



## Internal Lobe Pumps – Series RT

Tushaco Pumps Pvt. Ltd.

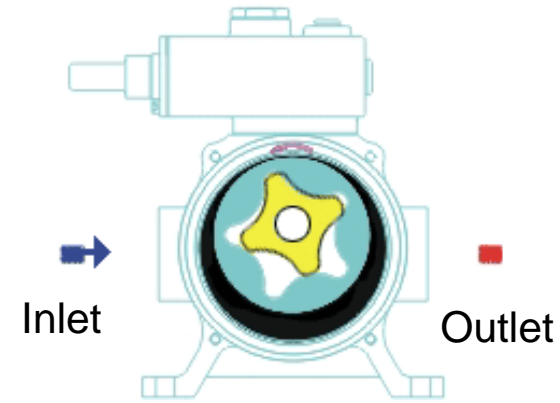
Mumbai



## Working Principle

TUSHACO series RT employs totally new pumping concept resulting in exceptionally reliable, simple design. Advanced manufacturing techniques ensure repeat accuracy's in dimensions, interchangeability, pump characteristics and at the same time the cost of end product is considerably reduced than conventional pumps.

There are only two pumping elements in Second-Generation internal gearing principle. The flow of liquid is axial through the elements. This results in unmatched suction characteristics that are impossible in double helical gear pumps. Also, there is only one shaft well supported at both ends of rotor for smooth, vibration-free running and eliminating bearing problems normally found in conventional gear pumps. Consequently, series RT have a very low noise level. This series needs practically no maintenance and has much longer service life than other types.



Single short shaft well supported by two self-lubricating bearings ensure high speed operation and vibration free running resulting in practically maintenance free pump with long service life.

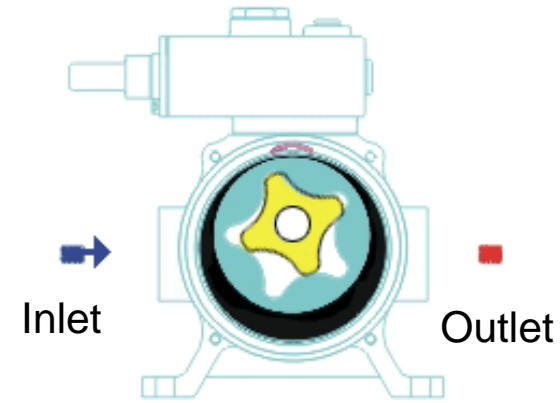
Unique pumping principle contributes to exceptionally high suction lifts and low noise level.

Precision machined components guarantee high volumetric efficiency and overall efficiency.

Internal gearing principle with axial flow ensures pulsation free continuous flow.

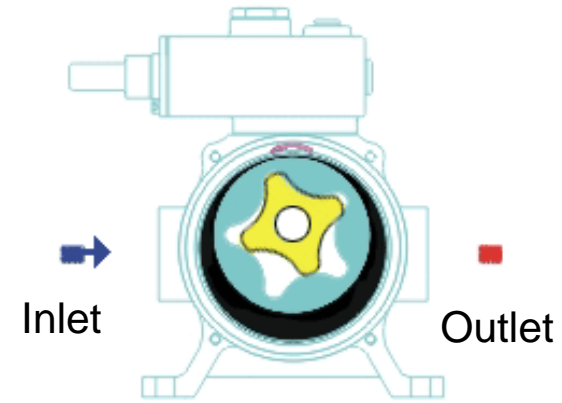
Compact and lightweight design eliminates elaborate foundations.

Single shaft design permits pump dismantling and without removing pump from base or disconnecting pipes. Pump can be serviced in place (Not possible in double helical gear pumps).



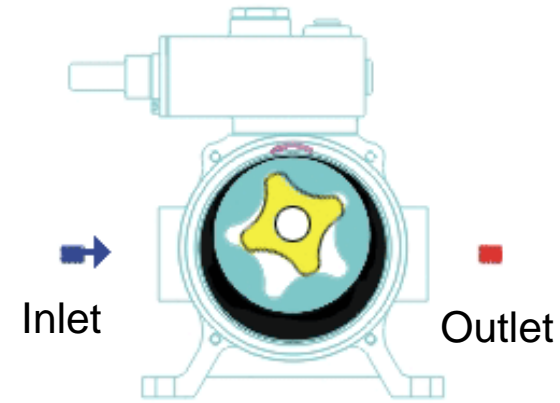
## Operating Parameters

Capacity	10 to 200 lpm
Pressure	up to 8 bar
Viscosity	up to 1500 cSt
Temperature	up to 250o C



This series of TUSHACO pumps has been designed to handle fuel and lubricating oils as well as other fluids with similar properties. These pumps are therefore ideally suited for following typical applications

- Transfer of lubricating oils when emptying barrels and tanks.
- Pressure lubrication and cooling of bearings, oil circulation through cooler, gear lubrications etc.
- Transfer of fuel oils to daily service tanks, preheating, circulation etc.
- Boosting of fuel oil pressure for oil burner service and fuel injection pumps.
- Unidirectional flow design for reversing shaft duties as in machine tools, gear boxes and crane duties.



### PERFORMANCE DATA

Head (kg/cm <sup>2</sup> )	0	2	4	6	8
Capacity (lpm)	11.8	11.54	11.11	10.71	10
Power (kW)	0.16	0.22	0.28	0.34	0.45

Tested at 1450 rpm with Lube Oil of viscosity 42.5 cSt

Suction x Discharge : 1/2" x 1/2"

Net Weight : 1 kg

### CONSTRUCTION FEATURES

Mounting : Horizontal Foot / Flange  
 Sealing : Oil Seal  
 Relief Valve : Built in / LMRV  
 Steam Jacket : -  
 Coupling : Spider  
 Drive : Direct Motor

### M.O.C

Casing : C.I  
 Rotor : Sintered Iron  
 Shaft : SS-410 / EN-8  
 Bush : Sintered Bronze / C.I

### PERFORMANCE DATA

Head (kg/cm <sup>2</sup> )	0	2	4	6	8
Capacity (lpm)	17.6	17.0	16.0	15.5	15.0
Power (kW)	0.24	0.30	0.38	0.48	0.58

Tested at 1450 rpm with Lube Oil of viscosity 42.5 cSt

Suction x Discharge : ½" x ½"

Net Weight : 3 kg

### CONSTRUCTION FEATURES

Mounting : Horizontal Foot / Flange  
 Sealing : Oil Seal  
 Relief Valve : Built in / LMRV  
 Steam Jacket : -  
 Coupling : Spider  
 Drive : Direct Motor

### M.O.C

Casing : C.I  
 Rotor : Sintered Iron  
 Shaft : SS-410 / EN-8  
 Bush : Sintered Bronze / C.I

### PERFORMANCE DATA

Head (kg/cm <sup>2</sup> )	0	2	4	6	8
Capacity (lpm)	25	24	22	21	19
Power (kW)	0.26	0.36	0.45	0.55	0.70

Tested at 1450 rpm with Lube Oil of viscosity 42.5 cSt

Suction x Discharge : 1/2" x 1/2"

Net Weight : 3.5 kg

### CONSTRUCTION FEATURES

Mounting : Horizontal Foot / Flange

Sealing : Oil Seal

Relief Valve : Built in / LMRV

Steam Jacket : -

Coupling : Spider

Drive : Direct Motor

### M.O.C

Casing : C.I

Rotor : Sintered Iron

Shaft : SS-410 / EN-8

Bush : Sintered Bronze / C.I



### PERFORMANCE DATA

Head (kg/cm <sup>2</sup> )	0	2	4	6	8
Capacity (lpm)	45	44	43	41	40
Power (kW)	0.21	0.30	0.50	0.70	0.85

Tested at 1450 rpm with Lube Oil of viscosity 42.5 cSt

Suction x Discharge : 1" x 1"

Net Weight : 6.5 kg

### CONSTRUCTION FEATURES

Mounting : Horizontal Foot / Flange  
 Sealing : Oil / Mech. Seal / Gland Pack  
 Relief Valve : Built in / LMRV  
 Steam Jacket : Front Cover  
 Coupling : Spider  
 Drive : Direct Motor

### M.O.C

Casing : C.I / Carbon Steel  
 Rotor : Sintered Iron  
 Shaft : SS-410 / EN-8  
 Bush : Sintered Bronze / C.I

### PERFORMANCE DATA

Head (kg/cm <sup>2</sup> )	0	2	4	6	8
Capacity (lpm)	86	84	82	81	76
Power (kW)	0.6	0.7	1.1	1.5	1.9

Tested at 1450 rpm with Lube Oil of viscosity 42.5 cSt

Suction x Discharge : 1½” x 1½”

Net Weight : 8 kg

### CONSTRUCTION FEATURES

Mounting : Horizontal Foot / Flange  
 Sealing : Oil / Mech. Seal / Gland Pack  
 Relief Valve : Built in / LMRV  
 Steam Jacket : Front Cover  
 Coupling : Spider  
 Drive : Direct Motor

### M.O.C

Casing : C.I / Carbon Steel  
 Rotor : Sintered Iron  
 Shaft : SS-410 / EN-8  
 Bush : Sintered Bronze / C.I

### PERFORMANCE DATA

Head (kg/cm <sup>2</sup> )	0	2	4	6	8
Capacity (lpm)	131	129	126	123	120
Power (kW)	1.24	1.59	2.03	2.58	3.18

Tested at 1450 rpm with Lube Oil of viscosity 42.5 cSt

Suction x Discharge : 1½” x 1½”

Net Weight : 22 kg

### CONSTRUCTION FEATURES

Mounting : Horizontal Foot / Flange  
 Sealing : Oil / Mech. Seal / Gland Pack  
 Relief Valve : Built in / LMRV  
 Steam Jacket : Front Cover  
 Coupling : Pin Push / Spider / Spacer  
 Drive : Direct Motor / Gear Box / V-belt

### M.O.C

Casing : C.I / Carbon Steel  
 Rotor : C.I  
 Shaft : SS-410 / EN-8  
 Bush : Sintered Iron

### PERFORMANCE DATA

Head (kg/cm <sup>2</sup> )	0	2	4	6	8
Capacity (lpm)	157	154	152	149	146
Power (kW)	1.34	1.8	2.31	2.04	3.92

Tested at 1450 rpm with Lube Oil of viscosity 42.5 cSt

Suction x Discharge : 1½” x 1½”

Net Weight : 25 kg

### CONSTRUCTION FEATURES

Mounting : Horizontal Foot / Flange  
 Sealing : Oil / Mech. Seal / Gland Pack  
 Relief Valve : Built in / LMRV  
 Steam Jacket : Front Cover  
 Coupling : Pin Push / Spider / Spacer  
 Drive : Direct Motor / Gear Box / V-belt

### M.O.C

Casing : C.I / Carbon Steel  
 Rotor : C.I  
 Shaft : SS-410 / EN-8  
 Bush : Sintered Iron

### PERFORMANCE DATA

Head (kg/cm <sup>2</sup> )	0	2	4	6	8
Capacity (lpm)	201	196	190	184	177
Power (kW)	1.48	2.0	2.66	3.45	4.13

Tested at 1450 rpm with Lube Oil of viscosity 42.5 cSt

Suction x Discharge : 1½” x 1½”

Net Weight : 29 kg

### CONSTRUCTION FEATURES

Mounting : Horizontal Foot / Flange  
 Sealing : Oil / Mech. Seal / Gland Pack  
 Relief Valve : Built in / LMRV  
 Steam Jacket : Front Cover  
 Coupling : Pin Push / Spider / Spacer  
 Drive : Direct Motor / Gear Box / V-belt

### M.O.C

Casing : C.I / Carbon Steel  
 Rotor : C.I  
 Shaft : SS-410 / EN-8  
 Bush : Sintered Iron





Thank You

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