

# Polyurethane (Isocyanates) Market

PRODUCT BROCHURE



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a DOVER company

**MUVEX**

Where Innovation Flows

CONSISTENT.  
EFFICIENT.  
SAFE.

## Mouvex® Eccentric Disc Pump Technologies | The Solution for Your Polyurethane Process

Mouvex® features a variety of leading pump technologies that include eccentric disc and rotary vane pumps to meet virtually any application challenge throughout the polyurethane manufacturing process.

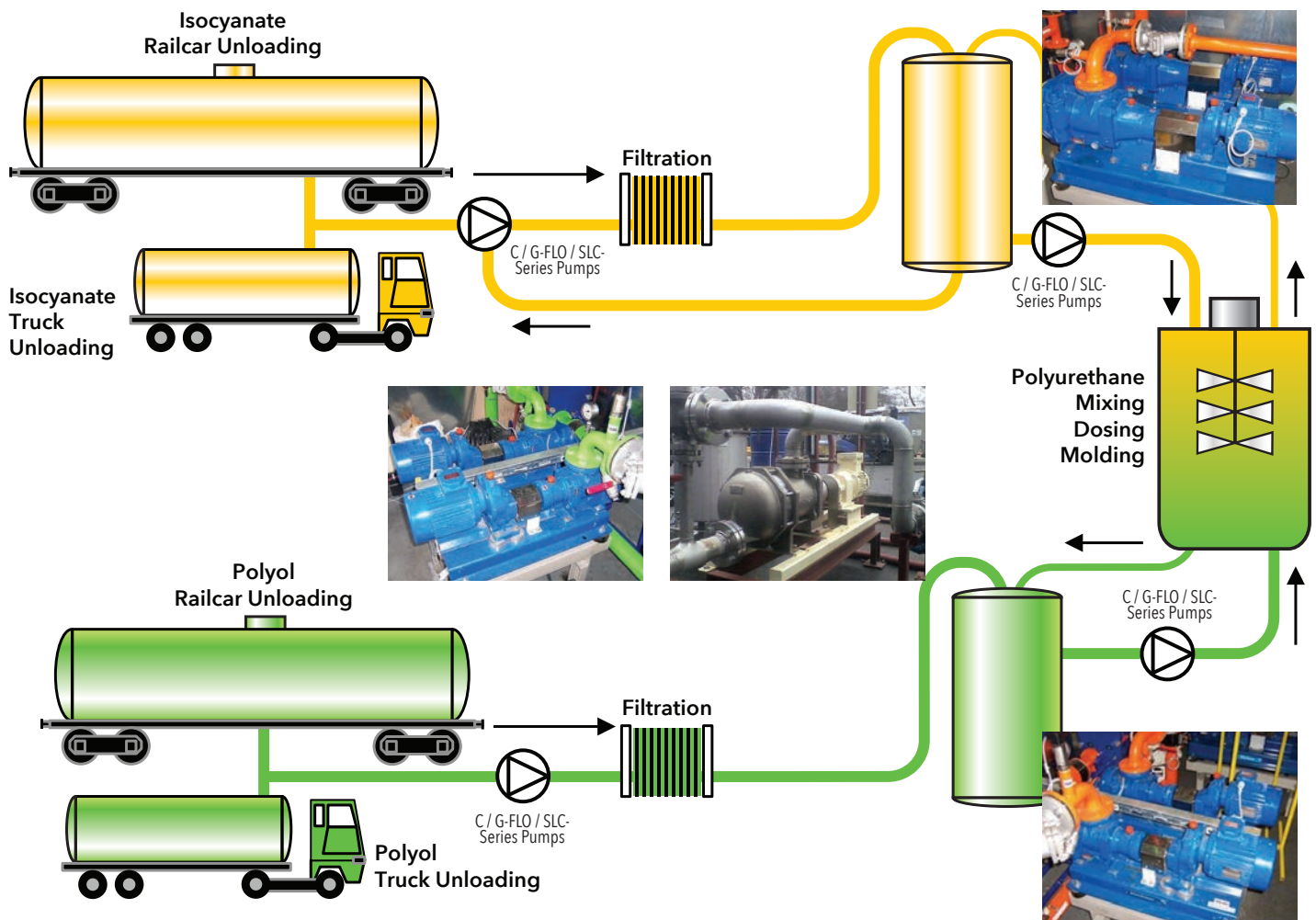
### Polyurethane Production Challenges:

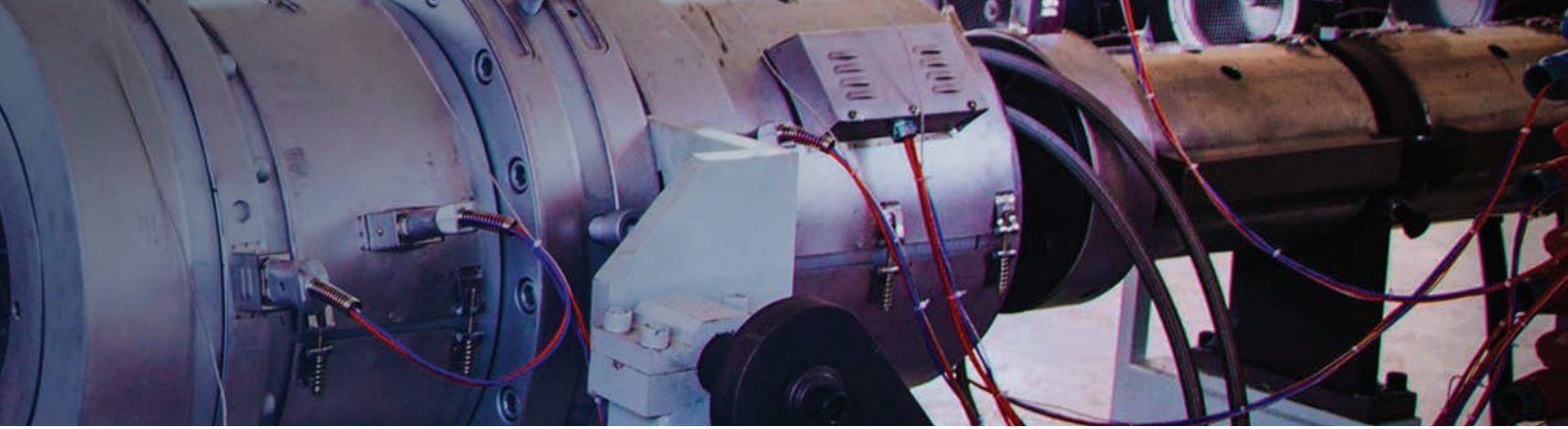
Polyurethane producers face the following challenges in their day-to-day operations:

- Handling of dangerous chemicals
- Operational safety
- Environmental safety
- 24/7 duty on isocyanate pumps to avoid solidification

Pumps used throughout each phase of the polyurethane production process must have the following attributes to meet those challenges:

- Avoiding leakages
- Volumetric consistency for mixing
- Line stripping during unloading operations
- Low shear to avoid isocyanates dilatation





# Mouvex® Eccentric Disc Pump Technologies |

## The Safest and Most Efficient Pumping Technology for Your Polyurethane Process

- Unique seal-less principle with stainless steel bellows provide zero leakage during operation
- Line stripping allowing safer and cleaner unloading operations
- High volumetric efficiency allowing accurate formulation
- Very limited maintenance: No seals, only two pumping parts, virtually no wear due to low contact speed
- 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



### C Series

The versatile seal-less ductile pump.  
Up to 18 m<sup>3</sup>/hr (79.3 gpm)



### G-FLO & SLC Series

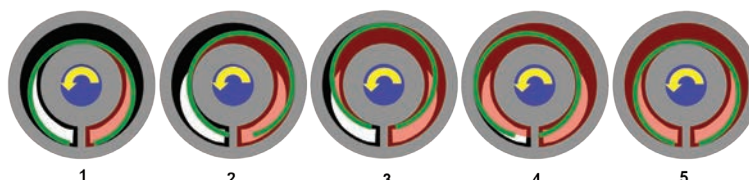
The seal-less stainless steel pump.  
Up to 65 m<sup>3</sup>/h (286.2 gpm)



## 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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