ORBIT PUMPS & SYSTEMS PVT. LTD.



HIGH PRECISION CHEMICAL PROCESS PUMPS, PLUNGER, DIAPHRAGM TYPE METERING, DOSING PUMP, GEAR PUMP, ROTARY GEAR & SCREW PUMP.



DOSING/METERING PUMP

Orbit Pumps are high precision positive displacement Pumps, as per A.P.I. 675 International Code for controlled volume Pumps. The discharged can varied from 0 to 100 capacities while pumps are running or at rest. Our pump design makes it an ideal flow control element in chemical process for feeding chemicals with a high degree of accuracy, under any discharge pressure condition. They are of robust design, unmatched quality and offer considerable saving due to small space requirements, low installation cost and minimum maintenance.

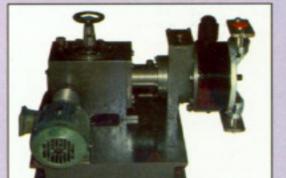
PUMP HEAD DESIGN



JACKETED HEAD

PLUNGER TYPE HEAD

Plunger type liquid ends are suited for non-hazardous liquids. Because of their simple design they are quite economical. They can be provided with flushing connections. In the case of molten liquids, Jacketed heads can be provided. The jacket encloses the check valves and gland chamber. The valves are cartridge type and can be removed for servicing without dismantling the suction and discharge connection.



DIAPHRAGM PUMP

DIAPHRAGM TYPE HEAD

Hydraulically operated Diaphragm type head are suitable for service conditions involving hazardous toxic, radio active or poisonous liquid where product leakage is not at all permitted. The Diaphragm is Hydraulically actuated and has a long life as it is always in hydraulic balance, with the liquid being pumped on one side and actuating fluid on the apposite side. Its function is basically that of the partition. The diaphragm material is usually Teflon or Synthetic rubber. The system is safe guarded by the built in relief vacuum valve on the hydraulic side. For very severe duty condition or handling slurry or hot liquids and remote type heads can be provided.

SELECTION TABLE: METERING PUMPS										
Plunger Dia - mm	IP 1		IP 2		IP3		IP 4		IP5	
	Pressure Kg/Cm ¹	LPH n100	Pressure Kg/Cm [*]	LPH n100	Pressure Kg / Cm ³	LPH n100	Pressure Kg/Cm ¹	LPH n100	Pressure Kg / Cm ¹	LPH n100
5	400	0.5								
7	204	1								
10	123	2	450	6	500	11	700	15	1200	26
12	85	3	344	9	303	16	533	22	875	38
16	48	5.5	190	17	173	28	300	40	490	68
18	38	7.5	153	21	150	36	234	* 50	317	87
20	30	8.5	124	26	120	45	190	62	300	107
24	21	12.5	85	38	83 '	65	130	90	218	154
30	13	20	55	60	54	101	85	141	140	241
35	10	27	40	82	40	137	52	192	100	329
40	7.5	35	30	107	30	179	48	250	75	429
45			24	136	24	227	40	315	62	544
50		3	20	167	20	280	30	391	50	671
55			15	203	16	338	26	474	42	813
60			14	241	14	403	20	564	35	967
65			12	284	12	473	18	662	30	1135
75	5		9	378	9	549	14	882	22	1512
80			7	423	7	717	12	1002	20	1719
100			4	671	3	1120	8	1566	12	2686
120			-				5	2256	9	3867
							4	3070	6	5264

TYPICAL APPLICATIONS

TYPICAL APPLICATIONS of our Pumps are the accurate dosing and mixing of acids, alkalis, slurries, viscous liquids etc. which may be Pump at elevated, ambient or low temperatures, 24 hours a day. Our range covers every thing form the single pump to a complete automated Metering Dosing System and comprises of Plunger and Diaphragm Pumps with metering ranges from 0.5 to 10,000 L.P.H. per Pump head.

STROKE ADJUSTMENT

THE pump discharge is variable while Pump is running or at rest from 0% to full stroke 100% by means of a precision machine crank equipped with a stroke length adjustment mechanism.

The stroke of the pumps can be controlled either

- Automatic
- Remote
- Electrically

LIQUID END MATERIAL

Wetted parts can be offered in:

- > Stainless steel 304
- > Stainless steel 316
- > Steel

- > P.V.C.
- > P.P.
- > Teflon

SPECIAL FEATTURES

Pumps can be offered in simplex, duplex or multiple heads for handling different chemicals with a common motor. Each head would have independent connection and the capacity of each head can also be independently adjustable.

Rotary Gear Pump



SPECIAL FEATURES:

- * Robust & sturdy design.
- * Specially Designed Gears for Low Noise and Less Vibrations.
- * C.S., S.S. or GM Construction for special applications.
- * Steam Jacketed Pumps for Highly Viscous Liquids or for Liquids which solidify at normal temperature.
- * Portable Trolley for transfer of pump set from place to place.
- * Drive Direct or Through reduction Gear Box or Through Pulleys.
- * Hardened and Ground Rotors for High Pressure Application.
- * Vertical/Submerged type can be offered.

CONSTRUCTION:

- * Casing & Covers: Pressure tested graded cast iron.
- * Gears & Shafts: Carbon steel-spur or Double helical gears
- * Bearings: Antifriction or Bush Bearings.
- * Sealing: Lip type or Mechanical seal. Gland packing for Abrasive or highly viscous liquids.
- * Testing: Each pump tested for its performance.
- * Tests can be offered to any inspection authority.