

Ramo



SERIES

Single Screw Pumps (Progressive Cavity)

Wide Throat Feeder Pump for Highly Viscous & Heterogeneous Applications



Pump Range

Max. Capacity	: 120 m ³ /hr
Max. Pressure	: 24 Bars
Viscosity	: 10,00,000 Cst or above.
Standard Material	: Cast Iron, SS 304, SS 316.
Drive Shaft	: En-24, SS 304, SS 316 Hard Chrome Plated Under Gland for excellent wear resistance. Solid or hollow design are standard.
Hopper	: Fabricated M. S., SS 304, SS 316 also in food grade quality.
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 tool steel, SS304, SS316, SS316L etc.
Shaft Sealing	: Soft packing, Cartseal and Mechanical seal.
Stator	: Natural Rubber, Nitrile, Neoprene, EPDM, NCR, Hypalon, 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

Adhesive & Glue, Breweries, Bakery, Confectionery, Dairy, Cosmetics & Toiletries, Explosives, Ceramic & Refractories, Cement Industry, Mining & Construction, Chemical & Fertilizer, Oil Blending, Dyestuff, Food Processing, Edible / Palm Oil, Printing & Packaging, Slaughter House & Meat Processing, Sugar Industry, Paint & Varnish, Paper & Pulp industry, Cellulose, Petrochemical, Sewage & Waste Water, Soaps & Detergent, etc.

Fluid handled / Applications

Aluminium Hydroxide Paste, Asbestos Slurry, Bentonite Slurry, Butter, Chayawanprash, Cake / Chocolate Mix, Clay / Coal Slurry, Explosive Slurry, Ferrite Slurry, Fish Paste, Formic Acid Slurry, Fruit & Vegetable Mash, Glue, Grease, Gel, Ghee, Grout Mix, Malt Mix, Magma & Masecuite, Molten Soap, Mash Grapes, Minced Meat, Oil Paste, Petroleum Jelly, Pigments, Putty, Printing Inks, Silicon Gum, Shrikand, Sludge, Tooth Paste, Yoghurt, Wax etc,

Salient Features

- Inlet: Wide throat suction hopper along with coupling rod cum auger arrangement, facilitate easy entry of highly viscous product to the cavity between rotor & stator, which is then pumped out with ease.
- Bridge Breaker: Pumps are also available with bridge breaker arrangement in the Hopper to move extremely difficult liquids which tends to stick on the walls of the hopper as well as bridge formation.
- Viscous: Can handle highly viscous liquids, pastes and sticky materials.
- Maintenance: Low internal velocity thereby minimizes wear & tear. Virtually no maintenance required.
- Torsion free metal: Bonded stator for higher efficiency, increased stator life & per stage pressure.



