

**teryair**<sup>®</sup>  
www.teryair.com



**stroke**<sup>®</sup>  
pumps

Engineered to your Advantage





As India's premier pneumatic products manufacturer, Teryair offers a diverse product line-up that delivers excellent value to delighted customers in 40 countries.

We leverage the low-cost manufacturing in India to bring to market products that exhibit the most attractive Quality : Price Ratio. Our passion is to create robust products with some of the highest warranty standards in the industry.

Our highly popular STROKE pumps are manufactured in various materials and offer different elastomer choices to offer solutions to a variety of pumping problems across many industries.



## Certifications

- > ISO 9001: 2008
- > CE (European safety health and environmental Standards)

3 inch Aluminium Pump  
DPB75ALN





## Worldwide Distribution

- |              |            |             |
|--------------|------------|-------------|
| Germany      | Turkey     | Italy       |
| UK           | U.S.A      | Nigeria     |
| S.Korea      | Canada     | Greece      |
| Thailand     | Newzealand | Norway      |
| Panama       | Jordan     | Singapore   |
| Brazil       | Sweden     | China       |
| Denmark      | Belgium    | Netherlands |
| Spain        | Peru       | Qatar       |
| Cyprus       | Indonesia  |             |
| U.A.E        | Kuwait     |             |
| Saudi Arabia | Libya      |             |
| Argentina    | Egypt      |             |
| Algeria      | Bahrain    |             |
| Bulgaria     | Kenya      |             |
| S.Africa     | Iran       |             |





## **Strike Down Costs, Maintain Quality.**

Avail Precision Engineering Expertise, Dependability and a Quality Product at a price that delivers Savings to your clients.

STROKE pumps are high-quality products, yet offer excellent value for money thanks to excellent planning & low-cost manufacturing. Teryair has implemented and practices the ISO 9001:2008 system of Quality Management. All Teryair products carry the CE mark, signifying compliance with health and safety requirements in the European Union.

Teryair seals commitment to quality with tight quality control on input materials, processes, testing and packaging of products. The Teryair factories are close to India's largest seaport, Mumbai. This allows shipping and turnover in the shortest possible time.



1 inch Stainless Steel Pump  
DP25SST



# Your Advantage



**Precision Engineered:**



Cool running and durable

**Robust Design:**



Portability, easy installation and maintenance

**No Rotary Components:**



Ensure Constant Pump Efficiency over the life of the pump

**Variety of fluids:**



Safely pump a variety of viscous, corrosive or abrasive fluids

**Self-Priming:**



Start dry with a high suction head, without priming

**Low Velocity Action:**



Totally prevent shearing and foaming

**Automatic Stop:**



Energy consumption proportional to pumping volumes

**Solid Particle handling:**



Fluids having suspended solids can be safely pumped

**No lubrication needed:**



Dry operation and handling without damage

**Warranty Product:**



2 Year coverage under warranty



## **What our customers say**

Teryair is a delight to work with. I have been purchasing internationally for many years, and would have to put them at the top of my list as to taking care of their customers.

Through the years not only have we purchased their staple products but have also developed with them at least 150-200 other products that are particular to our market. I can honestly say that the developments were all completed well in timely fashion. We have flawlessly instituted these new products into our line.

Regarding the quality of the products themselves - we have sold over 2 million dollars of the products and have never had one single complaint. That to me says something for a product line. So my advice to you is to dive in and collaborate with Teryair.”

*Tim Townsend, Senior Manager,  
Gulf Marine & Industrial Supplies, Inc.  
Houston, Texas  
USA*



PACKAGING INDUSTRY



PAINT INDUSTRY



CHEMICAL INDUSTRY



CONSTRUCTION INDUSTRY



OFFSHORE INDUSTRY



SHIPPING INDUSTRY



CERAMIC INDUSTRY



PHARMA INDUSTRY



MINING INDUSTRY

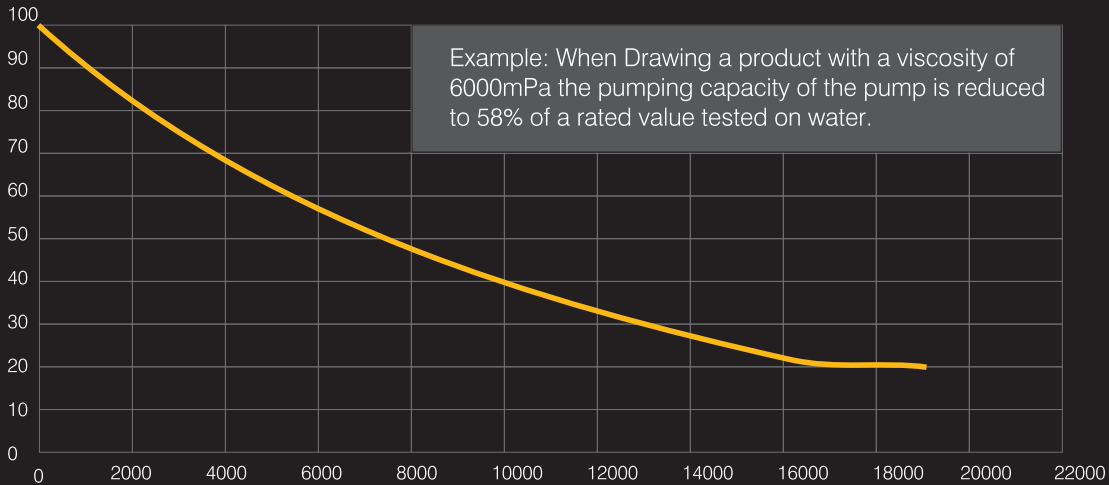
# Stroke Diaphragm Pumps can pump these fluids:

- ▶ **ABRASIVES:** Clay Slips, Titanium dioxide, mill scale
- ▶ **ACIDS:** All mineral and organic acids.
- ▶ **ADHESIVE:** Solvent and water based, Elmer's glue, white good glue, starch adhesive.
- ▶ **ALCOHOLS:** Chemicals.
- ▶ **CAUSTICS:** Acids.
- ▶ **CEMENT:** Cements, mortar, cement slurry, rock slurry, ceiling coating
- ▶ **CERAMICS:** Slip, glazes, Clay, enamel slip, clay slurry, lime slurry, kaolin slurry.
- ▶ **COSMETICS:** Creams, emulsions, detergents, lotions, shampoos, hand creams, hair permanents, soaps.
- ▶ **DRILLING:** Mud, grout, lubricants.
- ▶ **DRINKS:** Soft drinks, Spirits, beer, wine, milk, juice, sugar syrup, fruit pulp, and kaolin slurry.
- ▶ **EXPLOSIVES:** Suspensions of gun powder, explosives, etc.
- ▶ **FOODS:** Liquid and semi-solid foods flavorings, chocolate, vinegar, vegetable oil, soyabean oil.
- ▶ **INKS & DYES:** Printing inks, dryers, dyes, sizea and solvents.
- ▶ **OILS:** Petrol, diesel, hydraulic and cutting oils, lube oils, animal and vegetable oils and greases.
- ▶ **PAINT:** Emulsions, latexes, pigments, solvents, resins, thinners, acrylic, concrete paints, titanium dioxide slurry.



- ▶ **PHARMACEUTICALS:** Liquids, creams and compounds, ointments, filtering aids, waste solvents, blood plasma.
- ▶ **PLATING:** Aggressive acids, salts, sludge and effluents, Anodic sludge, cleaning baths, solvents, filtering.
- ▶ **PULPS:** Paper, wood, sizes, bleaches, latex, adhesives, kaolin clay, paints.
- ▶ **RESINS:** Natural and synthetics, water and solvent based, monomeric and polymeric plastics
- ▶ **RUBBER:** Gum, latex.
- ▶ **SLUDGE & WASTE:** Sewage, effluents, coal and lime slurry.
- ▶ **SOLVENTS:** Aromatic and aliphatics, ketones, aldehydes, esters and chlorinated hydrocarbons, de-icing fluids.
- ▶ **TIMBER PRESERVATIVES:** Creosote, turpentine, copper naphthenate.
- ▶ **WATER:** All types, milk of lime, thin slurry, chemicals.

# Capacity reduction with viscous fluids



## Viscosity Guide

Viscosities in cps  
cps = centipoise

DPB75 - 3" Stroke Diaphragm Pump Bolted							Maximum 25000	
DP 50 - 2" Stroke Diaphragm Pump Clamped						Maximum 12000		
DP 40 - 1-1/2" Stroke Diaphragm Pump Clamped						Maximum 12000		
DP 25 - 1" Stroke Diaphragm Pump Clamped					Maximum 5000			
DPB12 - 1/2" Stroke Diaphragm Pump Bolted					Maximum 5000			
1	200	500	1000	2000	4000	10000	15000	

### MATERIAL

Water @ 70 F  
 Blood or Kerosene  
 Anti - Freeze or Ethylene Glycol  
 Motor Oil SAE 10 or Mazola Corn Oil  
 Motor Oil SAE 30 or Tomato Juice  
 Motor Oil SAE 40 or Castor Oil  
 Motor Oil SAE 60 or Glycerin  
 Karo Corn Syrup or Honey or Glue

### APPROX. VISCOSITY (in cpm)

1 to 5  
 10  
 15  
 50 to 100  
 150 to 200  
 250 to 500  
 1,000 to 2,000  
 2,000 to 3,000

### MATERIAL

Mayonnaise or Blackstrap Molasses  
 Hershey Chocolate Syrup  
 Heinz Ketchup or French's Mustard  
 Tomato Paste or Peanut Butter  
 Crisco Shortening or Lard  
 Caulking Compound  
 Window Putty

### APPROX. VISCOSITY (in cpm)

5,000 to 10,000  
 10,000 to 25,000  
 50,000 to 70,000  
 150,000 to 250,000  
 1,000,000 to 2,000,000  
 5,000,000 to 10,000,000  
 100,000,000

# STROKE Pump Selection

How to select the right STROKE Pump? Follow the steps outlined here to arrive at the best match of STROKE Pump for your application.

## 1. Gather your application data first. Following data is important.

Fluid to be pumped and its physical and chemical characteristics  
Viscosity  
pH value  
Specific Gravity  
Size of suspended solids, if any  
Discharge rate required  
Head at which discharge is required  
Suction head if any  
Pipe line diameter intended/existing and no. of bends

## 2. Select the diaphragm, ball and seat material. STROKE pumps offers the following material choices

### Neoprene

An excellent general purpose diaphragm for use in non-aggressive applications such as water-based slurries, well water or sea water. Exhibits excellent flex life and low cost. Temperature range -18°C to +93°C (0°F to +200°F)

### Buna N

Excellent for applications involving petroleum / oil-based fluids such as leaded gasolines, fuel oils, non-synthetic hydraulic oils, kerosene, turpentine and motor oils. Temperature range -12°C to +82°C (+10°F to +180°F)

### Viton

Excellent for use in applications requiring extremely hot temperatures. May also be used with aggressive fluids such as aromatic or chlorinated hydrocarbons and highly aggressive acids. Especially where high suction lift is important. Temperature range -40°C to +175°C (-40°F to +350°F)

### Teflon

Excellent choice when pumping highly aggressive fluids such as aromatic or chlorinated hydrocarbons, acids, caustics, ketones and acetates. Temperature range +4°C to +104°C (+40°F to +220°F)

### Santoprene

Exhibits excellent abrasion resistance, flex life and durability. Excellent general purpose diaphragm. Temperature range -40°C to +107°C (-40°F to +225°F)

## 3. Once the diaphragm, ball and seat material is chosen, select the correct material of construction of the pump. STROKE Pumps offers following material of construction choices:

### Cast Iron

Good for fluids having pH between 3.5 and 5.5 (acidic) and between 8.5 to 10.5 (alkaline)

### Aluminium

Good for fluids having pH between 5.5 and 8.5

### Stainless Steel

Good for stronger concentrated acids and alkaline

### Polypropylene

Good alternative low cost choice where fluid is compatible especially chemical compatibility and temperatures. Polypropylene is good between temperature ranges of +12° to +107°C and +32° to +175°F.

### PVDF

Exhibits a higher temperature range of -12° to +107°C and -10° to +225°F.

#### **4. Establish TOTAL head**

Now establish the TOTAL Head using the below calculation.

TOTAL Head = Specific gravity X (Suction Head + Discharge head) + approx Additional head (due to pipe bends). Roughly about 10 feet for each 90° Bend.

Finally check that the selected pump meets the below guidelines for viscous fluids.

the fluid, irrespective of pump size, so it is beneficial to select a pump whose daily operation will be in the middle of the pump performance.

The STROKE flow curves are all based on pumping of water. When pumping viscous fluids pump output reduces according to the graph as shown on page 9. Be sure to compensate for viscous fluids.

#### **5. Establish Pump Model most suited**

Every STROKE pump technical specifications include the pump flow curves. Looking at the pump flow curves, establish the point where the TOTAL Head and required discharge intersect. This intersection pump should ideally be somewhere in the middle of the graph. That is the pump should achieve the required discharge @Head at the supply air pressure of about 70 PSI. With STROKE Diaphragm pumps you only consume as much air as is needed to move

#### **6. Check Solids Handling Capability**

Maximum slurry particle size must not be greater than the pump's solids passage capability. A strainer may be placed on the inlet line to eliminate particles larger than the pump's capability. Please refer to individual specifications for your pump's specific solids passage capabilities.



## **What our customers say**

We have been doing business with Teryair Equipment Pvt. Ltd. for many years. They are a very reliable and professionally run company. We have been very happy with their service.

*AIR-TRADING Rotterdam B.V.  
Rotterdam*