# ROTOSYS TM SLUDGE PUMP REMOVER



#### **PRINCIPLE**

The main components which characterise the pump are a metalic single helical rotary part ROTOR and a fixed double helical resilient polymer part STATOR in which the rotor turns and thereby a complex progressive sealing line (cspl) is maintained. Whilst the rotor rotates in the stator, the cavities formed between them progresses from suction to discharge end, gently carying the media.

#### **FLUIDS HANDLED**

Acidic & Alkaline Slurry Acrylic Emulsion - Alum Aluminium Hydroxide Gel Bentonite Slurry - Black Liquor Casein Slurry - Ceramic/Clay Slip Chemical Slurry - Coating Mix Detergent Slurry Dyestuff & Intermediates Electroplating Solutions - Epoxy Mix Ferrite Slurry - Fuel Oil Sludge - Flocculent Glue - Gum Sludge - Grout Mix - instant Tea Latex - Lime Slury - Lube Oil - Molasses Melt - Paint - Paper Pulp - Printing ink Petroleum Jelly - Resins - Rice Bran Oil Soap Stock - Sewage Sludge - Sodium Silicate Sulphited Syrup - Trlbasic Lead Sulphate Vegetable Oil - Varnish - Viscose - Yeast Waste Water & Effluent Sludge Xylene - Zinc Clhoride - Zinc Sulphate And many more numerous fluids

#### MATERIAL OF CONSTRUCTION

"SA\*. CI/CS" series ROTOSYSC pumps are made of CI/CS casting components. The internal rotating parts can be made of either Alloy Steel or Stainless Steel depending upon the fluid handled. For abrasive duties, Tool Steel hardened

& Hard Chrome Plated or Nitrided Steel Rotor is used.

"SA\*. SS/ST" series ROTOSYSC pumps are made of AISI-304/316 wettable casting components. For highly corrosive fluids the material can be FRP/Epoxy lined and rotating parts of Alloy-20, Monel, Hastelloy, Ti Alloy or any other super alloy construction.

The resilient STATOR material can be either in Natural, Nitrile, Neoprene, Hypalone, Hycar, Silicon, Butyl, EPDM, Viton or PTFE depending upon the compatibility of the pumping fluid.

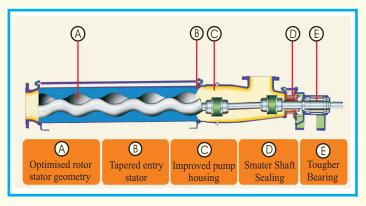
#### **SPESIFICATION**

CAPACITY: 20 m<sup>3</sup> / hour (max)

PRESSURE: 24 bar or more for system pressures

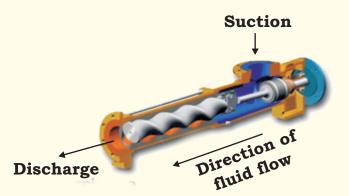
VISCOSITY: 100.000 cST

TEMPERATURE : 175 C (max)



#### SALIENT FEATURES

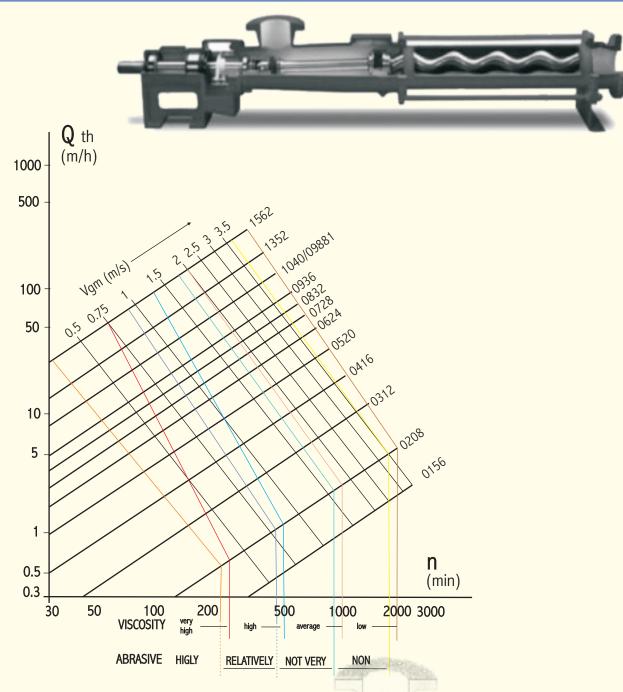
- Torsion free metal Bonded Stator for increased life, higher efficiency and per stage pressure.
- High Suction lift capability up to 8,4 MWC.
- Double articulated sealed pin joins ensures smooth power transmission & longer service life of critical components. Alternately, Cardan Joint & Flexishaft designs optionally available.
- Shaft sealing standardised to ISO 3069. Allows mounting or dismantling without disassembling shaft from the bearings. Shaft sleeves provided optionally.
- Handless solids in suspension or mixtures containing high percentage of solids.
- Can work on snore i.e., Handles high precentage of air with liquid.
- Very low internal velocity reduces wear due to erosion and corrosion.
- Metered uniform flow with minimal pulsation avoids risk of damage to shear sensitive products.
- Gate & Check valves not needed as the pumps are self priming.
- Suction and Delivery ends can be interchanged by merely changing the direction of rotation of pump.
- The presure head is independent of speed and the capacity proportional to speed.
- Handles any liquid from water abrasive slurry and froth to highly viscous media.



### ROTOSYS<sup>TM</sup>

Theoretical performance curve





### SOLIDS & COMPRESSIBLE HANDLING CAPABILITY

Model	0156	0208	0312	0416	0520	0624	0728	0832	0936	0988	1040	1352
Solids	3	4	6	8	10	12	15	16	18	20	20	25
Soft & Compressible	12	16	24	32	40	48	60	64	72	80	80	101

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#### NOTES:

- 1. All dimensions in milimetres and for guidance only, except where otherwise stated.
- 2. Shaft diameters are to BS 4506: 1970 and keyward to BS 4235: 1982 part 1 and ISO R773
- 3. Flanges are identical and tp BS 4504: 1969 (ISO/DIN/ANSI/IS flanges optional)
- 4. W= Weight in kg
- 5. For full certified drawings refer to ROTOSYSC Pump



## ROTOSYS TM

#### **ROTOSYS - PUMP CODING**

#### **TYPE**

SA, SI, SF, FA, FI, WA, WF, HA, HF, LA, BA, BB, PA, DM

#### DESIGN

- A- Pin & Bush Joint with Auger cum Coupling Rod
- C- Cardan
- F- Flexishaft
- P- Pin & Bush joint with normal Coupling Rod

#### SIZE

0,1,2,3,4,5,6,7&8

#### **BODY MATERIAL**

- CI Cast Iron (FG 260/220 as per IS 210)
- CS Cast Steel (Low Carbon as per IS 2062)
- SS Cast AISI 304 / CF8
- ST Cast AISI 316 / CF 8M
- SF AISI 304 Fabricated
- SG AISI 316 Fabricated

For more material option contact factory assistance

#### ROTATING PARTS CODE

01 to 99

For details contact factory assistance

#### **RUBBER CODE**

- A Natural Rubber Black 70 A
- B Natural Rubber Black 60 A
- P High Nitrile Rubber Black 70 A

- R Nitrile Rubber Black 70 A
- S Nitrile FoodGrade (Non Contaminating) Rubber Black 70 A
- T Nitrile FoodGrade (Non Contaminating) Rubber White 70 A
- E EPDM Rubber Black 70 A
- F EPDM Rubber White 70 A
- K Neoprene Rubber Black 70 A
- H Hypalon Rubber Black 70 A
- Q Silicone Rubber 70 A
- V Viton Rubber Black 70 A

For more material option contact factory assistance

#### ROTOR MARK CODE

1,3,5,&9

For details contact factory assistance

#### SHAFT SEALING

- B PTFE Soft Gland Packing
- C PTFE impregnated Aramid packing treated with a high Temp.
- M Single Mechanical Seal (ISO: 3069)
- N Single Mechanical Seal (non ISO: 3069)

For more option contact factory assistance

#### **END COVER**

- 1 Standard, Straight Through
- 2 Standard, 90

#### ROTOSYSC VARIATION

00 No Variation

For variation details contact factory assistance



### PT. ANGKASA TEHNIK MANDIRI

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