trolley mounted
- Drum and tank transfer systems



## GCP SERIES OVERVIEW

The GCP Series by GLOBE STAR consists of horizontal end-suction chemical process pumps designed to meet internationally recognized standards for chemical and process industries. These pumps are engineered for safe, efficient, and continuous handling of corrosive, toxic, and aggressive fluids in demanding operating environments.

### Applications

The GCP Series is suitable for a wide range of chemical and industrial services:

- Chemical, Solvent, oil and energy, refineries, hydrocarbon, dyes, pigment
- Petrochemical & refinery units, fire fighting
- Pharmaceutical manufacturing, food and beverages
- Fertilizer and agrochemical plants, slurry
- Power plant chemical dosing systems

### Technical Specifications

PARAMETER	SPECIFICATION
Pump Type	End-Suction Chemical Process Centrifugal
Flow Capacity	Up to 400 m <sup>3</sup> /hr
Total Head	Up to 150 m
Operating Pressure	Up to 16 bar
Liquid Temperature	Up to 200°C
Speed	1450 / 2900 RPM
Sealing Options	Single / Double Mechanical Seal / Customised as per application
Mounting	Foot Mounted / Centerline Mounted (OH2 Design)

### Applicable Design & Flange Standards

#### Design Standards

The GCP Series pumps are designed and manufactured in compliance with the following international standards:

- ISO 2858 – Dimensional standard for end-suction centrifugal pumps
- ISO 5199 – Technical requirements for chemical process pumps

Pump designs can be supplied as per customer-specified standards.

#### Flange Standards

Standard flanges are provided as per:

- ANSI B 16.5 – 150 class / 300 class
- DIN EN 1092-1 – PN10 / PN16
- ISO 7005

Other international flange standards are available on request.

## CHEMICAL PROCESS PUMP

### Pump Design & Construction

#### Design Concept

- Horizontal, End-Suction, Single-Stage Centrifugal Pump
- Back Pull-Out Construction allowing removal of the rotating assembly without disturbing pipework or motor alignment

#### Key Construction Features

- Radial split casing with robust pressure containment
- Closed radial impeller for high efficiency
- Heavy-duty shaft with minimal deflection
- Centerline supported casing (for high-temperature services – optional)
- Bearing housing with oil or grease lubrication

### Materials of Construction

**Casing:** Cast Iron, Carbon Steel, SS304, SS316, Duplex, Alloy moc

**Impeller:** Cast Iron, Carbon Steel, SS304, SS316, Duplex, Alloy moc

**Shaft:** Stainless Steel

**Mechanical Seals:** single, double, cartridge, ptfe bellow and other as per application

**Elastomers:** PTFE, VITON, EPDM, FEP, KALREZ

**Face :** CARBON/SILICON/TUNGSTAN CARBIDE

Other materials are available on request.

### Design Advantages

- Compliant with international chemical pump standards
- Easy maintenance through back pull-out design
- Wide material options for corrosive media
- High efficiency and stable hydraulic performance
- Suitable for continuous process duty



## GVSP SERIES OVERVIEW

### Vertical Long Shaft Sump Pumps – Cantilever Type

**Pump Type:** Vertical Long Shaft Sump Pump (Cantilever Design)

**Mounting:** Vertical, Base Plate Mounted

The **Globe Star GVSP Series** vertical sump pumps are heavy-duty, cantilever-type centrifugal pumps designed for pumping **corrosive, abrasive, and solids-laden liquids** from sumps, pits, and open tanks. The series is engineered to provide **maximum reliability** by eliminating submerged bearings and mechanical seals.

The GVSP Series is ideal for continuous industrial service where flooded suction conditions exist and where maintenance access and long service life are critical.

### Applicable Design & Compliance Standards

The GVSP Series is designed and manufactured in accordance with internationally accepted engineering standards.

- Designed as per **vertical sump pump hydraulic principles**
- Manufacturing quality aligned with **ISO 9001 Quality Management Systems**
- Dimensional tolerances as per **ISO / DIN standards**
- Motors suitable for **IEC standards**
- Designed to meet industrial safety and environmental norms
- Suitable for chemical, solvent, slurry, pharmaceutical, petrochemical, and mining services

### Pump Applications

The GVSP Series is suitable for a wide range of industrial sump and pit pumping duties.

#### Industrial & Process

- Process liquid sumps
- Industrial effluent pits
- Floor drainage and spill collection
- Open tank liquid transfer

#### Power, Steel & Heavy Industry

- Power plant ash handling sumps
- Cooling tower basin pumping
- Steel plant scale pits
- Mill water and process water sumps

#### General Utilities

- Tank farm drainage
- Wastewater and contaminated liquids
- Utility and service water pits

### Pump Design & Construction

The GVSP Series utilizes a **vertical cantilever centrifugal pump design**, keeping all critical rotating components above the liquid level.

- Vertical single-stage centrifugal construction
- Cantilever shaft supported by heavy-duty bearings above base plate
- No submerged bearings
- No mechanical seals below liquid level
- Rigid discharge column for structural integrity
- Designed for flooded suction operation

This construction minimizes wear and simplifies maintenance.

## VERTICAL LONG SHAFT SUMP PUMP

### Pump Specifications

- Open or semi-open impeller for solids handling
- Stable hydraulic performance across operating range
- Shaft length options for varying sump depths
- Low vibration due to rigid shaft design
- Continuous duty capability
- Easy access for inspection and servicing

### Materials of Construction

Materials are selected based on corrosion, abrasion, and temperature requirements.

- **Casing:** Cast Iron / C.S / Stainless Steel/SS 304L/SS 316L/ALLOY 20
- **Impeller:** Cast Iron / C.S / Stainless Steel/SS 304L/SS 316L/ALLOY 20
- **Shaft:** Stainless Steel or high-strength alloy steel
- **Column, Delivery Pipe:** Carbon Steel / Stainless Steel
- **Bearings:** Heavy-duty antifriction bearings (oil or grease lubricated)
- **Fasteners:** Corrosion-resistant steel

Custom material combinations available for severe service.

### Technical Data (General Range)

#### Hydraulic Performance

- **Capacity Range:** Up to approx. **400 m<sup>3</sup>/hr**
- **Head Range:** Up to approx. **80 m**
- **Operating Speed:** Typically **1450 RPM / 2900 RPM**
- **Flow Type:** Radial flow centrifugal

#### Mechanical Limits

- **Shaft Length (Immersion):** Customizable for varying sump depths
- **Bearing Arrangement:** All bearings located above liquid level
- **Lubrication:** Oil or grease lubricated bearings

#### Liquid Handling

- **Liquid Type:** Clean, dirty, corrosive, or solids-laden liquids
- **Solids Handling:** Suitable for suspended solids
- **Maximum Liquid Temperature:**
  - Standard materials: up to **90°C**
  - Special materials: higher on request

#### Power & Drive

- **Driver:** Electric motor
- **Motor Mounting:** Vertical, flexible or rigid coupling
- **Power Supply:** 3-phase, 50 Hz / 60 Hz

### Installation & Maintenance

#### Installation

- Base plate mounted over sump or pit
- No priming required (flooded suction)
- Suitable for indoor and outdoor installations

#### Maintenance

- No submerged wear components
- Easy bearing inspection and replacement
- Reduced downtime due to simple cantilever design

### Design Advantages

- No submerged bearings or mechanical seals
- High reliability in corrosive and abrasive services
- Low maintenance and extended service life
- Safe operation in open sump conditions
- Simple, rugged construction
- Wide material and configuration flexibility



## GHE SERIES OVERVIEW

The GHE Series by GLOBE STAR is a specialized range of non-metallic centrifugal pumps featuring a semi-open impeller design, developed for handling corrosive, aggressive, and contaminated chemicals in demanding industrial environments.

The non-metallic construction ensures excellent corrosion resistance, while the semi-open impeller allows reliable pumping of liquids containing light solids or impurities.

### Typical Applications

- Chemical processing plants
- Acid & alkali transfer
- Filter press feeding & scrubber
- Acid Pickling and plating industries
- Paints, inks & coatings
- Battery, electronics & specialty chemical plants
- Effluent and chemical wastewater transfer

### Pump Design & Construction

#### Design Concept

- Horizontal, end-suction, single-stage centrifugal pump
- Designed exclusively for corrosive and chemical service
- Back pull-out construction for ease of maintenance

#### Semi-Open Impeller Design

- Semi-Open Radial Impeller
- Handles liquids with light solids and impurities
- Reduces clogging compared to closed impellers
- Suitable for viscous and chemically aggressive fluids

#### Adjustable Impeller Clearance

- Maintains hydraulic efficiency over time
- Compensates for wear due to suspended particles

#### Key Construction Features

- Thick-Walled Non-Metallic Casing – High chemical resistance, excellent impact and abrasion strength
- Rigid Shaft Design – Ensures smooth, vibration-free operation
- Back Pull-Out Assembly – Allows quick inspection and servicing

### Materials of Construction (Non-Metallic)

- Pump Casing: Polypropylene (PP), PVDF
- Impeller: PP / PVDF
- Shaft: EN8 / SS
- Shaft Sleeve: Ceramic / SS
- Seal Faces: GFT / CERAMIC / PTFE Bellow
- Elastomers: PTFE

## POLYPROPYLENE PUMP

### Pump Specifications

PARAMETER	SPECIFICATION
Pump Type	Non-Metallic End-Suction Centrifugal
Impeller Type	Semi-Open Radial Impeller
Flow Capacity	Up to 60 m <sup>3</sup> /hr
Total Head	Up to 30 m
Maximum Operating Pressure	10 bar
Maximum Liquid Temperature	120°C (material dependent)
Speed	1450 / 2900 RPM
Installation	Horizontal
Sealing Options	Gland Packing / Mechanical Seal

### Design Advantages

- Complete corrosion resistance
- Semi-open impeller handles contaminated fluids
- Lightweight yet robust construction
- Reduced maintenance and longer service life
- Suitable for aggressive chemical duty
- Back pull-out design for easy servicing

### Installation Options

- Base plate mounted pump
- Flexible coupling arrangement
- Pipeline-mounted horizontal installation



## GMP SERIES OVERVIEW

The **GMP Series** by **GLOBE STAR** is a range of heavy-duty **self-priming centrifugal mud pumps** designed for dependable performance in water, waste water, effluent and general fluid transfer applications. Built with a rugged construction and service-friendly design, the GMP Series ensures reliable operation even under demanding site conditions.

These pumps are engineered to handle air-entrained liquids and resume pumping automatically, making them ideal for intermittent and mobile operations.

### Pump Applications

The **GMP Series** is suitable for a wide variety of industrial, municipal, sewage, dewatering.

#### Water Transfer & Circulation

- Raw water pumping
- General service water systems

#### Drainage & Dewatering

- Construction site dewatering
- Pit, sump, and trench drainage
- Flood water removal

#### Wastewater Handling

- ETP, STP
- Light contaminated liquids
- Effluent and drainage systems

### Key Construction Features

#### Self-Priming Volute Casing

- Ensures rapid priming and consistent suction lift performance.

#### Radial Flow Impeller

- Designed for stable hydraulic efficiency and smooth flow characteristics.

#### Overhung Shaft Design

- Allows easy access to rotating components and simplifies maintenance.

#### Integrated Non-Return Valve

- Prevents backflow and supports reliable priming during start-up.

#### Bearing Housing Assembly

- Heavy-duty grease-lubricated bearings ensure long service life.

## SELF PRIMING MUD PUMP

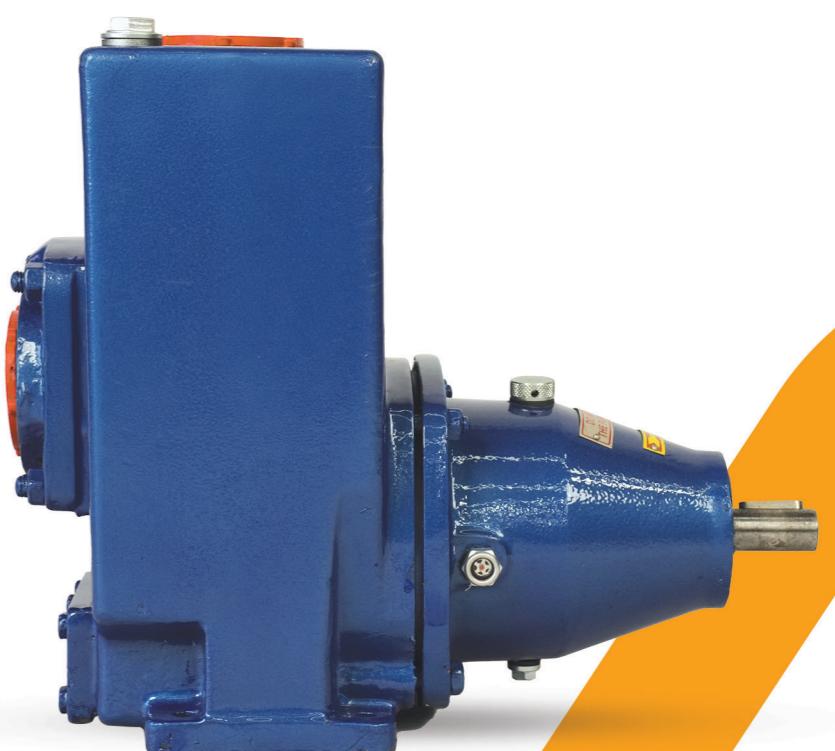
### Technical Specifications

PARAMETER	SPECIFICATION
Pump Type	Self-Priming Centrifugal Type
Max Flow Capacity	Up to 75 LPS / 75 m³/hr
Total Head	Up to 35 mtr
Maximum Liquid Temperature	90 degree
Speed Range	Up to 2900 / 1440 rpm
Mounting Options	Base mounted / Close-coupled
Rotation	Clockwise
Sealing Option	Gland Packing / Mechanical Seal

*Performance values may vary based on pump size and configuration.*

### Materials of Construction

- **Pump Casing:** Cast Iron / Stainless Steel
- **Impeller:** Cast Iron / Stainless Steel
- **Pump Shaft:** EN8 / Stainless Steel
- **Fasteners:** Stainless Steel (optional)



## GSSS PRODUCT OVERVIEW

### PORTABLE SUBMERSIBLE DEWATERING PUMP

The GSSS Series by GLOBE STAR is specially engineered for continuous submerged operation, where the pump and motor operate fully immersed in sewage, wastewater, or raw water environments.

This series is designed for wet-well, sump, and flooded chamber installations, ensuring reliable pumping performance even under prolonged submerged conditions.

#### Typical Applications

- Wet well sewage pumping stations
- Submerged sump and pit pumping
- Flooded basements and utility chambers
- Sewage Treatment Plants (STP)
- Effluent Treatment Plants (ETP)
- Storm water and drainage systems
- Industrial wastewater sumps

#### Design Standards & Compliance

##### Design Standards

- IS 13592 – Sewage & wastewater centrifugal pumps
- ISO 5199 – Technical specifications for centrifugal pumps
- DIN / EN wastewater pump design standards

##### Flange Standards

- DIN EN 1092-1 – PN10 / PN16
- IS 1538 / IS 6392
- ANSI B16.5 – Class 150 (optional)

#### Pump & Motor Design for Submerged Duty

##### Hydraulic Design

##### Non-Clog / Vortex Impeller

Allows free passage of solids and fibrous material  
Prevents clogging during submerged operation

##### Wide Volute Casing

Reduces turbulence and wear

Maintains stable hydraulic performance underwater

#### Jacketed Motor Design (Submerged Operation)

The GSSS Series is supplied with special jacketed induction motors, specifically designed for submerged duty.

##### Key Jacketed Motor Features

###### Water-Cooled Jacket Construction

Motor cooling is achieved through the surrounding liquid, eliminating the need for air cooling.

###### Designed for Continuous Submergence

Suitable for long-duration submerged operation without thermal overload.

###### High Ingress Protection

IP68 rated motor enclosure for safe operation under water.

###### Insulation Class

Class F / Class H insulation for superior thermal resistance.

###### Moisture Protection

Double mechanical seals with oil chamber for motor protection.

###### Corrosion Resistant Finish

Motor body and fasteners suitable for sewage and wastewater environments.

#### Pump Specifications

PARAMETER	SPECIFICATION
Pump Type	Submersible Non-Clog design
Installation	Fully Submerged
Flow Capacity	Up to 120 m <sup>3</sup> /hr
Total Head	Up to 55 m
Solid Handling Size	Up to 50 mm
Maximum Liquid Temperature	80°C
Speed	2900 RPM
Motor Type	Jacketed Water-Cooled
Motor Protection	IP68
Duty	Continuous (s1)

#### Materials of Construction

**Pump Casing:** Cast Iron / Ductile Iron / Stainless Steel

**Impeller:** Cast Iron / Ductile Iron / Stainless Steel

**Shaft:** Stainless Steel

**Mechanical Seal:** Tungsten Carbide / SIC

**Fasteners:** Stainless Steel (optional)

#### Installation & Mounting

Wet-well floor mounted

Guide rail installation (optional)

Free-standing submerged installation

Fixed discharge connection with flanged outlet

#### Design Advantages for Submerged Supply

- Designed exclusively for submerged conditions
- Jacketed motor ensures efficient cooling underwater
- Non-clog performance with high solids handling
- Compact footprint for confined wet wells
- Reduced noise and vibration
- Long service life in harsh environments



## GSSH PRODUCT OVERVIEW

The GSSH Series by GLOBE STAR is specially engineered for **continuous submerged operation**, where the **pump and motor operate fully immersed** in sewage, waste water, raw water or storm water environments.

This series is designed for **wet-well, sump, and flooded chamber installations**, ensuring reliable pumping performance even under prolonged submerged conditions.

### Typical Applications

- Wet well sewage pumping stations
- Submerged sump and pit pumping
- Flooded basements and utility chambers
- Sewage Treatment Plants (STP)
- Effluent Treatment Plants (ETP)
- Storm water and drainage systems
- Industrial wastewater, municipal sumps

### Design Standards & Compliance

#### Design Standards

- IS 13592 – Sewage & wastewater centrifugal pumps
- ISO 5199 – Technical specifications for centrifugal pumps
- DIN / EN wastewater pump design standards

#### Flange Standards

- DIN EN 1092-1 – PN10 / PN16
- IS 1538 / IS 6392
- ANSI B16.5 – Class 150 (optional)

### Pump & Motor Design for Submerged Duty

#### Hydraulic Design

- Non-Clog / Vortex Impeller / Dual Channel
  - Allows free passage of solids and fibrous material
  - Prevents clogging during submerged operation

- Wide Volute Casing
  - Reduces turbulence and wear
  - Maintains stable hydraulic performance underwater

#### Jacketed Motor Design (Submerged Operation)

The GSSH Series is supplied with **special jacketed induction motors**, specifically designed for **submerged duty**.

### Key Jacketed Motor Features

- **Water-Cooled Jacket Construction**  
Motor cooling is achieved through the surrounding liquid, eliminating the need for air cooling.
- **Designed for Continuous Submergence**  
Suitable for long-duration submerged operation without thermal overload.
- **High Ingress Protection**  
IP68 rated motor enclosure for safe operation under water.
- **Insulation Class**  
Class / Class H insulation for superior thermal resistance.
- **Moisture Protection**  
Double mechanical seals with oil chamber for motor protection.
- **Corrosion Resistant Finish**  
Motor body and fasteners suitable for sewage and wastewater environments.

## SEWAGE SUBMERSIBLE PUMP

### Pump Specifications

PARAMETER	SPECIFICATION
Pump Type	Sewage Submersible
Installation	Fully Submerged
Flow Capacity	<b>Up to 650 m<sup>3</sup>/hr</b>
Total Head	<b>Up to 50 m</b>
Solid Handling Size	<b>Up to 100 mm</b>
Maximum Liquid Temperature	<b>80°C</b>
Speed	1440 RPM
Motor Protection	IP68
Duty	Continuous (S1)

### Materials of Construction

- **Pump Casing:** Cast Iron / SS / HIGH CHROME / NI-HARD
- **Impeller:** Cast Iron / Stainless Steel / High Chrome / NI-Hard
- **Shaft:** Stainless Steel
- **Mechanical Seal:** Tungsten Carbide / SIC
- **Fasteners:** Stainless Steel (optional)

### Installation & Mounting

- Wet-well floor mounted
- Guide rail installation, auto coupling (optional), chain pulley
- Free-standing submerged installation
- Fixed discharge connection with flanged outlet

### Design Advantages for Submerged Supply

- Designed exclusively for submerged conditions
- Jacketed motor ensures efficient cooling underwater
- Non-clog performance with high solids handling
- Compact footprint for confined wet wells
- Reduced noise and vibration
- Long service life in harsh environments



## GSCD SERIES OVERVIEW

### DEWATERING PUMP (TOP DISCHARGE)

#### GSCD SERIES –SUBMERSIBLE DEWATERING CENTER LINE TOP DISCHARGE PUMP (2900 RPM)

The **Globe star GSCD Series**, is engineered to deliver reliable, high-speed performance for demanding drainage and dewatering applications. Designed for operation at **2900 RPM**, this series combines rugged mechanical construction with efficient hydraulic design to ensure dependable service in harsh and abrasive environments.

The GSCD range emphasizes durability, ease of maintenance, and consistent performance, making the GSCD Series suitable for continuous and intermittent duty across construction, industrial, mining, and municipal sectors.

#### Applicable Design & Compliance Standards

The Globe Star GSCD Series pumps are designed and manufactured in accordance with internationally recognized engineering and quality standards to ensure safety, reliability, and consistent performance.

- Designed in line with ISO hydraulic performance guidelines
- Manufacturing quality aligned with ISO 9001 Quality Management Systems
- Electrical motors suitable for IEC standards
- Dimensional and tolerance control as per applicable ISO / DIN practices
- Compliance with standard industrial safety and environmental norms

#### Pump Applications

The GSCD Series is intended for heavy-duty drainage and dewatering services in demanding operating conditions.

- Construction site dewatering
- Excavation pits, basements, and foundation works
- Mining, quarry, and mineral processing drainage
- Tunnel and underground infrastructure projects
- Municipal stormwater and flood control
- Industrial plant drainage and utility services
- Emergency and temporary water removal

Suitable for handling **dirty water containing fine suspended solids**.

#### Pump Design & Construction

The GSCD Series features a rugged, industrial-grade design optimized for high-speed operation.

- Compact, robust construction for portable and fixed installations
- Heavy-duty casing designed for mechanical strength and longevity
- Precision-engineered impeller for stable hydraulic performance
- High-strength shaft to minimize deflection during operation
- Design facilitates ease of inspection and maintenance

#### Pump Specifications

The GSCD Series incorporates features specifically suited for drainage and dewatering duties.

- Non-clogging hydraulic passages for solids-laden liquids
- High discharge rates with stable head characteristics
- Efficient operation across a wide duty range
- Reliable mechanical sealing system to prevent leakage
- Heavy-duty bearing arrangement for extended service life
- Designed for continuous or intermittent operation

### DEWATERING PUMP (TOP DISCHARGE)

PARAMETER	SPECIFICATION
Pump Type	Sewage Submersible (Centerline Top Discharged)
Installation	Fully Submerged
Flow Capacity	Up to 5500 LPM
Total Head	Up to 55 m
Solid Handling Size	Up to 80 mm
Maximum Liquid Temperature	50°C
Speed	2900 RPM
Motor Protection	IP68
Duty	Continuous (S1)

#### Materials of Construction

Materials are selected to ensure strength, abrasion resistance, and long operational life.

- Pump Casing: Heavy-duty Cast Iron / Abrasion-resistant alloy
- Impeller: Cast Iron / SS
- Shaft: Stainless Steel or high-strength alloy steel
- Wear Components: Hardened metallic parts
- Mechanical Seal Faces: Tungsten Carbide / SIC
- Fasteners: Corrosion-resistant steel

Final material selection may vary based on application requirements.

#### Design Advantages

The **Globe star GSCD Series** offers significant operational and lifecycle benefits.

- High-speed design ensures rapid and efficient dewatering
- Rugged construction suitable for harsh site conditions
- Reduced maintenance and extended service intervals
- Consistent hydraulic performance with high reliability
- Simple installation and easy servicing
- Adaptable for temporary or permanent installations



## GSAC SERIES OVERVIEW

Thermic Fluid / Hot Oil Pumps – Horizontal, End-Suction Centrifugal Type

The Globestar GSAC Series pumps are designed for circulation of thermic fluids, heat transfer oils, and other high-temperature liquids in closed-loop heating systems. The series delivers reliable, continuous flow under high temperatures and pressures, ensuring safe and efficient heat transfer in industrial processes.

The GSAC Series emphasizes robust construction, high efficiency, and thermal safety, making it suitable for power, chemical, process, and manufacturing industries where precise fluid circulation is critical.

### Applicable Design & Compliance Standards

The GSAC Series pumps are engineered and manufactured in accordance with international standards for hot fluid pumping.

- Horizontal, end-suction centrifugal pump design
- Manufacturing quality aligned with ISO 9001 Quality Management Systems
- Compliance with DIN / EN / ISO standards for centrifugal pumps
- Bearings, seals, and casing materials rated for high-temperature service
- Designed for thermic fluids with operating temperatures typically up to 350°C
- Safety and operational compliance per industrial thermic fluid system standards

### Pump Applications

The GSAC Series is suitable for industrial and process heating systems requiring continuous circulation of thermic or high-temperature fluids.

- Thermic fluid / hot oil circulation in closed-loop systems
- Process heating in chemical plants, refineries, and polymer industries
- Heat transfer in food, pharma, and specialty chemical plants
- Steam replacement heating systems
- Hot oil circulation for reactors, tanks, and heat exchangers
- Thermal fluid circulation in power plants and co-generation units
- District heating systems
- Bitumen and asphalt heating circuits
- Molten wax, tar, or specialty liquids in industrial processes
- Industrial dryers and ovens requiring stable thermal fluid supply

### Pump Design & Construction

The GSAC Series is a horizontal, end-suction centrifugal pump optimized for high-temperature, high-viscosity fluids.

- Single-stage or multi-stage horizontal configuration
- Rigid pump casing designed for high temperature and thermal expansion
- High-efficiency impeller designed for thermic fluids
- Shaft supported by heavy-duty bearings capable of withstanding thermal stress
- Mechanical seal arrangement suitable for continuous high-temperature service
- Suction and discharge flanges designed per standard industrial piping dimensions

### Pump Specifications

- Designed for continuous circulation of thermic fluids
- Low vibration and stable hydraulic performance
- Flow proportional to pump speed; stable under varying viscosity
- Can operate under full vacuum or pressurized discharge conditions
- Compact baseplate design for easy installation
- Suitable for direct or coupling-driven motors (electric or steam)

## THERMIC FLUID HOT OIL PUMP

### Materials of Construction

Materials are selected for high-temperature resistance, corrosion, and thermal stability.

- Pump Casing: Carbon Steel, Stainless Steel
- Impeller: Carbon Steel, Stainless Steel
- Shaft: Alloy Steel or Stainless Steel
- Bearings: Heavy-duty antifriction or sleeve bearings with high-temperature grease or oil lubrication (ZZ C4 bearing)
- Seals: High-temperature mechanical seals (single or double)
- Fasteners: High-temperature, corrosion-resistant steel

### Technical Data (General Range)

#### Hydraulic Performance

- Flow Range: Up to approx. 150 m³/hr (depending on pump size)
- Head Range: Up to approx. 80 mtr
- Operating Temperature: Up to approx. 350°C (depending on material and seal selection)
- Operating Pressure: Up to approx. 16 bar per stage
- Pump Type: Radial flow, horizontal, single or multi-stage, air cooled

#### Fluid Handling Capability

- Liquid Type: Thermic fluids, hot oils, high-temperature liquids
- Viscosity Range: Up to ~1000 cSt
- Solids Content: Low; not designed for high solids

#### Mechanical & Drive

- Shaft Length: Standard; customizable for baseplate or skid installation
- Drive: Electric motor, VFD-controlled motor
- Bearings: Designed for thermal expansion compensation and high-temperature operation

### Installation & Maintenance

#### Installation

- Horizontal installation on baseplate or skid
- Suitable for indoor or outdoor locations
- Suction and discharge connections per standard flange sizes
- Thermal expansion accounted for in piping and base design

#### Maintenance

- Easy access to mechanical seal and bearings
- Modular design for quick disassembly and reassembly
- Predictable wear patterns for planned maintenance
- Designed for long-term operation under continuous high-temperature duty

#### Design Advantages

- High reliability in thermic fluid circulation systems
- Stable hydraulic performance under high-temperature operation
- Robust construction with low maintenance requirements
- Wide material and seal options for temperature and fluid compatibility
- Compact horizontal design suitable for industrial and process plants
- Safe operation in closed-loop heating systems
- Easy inspection, maintenance, and component replacement



## GGP SERIES OVERVIEW

### GEAR PUMPS – POSITIVE DISPLACEMENT TYPE

The Globestar GGP Series gear pumps are precision-engineered positive displacement pumps designed for accurate, continuous, and pulse-free transfer of clean and moderately viscous fluids. The series delivers consistent flow proportional to rotational speed, ensuring reliable performance independent of system pressure variations.

Designed for industrial reliability, the GGP Series combines robust mechanical construction, high volumetric efficiency, and compact design, making it suitable for a wide range of fluid handling and process applications.

### Applicable Design & Compliance Standards

The Globestar GGP Series pumps are designed and manufactured in accordance with internationally recognized engineering and quality standards

- Designed based on positive displacement pump design principles
- Manufacturing quality aligned with ISO 9001 Quality Management Systems
- Dimensional tolerances maintained as per ISO / DIN standards
- Compatible with electric motors conforming to IEC standards
- Designed to meet standard industrial safety and operational requirements

### Pump Applications

The Globestar GGP Series is suitable for handling clean, lubricating, and moderately viscous fluids across diverse industries where controlled and reliable flow delivery is required.

#### Industrial & Process Applications

- Industrial lubrication systems
- Hydraulic oil circulation and transfer
- Machine tool lubrication
- Gearbox and bearing oil supply
- Heat transfer oil circulation

#### Energy & Power Sector

- Fuel oil transfer systems
- Diesel and light furnace oil handling
- Burner feed systems
- Lube oil circulation in power plants
- Generator and turbine lubrication

#### Food, Pharma & Specialty Applications

- (Subject to suitable material and seal selection)
- Edible oil transfer
  - Syrups and non-solid food-grade liquids
  - Pharmaceutical intermediates
  - Cosmetic oils and formulations

## ROTARY GEAR PUMP

Pump Model	Suc x Dis.	Capacity at 1440 RPM			Recommended motor BHP at Difference Pressure / Head Kg/cm <sup>2</sup> with 1500 SSU Viscosity										WT. of Bare Pump in Kg.	
		LPM GPM M3/hr			Kg/cm <sup>2</sup> 1 2 3 4 5 6 7 8 9 10											
		METER	10	20	30	40	50	60	70	80	90	100				
GGP-50	1/2"x1/2"	20	5.3	1.2	KW	0.3	1.35	0.4	0.45	0.5	0.55	0.6	0.65	0.7	0.75	2.2
					HP		0.5			0.75			1			
GGP-75	3/4"x3/4"	30	7.9	1.8	KW	0.37	1.45	0.54	0.62	0.69	0.77	0.85	0.92	1.01	1.09	4.2
					HP		0.75			1			1.5			
GGP-100	1"x1"	50	13	3	KW	0.4	1.5	0.6	0.75	0.89	1.04	1.17	1.3	1.46	1.59	5
					HP		1			1.5			2			
GGP-125	1 1/4"x1 1/4"	75	20	4.5	KW	0.7	1	1.2	1.4	1.5	1.9	1.95	2.15	2.35	2.55	8
					HP		1.5			2			3			
GGP-150	1 1/2"x1 1/2"	110	29	6.6	KW	1.05	1.45	1.95	2.1	2.4	2.65	2.95	3.25	3.6	3.75	9.5
					HP		2			3			5			
GGP-200	2"x2"	225	59	13.5	KW	2	2.5	3.2	3.75	4.3	4.55	5.6	6.2	6.9	7.11	17.2
					HP		3			5			7.5			
GGP-250	2 1/2"x2 1/2"	350	93	21	KW	4.15	5.2	6.1	7.3	8.2	9.1	10.3	11.2	12.1	12.25	28.5
					HP		5			10			12.5			
GGP-300	3"x3"	500	132	30	KW	4.5	6.6	6.4	9.9	11.1	12.1	13	13.9	14.9	15.9	40
					HP		10			15			20			

### Pump Design & Construction

The GGP Series is based on a precision external gear pump design, ensuring accurate volumetric displacement and smooth fluid transfer.

- External gear configuration with precision-machined gears
- Close internal clearances for high volumetric efficiency
- Rigid casing to maintain alignment under operating loads
- Compact construction suitable for inline or skid-mounted installations
- Shaft and gear arrangement designed for smooth torque transmission

Fluid is transported by being trapped between the gear teeth and the casing and carried from the suction side to the discharge side with minimal pulsation.

### Pump Specifications

The GGP Series incorporates features that ensure consistent and reliable operation in industrial service.

- Positive displacement operation with uniform, pulse-free flow
- Flow rate directly proportional to pump speed
- Capable of handling a wide range of viscosities
- Self-priming capability under normal operating conditions
- Bi-directional operation (subject to sealing arrangement)
- Stable performance across varying discharge pressures
- Designed for continuous or intermittent duty

### Materials of Construction

Materials are carefully selected to ensure durability, wear resistance, and compatibility with pumped fluids.

- Pump Casing: Cast Iron / Carbon Steel / Alloy Steel
- Gears: Hardened alloy steel or precision-machined steel
- Shaft: High-strength alloy steel or stainless steel
- Bushings / Bearings: Bronze / Carbon / Alloy materials
- Sealing Arrangement: Mechanical seal or gland packing
- Fasteners: Corrosion-resistant steel



## GSPC SERIES OVERVIEW

### PROGRESSIVE CAVITY SCREW PUMP

#### PROGRESSIVE CAVITY PUMPS – STANDARD INDUSTRIAL DESIGN

**Pump Type:** Progressive Cavity Pump (Positive Displacement)

**Design:** Single Rotor–Stator, Helical Geometry

The **Globe star GSPC Series** progressive cavity pumps designed for **smooth, low-pulsation transfer of viscous, abrasive, shear-sensitive, and solids-laden fluids**. The series is engineered for **continuous, controlled flow** across a wide range of viscosities and operating pressures. Based on the proven progressive cavity pumping principle, the GSPC Series delivers **constant flow proportional to speed**, independent of pressure variations, making it ideal for demanding industrial and process applications.

#### Applicable Design & Compliance Standards

The Globestar GSPC Series pumps are designed and manufactured in accordance with recognized international standards and industry practices.

- Designed based on **progressive cavity (PC) pump principles**
- Manufacturing quality aligned with **ISO 9001 Quality Management Systems**
- Dimensional tolerances as per **ISO / DIN standards**
- Motors suitable for **IEC standards**
- Designed to meet standard industrial safety and environmental requirements
- Suitable for continuous industrial and process duty

#### Pump Applications

The GSPC Series is suitable for handling a wide variety of **difficult-to-pump fluids** across multiple industries.

#### Industrial & Process Applications

- Sludge and slurry transfer
- Effluent and waste handling
- Filter press feed
- Thickened liquids and pastes
- Dosing and metering applications

#### Food & Beverage Industry

- Fruit pulps and concentrates
- Syrups, sauces, and pastes
- Dairy products
- Starch and glucose solutions

#### Mining, Power & Infrastructure

- Mine tailings and slurries
- Coal slurry and ash handling
- Cement slurry and grout pumping
- Dewatering with solids

#### Pump Design & Construction

The GSPC Series is based on a **single-helical rotor** rotating within a **double-helical elastomer stator**, forming sealed cavities that move fluid axially.

- Positive displacement, non-pulsating flow
- Rotor manufactured from high-strength alloy steel with hardened surface
- Elastomer stator molded for accurate cavity formation
- Modular construction for ease of maintenance
- Compact design suitable for skid or base-mounted installations

The pumping action ensures gentle handling of sensitive fluids with minimal shear.

#### Pump Specifications

- Flow rate directly proportional to pump speed
- Capable of handling very high viscosities
- Excellent solids handling capability
- Self-priming under normal operating conditions
- Reversible flow (with suitable drive and seal arrangement)
- Constant flow regardless of pressure fluctuations
- Suitable for continuous or intermittent operation

#### Materials of Construction

Materials are selected to suit corrosion, abrasion, temperature, and fluid compatibility requirements.

- **Pump Casing:** Cast Iron / Carbon Steel / Stainless Steel
- **Rotor:** Alloy Steel with hardened or chrome-plated surface / Stainless Steel
- **Stator:** Nitrile (NBR), EPDM, Neoprene, Viton, or other elastomers
- **Drive Shaft:** Alloy Steel / Stainless Steel
- **Universal Joints:** Hardened steel with pin or gear type
- **Sealing Arrangement:** Gland packing or mechanical seal
- **Fasteners:** Corrosion-resistant steel

Material combinations can be customized for specific applications.

#### Technical Data (General Range)

##### Hydraulic Performance

- Capacity Range: From very low dosing flows up to approx. 35 m<sup>3</sup>/hr
- Differential Pressure: Up to approx. 12 kg/cm<sup>2</sup> (multi-stage)
- Operating Speed: Low to medium RPM (variable via gearbox / VFD)
- Flow Characteristics: Smooth, continuous, low pulsation

##### Fluid Handling Capability

- Viscosity Range: From water-like fluids up to extremely high viscosities
- Solids Content: High solids concentration possible
- Solids Size: Dependent on pump size and rotor–stator geometry
- Shear Sensitivity: Excellent (gentle pumping action)

##### Operating Limits

- Maximum Liquid Temperature:
  - Standard elastomers: up to 90°C
  - Special elastomers: higher on request
- Suction Lift: Good self-priming capability under standard conditions

#### Design Advantages

- Smooth, pulse-free flow
- Excellent handling of viscous and solids-laden fluids
- Accurate and repeatable flow control
- Gentle pumping for shear-sensitive media
- Self-priming and dry-running tolerant (limited duration)
- Easy maintenance and long service life
- Wide application flexibility

#### Drive & Installation

##### Drive Options

- Electric motor with reduction gearbox
- VFD-controlled drive for flow regulation
- Flexible coupling or direct drive

##### Installation

- Horizontal
- Base frame or skid mounted
- Suitable for indoor and outdoor installations

#### Maintenance Philosophy

- Simple disassembly and assembly
- Wear parts limited mainly to rotor and stator
- Predictable wear pattern for planned maintenance
- Reduced downtime due to modular design



## GSLB SERIES OVERVIEW

### Rotary Lobe Pumps – Positive Displacement Type

The Globestar GSLB Series rotary lobe pumps are designed for **gentle, low-pulsation transfer of viscous, shear-sensitive, and solids-containing fluids**. The series is engineered to handle **high-viscosity liquids, slurries, and fluids with entrained solids**, with continuous, pulse-free flow and high reliability.

With robust construction, wide material selection, and easy maintenance, the GSLB Series is ideal for **industrial, chemical, food, and wastewater applications**.

### LOBE PUMP

### Applicable Design & Compliance Standards

The GSLB Series pumps are designed and manufactured in compliance with recognized engineering standards:

- Rotary lobe pump design based on **positive displacement principles**
- Manufacturing aligned with **ISO 9001 Quality Management Systems**
- Dimensional tolerances per **ISO / DIN standards**
- Drive and motor interfaces as per **IEC standards**
- Suitable for standard industrial safety and environmental requirements

### Pump Applications

The GSLB Series is suitable for **industrial, chemical, food, and utility applications** where controlled flow and solids handling are required.

### Industrial & Process Applications

- Pharma and food application
- Paints, coatings, and cosmetics
- Polymers and resins
- Slurries, pastes, and adhesives

### Food & Beverage Industry

- Sauces, pastes, and syrups
- Dairy products and creams
- Fruit pulps and concentrates
- Chocolate and viscous liquids

### Pharmaceutical & Cosmetics

- Creams, gels, and lotions
- Shampoos, conditioners, and cosmetic pastes

### Pump Design & Construction

The GSLB Series is a **rotary lobe pump** featuring **intermeshing lobes in a precision casing**, forming sealed cavities to transfer fluid.

- Positive displacement, low-pulsation flow
- Bi-rotational lobe design
- Modular construction for easy maintenance
- Compact, heavy-duty design suitable for base or skid mounting
- Close-tolerance casing and lobes for volumetric efficiency

• The intermeshing lobes ensure gentle handling of shear-sensitive or viscous media.

### LOBE PUMP

### Materials of Construction

Materials are chosen for corrosion, abrasion, and fluid compatibility:

- **Casing:** Stainless Steel 316
- **Lobes:** Stainless Steel 316
- **Shafts:** High-strength alloy steel or stainless steel
- **Seals:** Mechanical seal or lip/gland type
- **Bearings:** Heavy-duty antifriction or sleeve bearings
- **Fasteners:** Corrosion-resistant steel

Material combinations can be customized to match fluid properties and operating conditions.

### Technical Data

#### Hydraulic Performance

- **Capacity Range:** Up to approx. **48 m³/hr**
- **Pressure Range:** Up to approx. **7 bar** (depending on size)
- **Operating Speed:** Typically low to medium RPM using vfd or gear motor
- **Flow Characteristics:** Smooth, continuous, low pulsation

#### Mechanical & Drive

- Shaft length: Standard, customizable for specific installations
- Drive: Electric motor, VFD-controlled, or gear-reduced drive
- Mounting: Base, skid, or inline as required

### Installation & Maintenance

#### Installation

- Compact design for skid or floor mounting
- Self-priming under standard conditions
- Indoor or outdoor installation possible

#### Maintenance

- Modular design with removable casing and lobes
- Minimal wear parts (mainly lobes and seals)
- Quick disassembly and reassembly for routine maintenance

### Design Advantages

- Smooth, low-pulsation, shear-friendly operation
- High reliability in viscous and solids-containing fluids
- Reversible flow capability
- Simple maintenance with long service intervals
- Wide material and configuration options
- Suitable for food, chemical, and industrial applications



## GCVF SERIES OVERVIEW

### VERTICAL MULTISTAGE CENTRIFUGAL PUMPS – NON-SELF-PRIMING

Pump Maker: Globestar

Series Name: GCVF

Pump Type: Vertical Multistage Centrifugal Pump

Application: Water, Process Liquids, Industrial Utility

The Globestar GCVF Series pumps are designed for high-head, high-pressure vertical pumping applications. Their non-self-priming multistage centrifugal design makes them ideal for boiler feed, water circulation, pressure boosting, and industrial process liquids. The vertical construction saves floor space, allows direct coupling to motors, and is suitable for continuous operation in industrial and process environments.

### Applicable Design & Compliance Standards

- Vertical multistage centrifugal pump principles
- Manufacturing aligned with ISO 9001 Quality Management Systems
- Hydraulic and mechanical design per ISO / EN / DIN standards
- Motor compatibility per IEC standards
- Designed for industrial water, process liquids, and light chemical fluids
- Non-self-priming, vertical configuration for space-constrained installations

### Pump Applications

The GCVF Series is suitable for high-head fluid circulation where a vertical multistage pump is preferred:

- Boiler feed water systems
- Industrial water supply and circulation
- Pressure boosting in municipal and industrial applications
- Cooling water and closed-loop process circulation
- Firefighting water systems
- Desalination and reverse osmosis feed pumps
- Light chemical and process liquid transfer

### Pump Design & Construction

- Vertical, multistage, non-self-priming centrifugal design
- Single or multiple impellers mounted on a vertical shaft
- Close-coupled or line-shaft configuration depending on duty
- Bearings sized for vertical loading and axial thrust
- Mechanical seals for leak-proof operation
- Modular stage assembly for easy maintenance and adaptability
- Impellers optimized for high efficiency at design flow

### Materials of Construction

- Casing: Cast Iron / Carbon Steel / Stainless Steel
- Impellers: Bronze, Stainless Steel, or Alloy Steel
- Shaft: Alloy Steel or Stainless Steel
- Bearings: Heavy-duty sleeve or antifriction
- Seals: Single or double mechanical seals suitable for process fluids
- Fasteners: Corrosion-resistant steel
- Material selection depends on fluid type, temperature, and chemical compatibility.

Material selection depends on fluid type, temperature, and chemical compatibility.

## VERTICAL INLINE MULTISTAGE PUMP

### Pump Specifications

- High-head, vertical discharge capability
- Non-self-priming (requires flooded suction or suction tank)
- Flow rate proportional to pump speed
- Continuous duty, low vibration
- Can be directly coupled to motors or gear drives
- Axial and radial loads accommodated by thrust bearings

### Technical Data (General Range)

#### Hydraulic Performance

- Capacity Range: 1 – 100 m<sup>3</sup>/hr (depending on stages)
- Head per Stage: Up to 228 mtr (total head proportional to number of stages)
- Pressure Range: Up to 25 bar
- Operating Speed: 2900 rpm
- Fluid Temperature: -20°C to 120°C (higher with special materials)

#### Mechanical & Drive

- Motor-driven vertical shaft
- Base-mounted or direct coupling
- Optional line-shaft bearings for taller configurations
- Standard vertical mounting reduces floor footprint

### Installation & Maintenance

- Requires flooded suction or supply tank for proper operation
- Vertical alignment simplifies pipe layout
- Bearings and mechanical seals designed for easy maintenance
- Modular stage assembly allows maintenance without full pump removal
- Continuous operation capable

### Design Advantages

- High-head capability with compact vertical footprint
- Non-self-priming design ensures simple, reliable operation
- Multistage configuration allows customization of total head
- Modular construction simplifies maintenance and repair
- Flexible material selection for different fluids and temperatures
- High efficiency with stable hydraulic performance

