

# "SEG" SERIES

## APPLICATION

- "MALHAR" Rotary gear pumps are useful for handling following viscous and semi viscous liquid.
- Clean lube oil, Castor oil, Coconut oil, Ground nut oil, Cotton seed oil and Hydraulic oil.
- All kind of vegetable oils.
- Paints & Varnish , Viscous Chemical , Printing Ink.
- All Kind of fish and animal oils.
- Soap Solutions , Glycerin , Glycol and Glue
- Sugar molasses and syrups.
- Rotary gear pumps are widely used in paper mills, refineries, Steel mills and textile Industries.

## EXTERNAL GEAR PUMP



## FEATURES

- All Positive displacement rotary gear pumps are self priming pumps with suction lift of 5 meters at mean viscosity and speed 1440 rpm
- The SEG series of MALHAR pump has a modified profile of teeth to give accurate discharge within the pressure range .
- The helical gear design delivers constant volume without any pulsation. It also reduces internal slippage and gives high volumetric efficiency.
- Compact in size and highly economical
- All these are self lubricated pumps recommended for use where the liquid to be transferred has lubrication properties hence the bearing is lubricated by the pumping fluid and do not need any external lubrication.
- Easy maintenance due to availability and interchangeability of spares.
- All MALHAR gear pumps are designed and assembled with close tolerances to reduce the mechanical losses, thus it consumes lesser power and operates at higher efficiency.

## RANGE

- **Pressure** : Up to 10 Kg/Cm<sup>2</sup>
- **Discharge** : 10 LPM to 500 LMP
- **Pipe Size** : 1/4" BSP to 3" BSP

CAST IRON CONSTRUCTION		STAINLESS STEEL CONSTRUCTION	
Pump Body	CI Gr. FG 200	Pump Body	CF-8M (SS-316)
Back / RV Cover	CI Gr. FG 200	Covers	CF-8M (SS-316)
Gears	EN-8	Gears	SS-316 Nitrided Spur type
Gear Design	Single Helix	Gear Design	Single Helix
Shaft	En-8 H & G	Shaft	SS-316 Nitrided
Shaft Seal	Oil Seal	Shaft Seal	PTFE Gland Packing / Mechanical seal (C/TC or C/SC)
PRV	STD Steel IN Built	Mouting Bracket	Cast Iron L-Type
Temperature	80°C	Temperature Limit	150°C
Bush Bearings	Self-Lubricated Sntered	Bush Beatings	PRFE Coated DU / PTFE Coated DU / Bronze CFT-PTFE
Special Note	In Built Reief valves provided in all models		

**"SEG" SERIES**
**CAST IRON PUMP PERFORMANCE TABLE**

MODEL	SUC DEL MM	CAPACITY		PRESSURE IN KG/CM <sup>2</sup>										NET WEIGHT KGS
		LPM	M <sup>3</sup> /H R	1	2	3	4	5	6	7	8	9	10	
				MOTOR REQUIRED IN HP (SPPED 1440 RPM)										
SEG-5	10 X 10	5	0.6	0.25	0.25	0.25	0.25	0.50	0.50	0.50	0.50	0.75	0.75	2.400
SEG-20	15 X 15	20	1.2	0.50	0.50	0.50	0.50	0.75	0.75	0.75	0.75	1.00	1.00	2.800
SEG-30	20 X 20	30	1.8	0.50	0.50	0.75	0.75	0.75	1.00	1.00	1.00	1.50	1.50	5.000
SEG-50	25 X 25	50	3	0.50	0.75	0.75	1.00	1.00	1.50	1.50	1.50	2.00	2.00	6.000
SEG-75	32 X 32	75	4.5	1.50	1.50	1.50	2.00	2.00	2.00	3.00	3.00	3.00	3.00	8.000
SEG-110	40 X 40	110	6.6	1.50	2.00	3	3.00	3.00	3.00	5.00	5.0	5.00	5.00	11.000
SEG-225	50 X 50	225	13.5	3.00	3.00	5	5.00	5.00	5.00	7.50	7.50	7.50	12.50	18.500
SEG-350	65 X 65	350	21	5.00	7.50	7.50	10.00	10.00	10.00	12.50	12.50	15.00	15.00	29.000
SEG-500	80 X 80	500	30	7.50	10.00	10	12.50	12.5	15.00	15.00	20.00	20.00	20.00	45.000

**SS-316 PUMP PERFORMANCE TABLE**

MODEL	SUC DEL MM	CAPACITY		POWER REQUIREMENTS IN AT KG/CM <sup>2</sup> DIFFERENT PRESSURE AT 500 SSU VICOCITY LUB OIL			WT OF PUMP IN KGS (APPROX)
		LPM	M <sup>3</sup> /HR	02 KG/CM <sup>2</sup>	04 KG/CM <sup>2</sup>	08KG/CM <sup>2</sup>	
SSEG-025	10 X 10	5	0.3	0.25	0.25	0.75	3.5
SSEG-50R	15 X 15	15	0.9	0.5	0.5	1.0	3.8
SSEG-50	15 X 15	25	1.5	0.5	1.0	1.5	4.0
SSEG-100	25 X 25	50	3	1.0	1.5	2.0	6.0
SSEG-125	32 X 32	80	4.8	2.0	3.0	5.0	11.0
SSEG-150	40 X 40	125	7.5	2.0	3.0	5.0	15.0
SSEG-200R	50 X 50	150	9	3.0	5.0	7.5	21.0
SSEG-200	50 X 50	200	12	5.0	7.5	10.0	22.0

VISCOSITY	SPEED	CAPACITY
UP TO 500 CST	1500 RPM	100 %
500 - 1500 CST	1000 RPM	66 %
15000 CST	750 RPM	50 %
5000 - 15000	500 RPM	33 %
15000 - 30000	380 RPM	25 %
30000 - 50000	300 RPM	20 %
50000 - 100000	200 RPM	13 %
100000 - 200000	150 RPM	10 %

