Impellers | HVM Series

Professional Mixing Technologies

Next Generation Efficiency in Mechanical Mixing Technologies

Mechanimix delivers specialized impeller technologies that ensure efficient mixing, reliable performance, and controlled flow behavior in demanding high-viscosity processes. The HVM impeller is engineered with narrow blades to promote stable laminar flow, strong axial pumping, and dependable circulation in fluids with critical rheology. Its streamlined blade geometry maximizes shear in the wall gap for effective blending and heat transfer, while optional internal baffles enhance power delivery. Suitable for viscous media and solid incorporation, the HVM provides consistent, application-driven performance across a wide processing range.

INDUSTRIES

- Food and Beverages
- Cosmetic
- Polymer
- Paint and Coating
- Pharmaceutical
- Formulated Products

HVM

APPLICATIONS

- Glue
- Polymerizations
- Rubber Products
- Creams, Mascara, Ointments
- Sealing Materials
- Grease

ADVANTAGES

- Adjustable According to Process
- Short Mixing Times
- Excellent heat transfer
- Easy Product Unloading

FEATURES

- Highly Flexible Modular System
- Both Directions of Rotation Possible
- Low to high viscosity process
- Ideal for mixing stages

Material Variants and Application Range

Professional Mixing Technologies

HVM (Stainless Steel)

Material

- High-grade stainless steel

Features

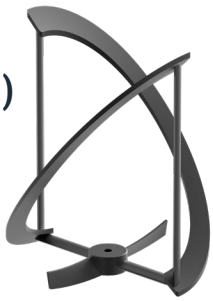
- Corrosion-resistant & sanitary
- Modular impeller design
- Bidirectional operation
- Wide viscosity handling

Typical Applications

- Food & beverage production
- Cosmetics and pharmaceuticals
- Polymers, paints and coatings

Advantages

- Short mixing times
- Excellent heat transfer
- Adjustable to process needs
- Reliable and clean operation



HVM (Rubber Lining)

Material

- Carbon-steel impeller body with rubber lining

Features

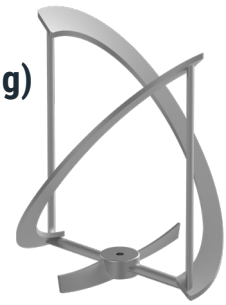
- Abrasion-resistant lining
- Corrosion and chemical barrier
- Maintains HVM design flexibility
- High-viscosity mixing capability

Typical Applications

- Mineral processing slurries
- Rubber and polymer compounds
- Sealants, adhesives, and paste mixing

Advantages

- Extended equipment life & lower maintenance
- Easy product unloading
- Process safety and product purity
- Robust mixing performance



HVM (Super Duplex)

Material

- Super Duplex Stainless Steel

Features

- Exceptional corrosion resistance
- High mechanical strength
- When coatings won't suffice
- Fully featured HVM design

Typical Applications

- Chemical and petrochemical processes
- Marine and high-chloride environments
- Minerals and aggressive slurries

Advantages

- Maximum durability & reliability
- Handles extreme viscosities
- Optimized for critical processes