Expert Solutions in Seal-less Hygienic Transfer

Where Innovation Flows

ECCENTRIC DISC PUMPS

DAIRY MARKET Eccentric Disc Pumps
Dairy Product Manufacturing Challenges:

Dairy product manufacturers face the following challenges in their day-to-day operations:

- Preservation of final product quality
- Having the cleanest operating conditions
- Minimizing product loss and recovering ingredients
- Handling extremely shear sensitive products and ingredients

Pumps used throughout each phase of all kinds of dairy product production processes must have the following attributes to meet those challenges:

- Gentle product handing
- Perfect cleanability
- Volumetric consistency
- Able to recover expensive products and ingredients

Yogurt culture injection
- Low shear (fragile product)
- Constant flow rate vs. variable pressure

Flavored milk dosing
- Constant flow rate vs. variable pressure
- Non pulsating flow
- Product recovery

Rework process
- Constant flow rate vs. variable viscosity
- Product recovery

Spray dryer feeding
- Constant flow rate vs. variable pressure
- Non pulsating flow

Aerating system feeding
- Constant flow rate vs. variable pressure
- Low shear

Heat exchanger feeding
- Constant flow rate through heat exchanger.
- Vacuum to prime with a viscous cream
- Product recovery
Mouvex Eccentric Disc Pumps: The Solution for the Challenges of Dairy Production

- Low shear due to eccentric disc technology and lack of mechanical seal and bushings
- Consistent performance (flow, pressure and volumetric efficiency) thanks to low slippage.
- Product recovery (pipeline stripping), means profit recovery
- Non-pulsating, smooth flow
- Self-priming to take ingredients from drums
- Easy to maintain: no seals, no metal/elastomer friction, only two pumping parts
- High volumetric efficiency allowing accurate formulation
- Clean-in-Place (CIP) capable for the ultimate in convenience and cleanliness
- Unique seal-less design eliminates leakage

Micro C Series
The seal-less pump for small flow rates. Up to 800 l/hr (3.5 gpm)

S Series
The seal-less pump with quick dismantling for daily hand cleaning. Up to 12 m³/hr (52 gpm)

SLS Series
The CIP capable seal-less pump for various applications. Up to 36 m³/hr (158 gpm)

Mouvex Technology
Eccentric disc pumps consist of a cylinder and pumping element mounted on an eccentric shaft. As the eccentric shaft is rotated, the pumping element forms chambers within the cylinder, which increase in size at the intake port, drawing fluid into the pumping chamber. The fluid is transported to the discharge port where the pumping chamber size is decreased. This action squeezes the fluid out into the discharge piping.

Mouvex Principle

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