ADVANTAGES OF 'ROTODEL' ROTARY TWIN GEAR PUMP OVER TWIN SCREW PUMP OF TUSHACO, BORNEMANN, ROTO & IMO MAKE	
ROTARY TWIN GEAR PUMP	**TWIN SCREW PUMP**
1). Capacity of the pump is determined by each tooth gap hence the capacity transferred per unit size of rotor is much higher.	1). Capacity of pump is determined by only one pitch length per screw element (i.e. 4 pitch length per pump) Hence the liquid transferred per unit size of the rotor is less.
2). Due to above advantage the gear size is small thereby peripheral velocity & frictional losses are less resulting in increased efficiency & less noise level of the pump.	2). Because of the above constrain the peripheral velocity is more , the frictional losses are high & multiplies with increase in viscosity. The noise level is also high due to this.
3). High pressure can be developed in the same configuration simply by tightening the internal clearance of the pump thereby maintaining the same size & shape of pump.	3). For developing higher pressure nos, of threads in each screw is required to be increased resulting into increase in size & shape of the Pump.
4). The meshing impellers are self driven hence no timing gear is required thereby reducing the size, cost & maintenance effort.	4). Timing gear is required to drive the screw, this increases size, cost & maintenance of the pump.
5). Because of lesser number of modified profile teeth with sharp tip there is no break up of the flow & resulting into pulsation free flow.	5). In screw construction the flow breaks at each pitch length due to meshing of screw.
6). The liquid directly enters into pump chamber & perpendicular to the shaft axies, hence NPSH required is much less.	6). The incoming liquid has to take the entry from he side of the screw, while the inlet flange is oriented perpendicular to screw axis The sharp turning of the incoming liquid resulting in pressures drop & thus require more NPSH.
7). Efficiency upto 65 % is committed for transfer application upto 10 Bar pressure.	7). Efficiency of the pump is committed upto 50% for transfer application upto 10 Bar pressure.
8). Because of modified profile teeth there is no undercutting as in the conventional gear pump. Further the gears are made out of alloy steel with gas nitriding hence the life of the pump is as good as screw pump.	8). Because of the timing gear there is no metal to metal contact of the screw. Hence the life of pump is claimed much higher.
9). Pumps upto 8"size can be run at 1500 RPM maintaining the same efficiency standard for all the pumps.	9). Pumps upto 8" size can be run directly at 1500 RPM . However in the large size the power consumption increases thereby reducing the efficiency.
10). The gear technology is under-stood well at all level of technical people & hence the pump can be repaired / maintained without special assistance. Hence less time is consumed & the cost is also less.	10). The screw manufacturing is complicated & not generally understood by ordinary maintenancestaff. Hence maintenance any becomes costly tricky & time consuming.
11). Offers advantage of triple screw pump at the price of conventional gear pumps with considerable saving on initial cost as well as long run expenditure.	11). Under the name of new technology the customers are royally screwed by charging abnormal prices.