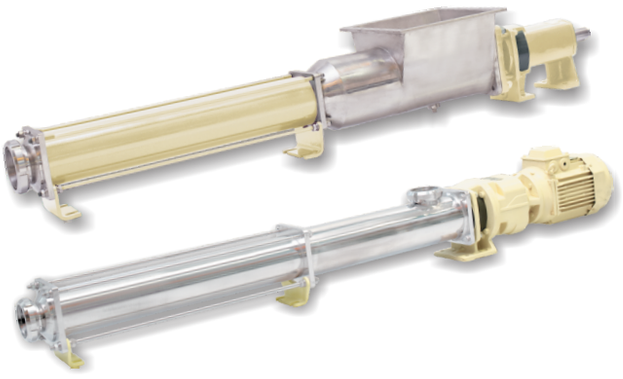
Roto pumps

Making your challenges

MANAGEABLE

FOOD • WINE • BEVERAGES • COSMETICS





45+ years of

...moving fluids positively

DM SERIES PUMPS

Introduction

DM series pumps are specially designed for applications in food, beverage and cosmetic industries. These pumps are simple in construction with emphasis on quick cleaning. All metallic parts in contact with the media are 316 and 304 stainless steel with a smooth finish. Wide throat hopper inlets incorporating coupling rod mounted augers are available for highly viscous media.

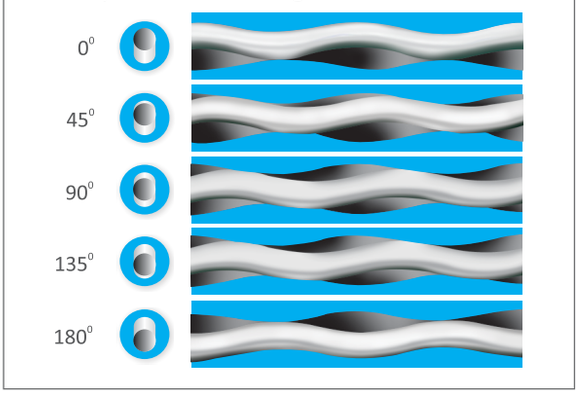
Distinctive design, features and benefits

- POSITIVE DISPLACEMENT
  The head developed is independent of speed, whereas capacity is proportionate to the speed
- NON CONTAMINATING METALS
  All metallic surfaces in contact with the media are smooth surface stainless steel
- NO RETAINING POCKETS
  Avoids chemical or bacterial contamination
- CLEANING IN PLACE
  Ensures positive cleaning
- HIGH SUCTION LIFT
  Ideal for lifting viscous fluids. Effective even in high vacuum conditions
- LOW FLUID VELOCITY
  Ensures gentle handling of shear sensitive fluids
- UNIFORM FLOW
  No pulsation, turbulence or aeration
- NON CLOGGING
  Ability to handle solids in suspension or mixtures containing high percentage of solids
- SELF PRIMING
  Can handle high percentage of air/gas/vapor with liquid
- VERSATILITY
  Handles any fluid from clear water to highly viscous media
- REVERSIBLE
  The rotation and direction of flow are reversible. This offers flexibility in handling variety of applications.

Progressive Cavity Pumping Principle

The pumping elements consist of a precision machined single helical metal rotor and a double helical elastomer stator. With the rotor engaged in the stator a seal line is formed along the axis of the rotor. The seal line is maintained in both static and dynamic conditions. As the rotor turns inside the stator, a series of cavities form that progress from the suction to the discharge end of the pump. As one cavity opens and closes, it's opposing cavity closes and opens at exactly the same rate resulting in a constant non-pulsating fluid flow.

Cavity movement through 180° of Rotor rotation



Typical Applications

FOOD

• Milk • Curd • Oil slurries • Cheese • Ice-cream
• Chocolates • Taco • Sauce • Dough balms
• Lecithin • Jam • Butter oils • Diced vegetables
• Fruit pulp • Fruit juice • Beer • Beverages
• Liquor • Wine • Malt • Extracts
• Tomato pastes etc.

PHARMA AND COSMETICS

• Syrups • Pill pastes • Creams • Shampoos
• Tooth pastes • Heavy liquid lotion • Creams
• Selenium liquid • Chyawanprash • Bulk drugs
• Vitamins • Emulsion • Gelatin
• Essential oils concentrate • Ointments
• Liquid make up • Fruit pulp • Herbal pastes etc.

Zero leakage @ low torque




SPECTRO ANALYTICAL LABS LIMITED

TEST REPORT

FOOD CONTACT TEST

TOTAL EXTRACTIVES

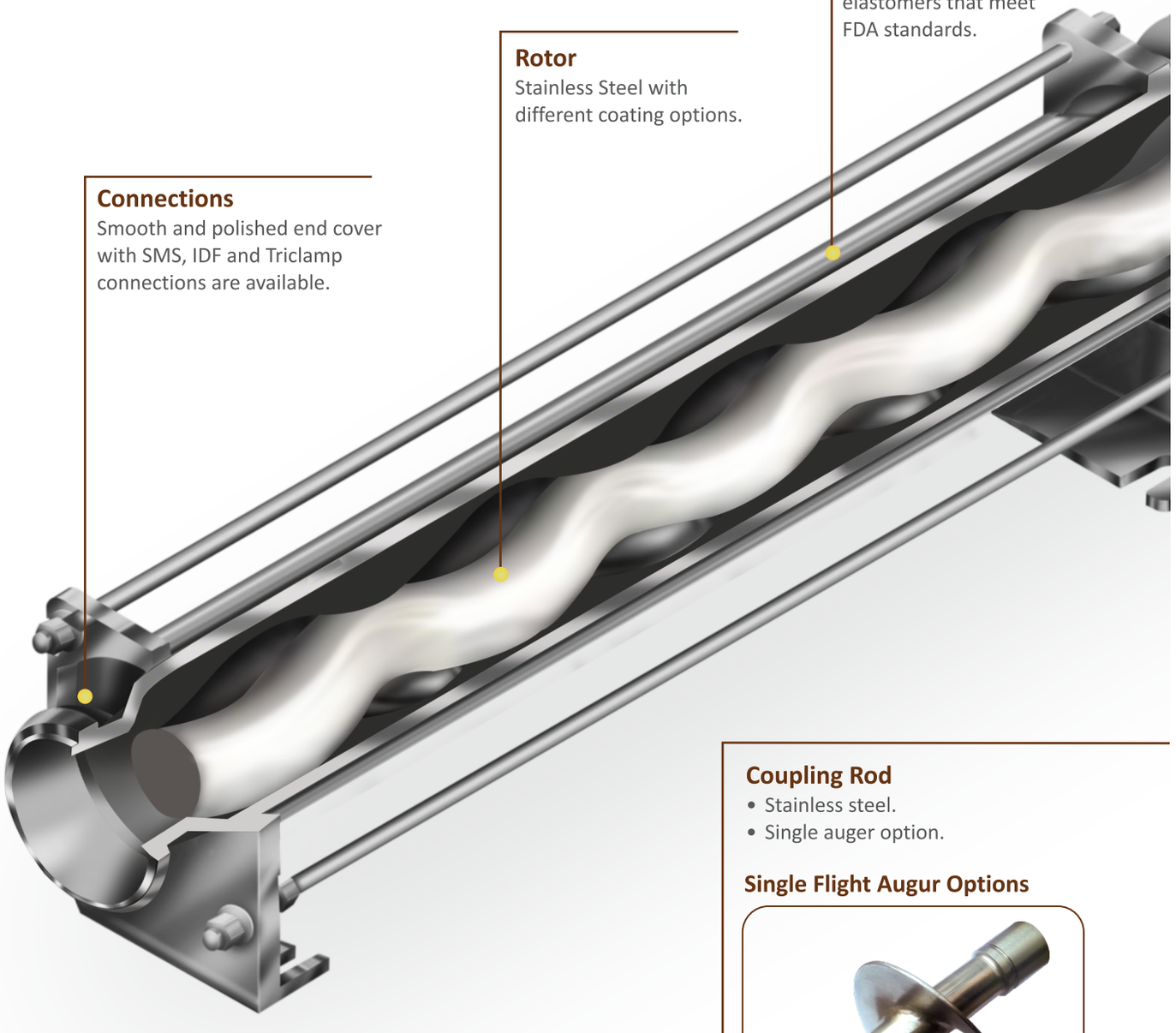
S.No.	SIMULANT	OBSERVED RESULTS	REQUIREMENTS (As per US-FDA 21 CFR 177.2600)	CONFORMITY	TEST METHOD
1	n-hexane (at Reflux temperature for 2 hours), mg/inch²	40.90	175 (Max)	YES	US FDA 21CFR, 177.2600
	Successive Extraction, (at Reflux temperature for 2 hours), mg/inch²	0.41	4.0 (Max)	YES	
2	Distilled water, (at Reflux temperature for 2 hours), mg/inch²	0.17	20.0 (Max)	YES	
	Successive Extraction, (at Reflux temperature for 2 hours), mg/inch²	0.04	1.0 (Max)	YES	

TRA-150994

Stator
Wide selection of elastomers that meet FDA standards.

Rotor
Stainless Steel with different coating options.

Connections
Smooth and polished end cover with SMS, IDF and Triclamp connections are available.



Coupling Rod
- Stainless steel.
- Single auger option.

Single Flight Augur Options

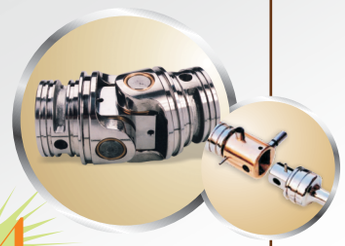


Shaft Sealing

- Single coil mechanical Seal flushed by the product.
- Double mechanical seal or Soft gland packing optional.

CIP (Cleaning in Place)

Single and double CIP ports available.

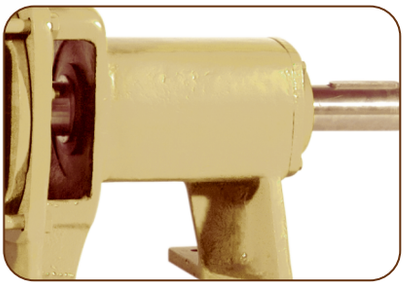


24 MONTHS WARRANTY

Cardan Universal Joint

Close Coupled Drive Options

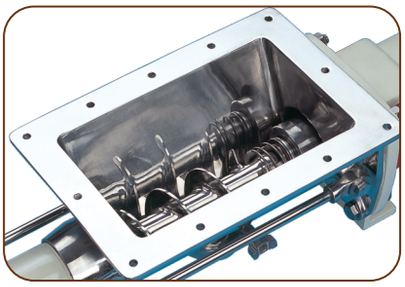
- Pump lanterns designed for gear motors or mechanical variable speed drives.
- Bearing Housing optional.



Suction Housing

- Polished stainless steel.
- Jacketed housings optional.
- For viscous fluids wide throat pump housing available.

Wide Throat

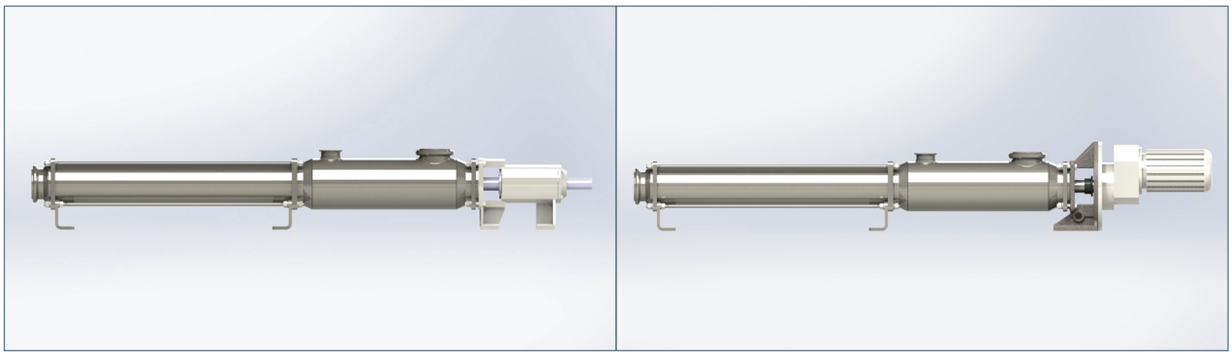


Material Options

- Fabricated stainless steel housing
- Stainless steel rotor
- Stainless steel hardware
- Stator options:
  - Nitrile Black
  - Nitrile Off-white
  - EPDM Black
  - EPDM White
  - Fluoroelastomer
- Other exotic materials
  - Duplex
  - Super Duplex

Technical & Performance Information;

Threaded Port Series



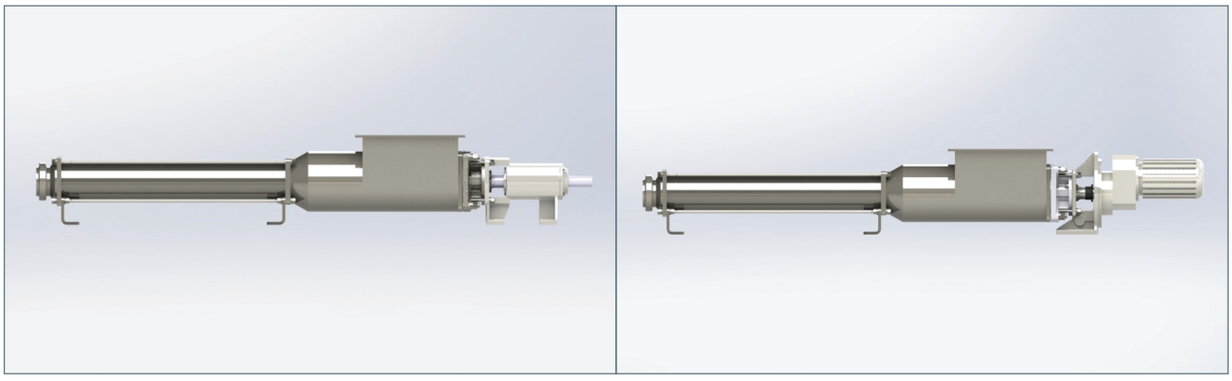
Single Stage Pumps

Size	51	53	54M	57M	59M	61M	63M
Capacity							
M^3/hr	7	10	18	31	51	63	86
Pressure							
Bar	6	6	6	6	6	6	6

Two and Four Stage Pumps

Size	51	53	54	56	58	60	62
Capacity							
M^3/hr	7	10	14	18	26	37	55
Pressure							
Bar	12	12	12	12	24	24	12

Wide Throat Series



Two and Four Stage Pumps

Size	51	53	54	56	58	60	62
Capacity							
M^3/hr	4	6	7	11	16	22	33
Pressure							
Bar	12	12	12	12	24	24	12

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Melbourne Office & Warehouse



Manchester Office & Warehouse



Roto Pumps North America, Inc



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