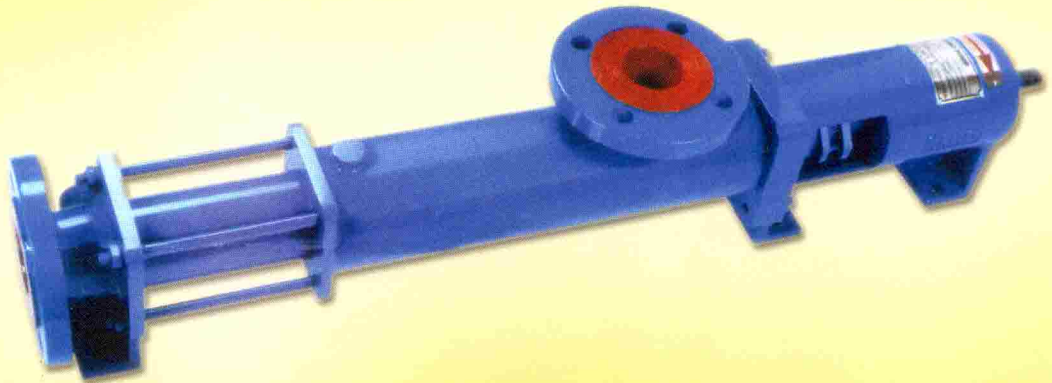


## Single Screw Pumps (Progressive Cavity) Pump for Marine & Industrial Application



### Pump Range

Maximum capacity	: 120 m <sup>2</sup> /hr
Maximum pressure	: 24 Bars
Viscosity	: 1,00,000 Cst
Castings	: Grey cast iron, CF-8 & CF-8M are standard casting materials. Special alloys or rubber linings are optional.
Drive shaft	: En-24, SS 304, SS 316 Hard Chrome Plated Under Gland for excellent wear resistance. Solid or hollow design are standard.
Rotor	: Hardened and Hard Chrome Plated rotors in En-24, Tool Steel, SS 304, SS 316, SS 316L and other exotic materials.
Universal Joint	: Grease lubricated pin type fully sealed & hardened in En-24, SS 304, SS 316, SS316L etc.
Shaft sealing	: Soft Packing, Cartseal & Mechanical Seal.
Stator	: Natural Rubber, Nitrile, Neoprene, Hypalon, EPDM, NCR, Silicon, Viton etc.

### Principle

Single screw pumps belong to the family of rotary positive displacement pumps, which works on unique principle of Progressive Cavity Pumps. The principle feature of this pump is based on a single helical rotor turning eccentrically in a double threaded helical stator twice the pitch length. As it rotates, a series of sealed cavities, 180 degrees apart are formed, which move along the pump from suction to discharge. As one cavity is closing, the opposite cavity is increasing in size at exactly the same rate to produce a non-pulsating, positive displacement flow.



### Application

Loading, Unloading, Transfer, Dosing, Draining, Re-circulation, Feeding to spray driers, Filter presses, Centrifuges, Digester, Evaporators etc.

### Industries

Agriculture, Breweries & Distilleries, Ceramic & Refractories, Construction, Cement Industry, Chemical & Fertilizer, Dyes, Edible / Palm Oil, Effluent Treatment, Marine & Ship Building, Sugar Industry, Paint & Varnish, Paper & Pulp industry, Cellulose, Petrochemical, Sewage & Waste Water, Soaps & Detergent, Starch, Speciality Chemicals etc.

### Fluid handled

Alum Liquor, Black Liquor, Additives, Ceramic Slurry, Coating Mix, Emulsions, Effluent Sludge, Molasses, Latex, Lime Slurry, Paint, Polyelectrolyte, Oily Water & Sludge, Spent Wash, Starch Slurry, Brine Sludge, Polymer Emulsions, Edible Oil, Gum, Soap Shampoo, Printing Ink, Chemicals, Dye Stuff, Paint, Sewage & Waste Water, Gel, Oil Paste, Pigments etc.

### Salient Features

- **Self priming:** Hence no Foot Valve / Priming required.
- **Low NPSH (R):** High suction lift up to 8.5 MWC.
- **Handles any liquid** from water to abrasive slurry & froth to highly viscous media.
- **Double sealed universal joints** ensure smoother power transmission & longer life.
- **Simple construction** minimum wear, easy maintenance.
- **Reversible:** Pump can be operated clockwise as well as in anticlockwise direction by reversing the motor connections.
- **Torsion free metal bonded stator** for higher efficiency & per stage pressure.
- Cardan Joint as optional.
- Solid handling capacity up to 60%.