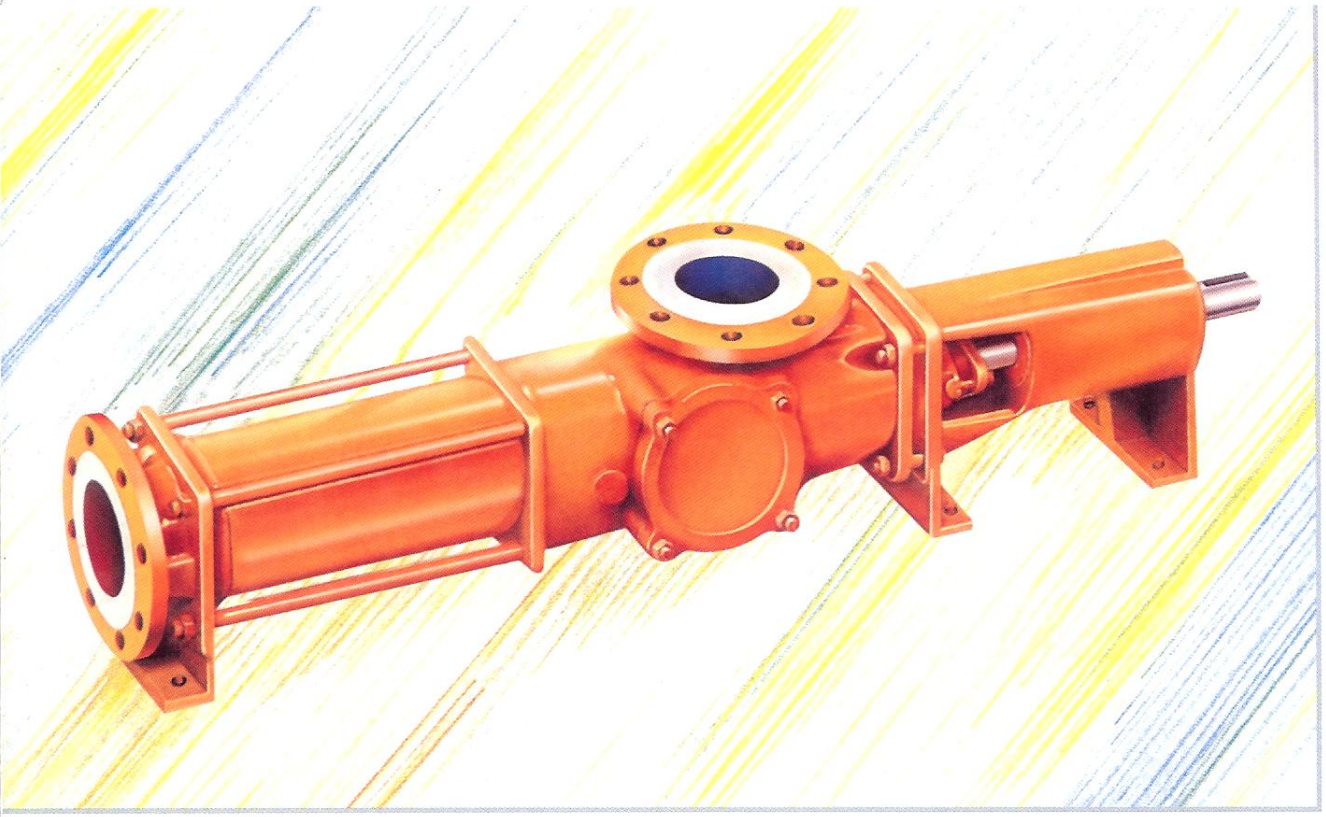
Colfax™ Corporation

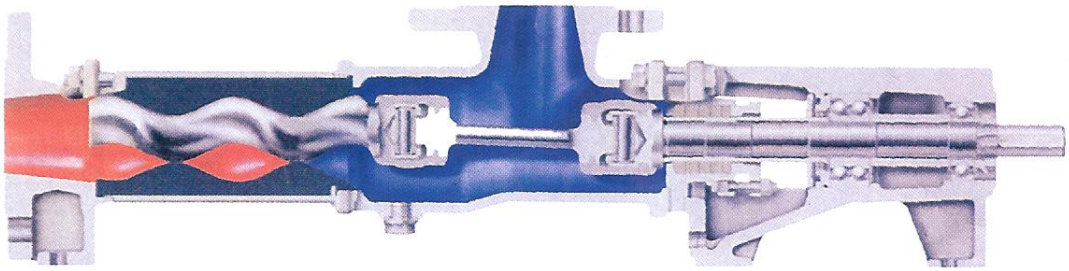
TUSHACO®

SERIES T1S

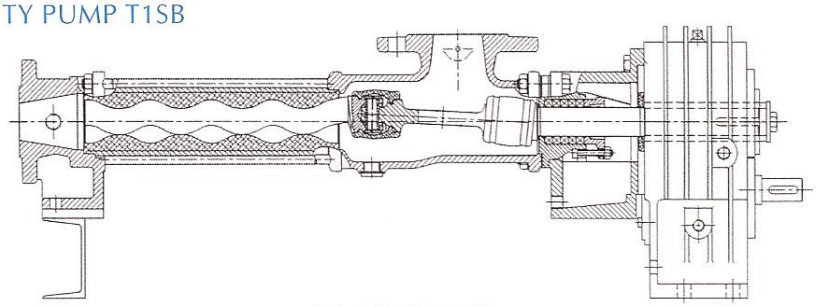


RELIABLE PUMPING PARTNERS SINCE 1960's

PROGRESSING CAVITY PUMP T1S



PROGRESSING CAVITY PUMP T1SB



BLOCK PUMP

DESIGN & OPERATION

The TUSHACO progressive cavity pump is a positive displacement rotary pump. The actual pumping elements of the pump are the rotor and the stator. The single helical rotor rolls eccentrically in a double threaded helix stator of twice the pitch length . A series of sealed cavities 180° apart are created that progress from suction to discharge. The opposing Cavities fill and empty simultaneously resulting in a pulsationless flow. The fluid travels axially with relatively low velocity and minimal agitation. The stator is made of a resilient elastomeric material and vulcanized to the stator tube providing a slight radial interference of the tool steel chrome plated rotor in the stator.

The important feature of the pumpiing principle is the ability to handle slurries and solid particles. The elastomer stator adds abrasion resistance beyond that of conventional rotary pumps. The particles tend to imbed rather than abrade the elastomer stator also allowing deformation to partially accommodate the solid particles. The compression fit of the rotor and stator enable TUSHACO progressive cavity pumps to handle gaseous liquids and low viscosity liquids . The pressure capabilities of the pump are a function of the number of times the progressive seal lines are repeated.

The TUSHACO progressive cavity pump lines are available in a wide variety of materials .They can be constructed with cast iron or stainless steel cases. and 10 standard elastomer materials . Rotors can be made ofSS 316, Tool Steel or even in Ceramic coated version. TUSHACO versatile progressive cavity pumps are rugged, compact and highly efficient.

If the fluid is delicate ,shear sensitive or abrasive ,low or high viscosity with fibres, high air content,or large solids, TUSHACO progressive cavity pumps can solve the problem of moving the fluid.

SPECIAL FEATURES

- Solid drive design provides strength for rigorous continuous operation.
- Unique pivot-joint design extends service life and reduces replacement cost.
- Close coupled models with built-on speed reducers offer a compact unit.
- Stators are available in a wide range of elastomers.
- Suction lift to 28' w.c. (water column)

TECHNICAL CHARACTERISTICS

Maximum delivery pressure	
Single Stage	6 bar
Suction obtainable	0.95 bar
Maximum permitted temperature for liquid pumped	150°C
Maximum permissible viscosity	300,000 mPa s
Maximum permissible solid content	60% by volume

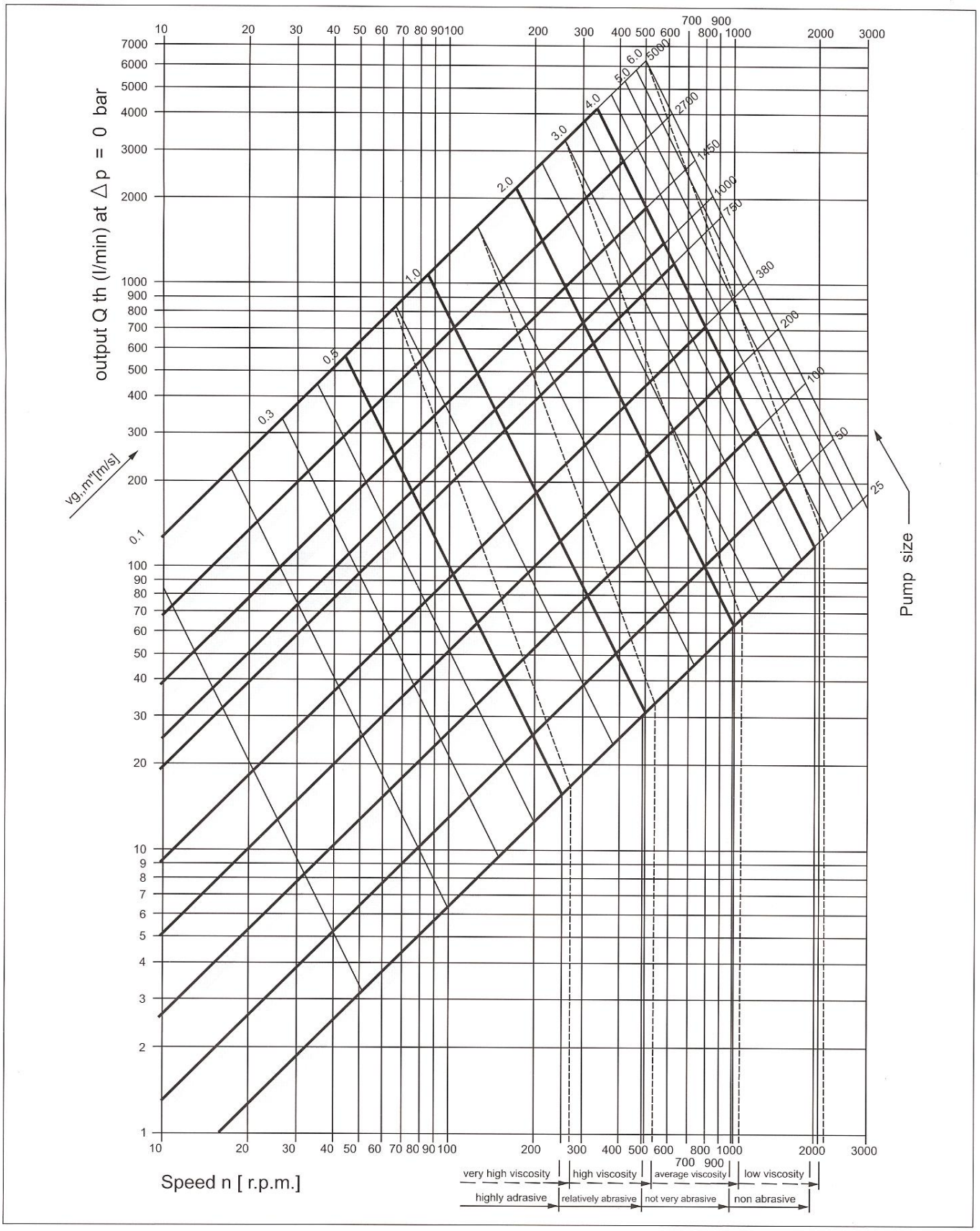
Maximum permitted grain sizes and fibre length:

Pump Size	25	50	100	200	380	550	750	1450	2700
Max.Grain Size(mm.)	2	3	3.8	5	6.8	7.5	9.5	14	20
Max FibreLength(mm.)	30	42	48	60	79	85	98	130	210

Increases in solid content and grain size can be controlled by lowering the pump speed.

PERFORMANCE CHART

To give a rough indication of the appropiate pump size and speed as functionof the required output and the nature of the liquid to be pumped. vg,m" = mean rubbing speed of rotor in stator.



POSSIBLE DRIVE ARRANGEMENTS INCLUDE :

1) DIRECT DRIVE WITH MOTOR
2) THROUGH GEAR BOX
3) V-BELT PULLEYS
4) VARIABLE SPEED DRIVES

PROGRESSIVE CAVITY PUMPS

INDUSTRIES	APPLICATIONS			FLUIDS		
Municipal/Industrial	Transfer Service Sampling	Polymer Feed Dewatering Sludge Transfer	Chemical Feed	Effluent with & without solids Milk of Lime	General Sewage Slurry Media	Protective Chemicals
Industrial	Centrifuge Charging Transfer Filter Charging	Kiln Charging Drainage Metering Tank Loading/ Unloading	Pit Emptying Gas Scrubbers	Acids Adhesives Caustic Soda Cellulose	Dye Liquor Dye Baths Flouring Plaster Ink	Lyes Mortar Coal Slurry Lime Slurry
Chemicals	Process Transfer	Loading/ Unloading Metering	Collecting	Acids Adhesives Colours Cosmetics Detergents	Glue Lacquers Hair Oil Hand Washing	Cream Paints Shampoos Waxes
Food Process & Production	Process Transfer	Loading/ Unloading Metering	Collecting	Alcoholic Beverages Apple Puree Baby Food Beer Beet Sludge Biscuit Dough Citrus Fruit Masher	Cream Cheese Edible Oils Eggs, Raw Fats Fish Residues Fruit & Berry Masher Honey Ice Cream	Lard Meat Extract Milk Mustard Tomato Vegetable Oil Wine Yeast
Petro Chemical Process & Production	Transfer	Loading/ Unloading	Metering	Crude Oil Oil sludge	Oil Tank Residues Processed Oil	Waste Products
Utilities	Transfer	Loading/ Unloading		Fuel Oil	Coal/ Oil Slurry	Coal/ Water Slurry

OTHER TUSHACO PRODUCTS

External Gear Pumps, Internal Gear Pumps, Shuttle Block Pumps, Three Spindle Screw Pumps,Two Spindle Screw Pumps and Internal Lobe (Trochoidal), Strainers - Simplex & Duplex, Complete fuel and Lube oil systems.

TUSHACO: PERFORMANCE PROVEN POSITIVE PUMPING POWER!

TUSHACO PUMPS PVT. LTD.

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