Expert Solutions in Seal-less Hygienic Transfer

LIQUID SUGAR MARKET
Eccentric Disc Pumps

Where Innovation Flows

ECCENTRIC DISC PUMPS

mouvex.com
Liquid Sugar Processing Challenges:

Liquid sugar under all its aspects (such as glucose, sugar syrup, caramel) is used in many industries: food (confectionery, sauces, chocolate), beverages, pharmaceutical, and many more. These widely used products, however, lead to difficult challenges in many processes in day-to-day operations:

- Difficult dynamic sealing, often leading to leakages
- Consequence of above, a water flush is almost always necessary leading to high potable water consumption
- Ordinary shaft sealing systems showing a limited life time
- Abrasiveness of some sugar based liquids
- Frequent downtime and maintenance
- As liquid sugar is often being added in recipes or used to coat, a need for a constant flow rate, even vs. a variable viscosity or pressure

Pharmaceutical syrup manufacturing
Glucose transfer from storage tank to process
- Seal-less
- Constant flow rate vs. wear in spite of an abrasive liquid

Chocolate bar manufacturing
Glucose transfer to chocolate mixing tank
- Seal-less
- Constant flow rate vs. wear

Sweets manufacturing
Glucose based colorant transfer to coating machine
- Seal-less
- Constant flow rate vs. variable viscosity and pressure

Sweets manufacturing
Glucose transfer for recipe formulation
- Seal-less
- Constant flow rate vs. variable viscosity and pressure

Chewing gum manufacturing
Glucose truck unloading
- Seal-less
- Line Stripping

Beverage Production
Glucose transfer from storage to process and recirculation to avoid crystallization. A 24/7 operation
- Seal-less
- Constant flow rate even if pumping parts are wearing
Mouvex Eccentric Disc Pumps:
The Solution for the Challenges of Liquid Sugar Process

- Unique seal-less design means the end of flush water consumption and frequent downtime and maintenance operation
- Easy to maintain: no seals, no metal/elastomer friction, only two pumping parts
- Consistent performance (flow, pressure and volumetric efficiency) thanks to low slippage
- Total wear compensation when pumping an abrasive liquid. No performance loss
- Product recovery (pipeline stripping), means profit recovery
- Non-pulsating, smooth flow
- 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

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