Verdermix VMS Series

Characteristics

Verdermix has developed a standard modular system to produce a mixer that is specific to your process, is quick to produce and ensures a long service life.
The Verdermix design is optimised for delivering turbulent mixing forces and minimizing the drag and 'energy loss' in the system.

***The VMS series** contain the most applied mixing element shape in the world; which is the helical shaped mixing element. This mixing element has unique characteristics and a proven track record.*

This type of static mixer is intended for the food and pharmaceutical industries designed with a perfectly cleanable construction. The element is retractable for thorough cleaning. All wetted parts are electro polished and meet the hygienic standards according to regulation 1935/2004/EC and FDA.

Your benefits

- **Custom design**
- **Robust and maintenance free**
- **High mixing efficiency**
- **Low energy consumption**
- **Fast delivery**
- **Easy to install**
- **Easy removal and cleaning**

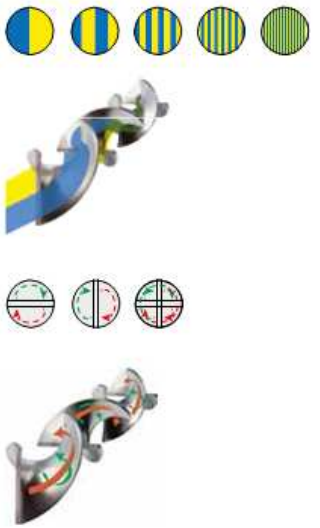
Application areas

- Food,
- Blending of different media
- Hygienic applications
- Sterile applications
- Pharmaceutical
- Aromas

Working principle

The static mixer uses a small part of the pump energy that is readily available in your process line. Mixing is accomplished in three ways:

1. *Flow division*
   Each time a product stream passes over an element, it is split in half, separated, creating layers.
   The number of separations, X, =2n (n=number of elements).
   This means that with 20 elements in line more than 1 million layers are created
2. *Flow conversion*
   The product is pushed over the elements, spiral walls, causing the liquid in the centre to move radial to the outer diameter and the product on the outside to move vice versa. This leads to a difference in speed between the product molecules causing mixing of the product
3. *Flow inversion*
   The product direction of rotation changes in each element, receiving rapid inversion of inertial force, which agitates the product.



Technical details

Type of elements	*Helicals*
Number of elements	*Minimum 2 - maximum 24*
DIN-size	*In stainless steel or other metals:* • *From DN4 to DN800*- other sizes on request* **From DN125: elements are made from flat strips, welded together* *In PVC, PE, PP, PVDF:* • *From DN15 to DN150* - other sizes on request* **From DN125: elements are made out of flat plate*
Materials	*SS304, SS316, PVC, PE, PP, PVDF - other materials on request*
Connections	*Flanged DIN, ASA or screwed connectors, sockets, plain end, other on request.*
Surface treatment (if applicable)	*Pickled (standard) - On request: Electropolishing*
Optional	*Available with jacket (double piping) for heating or cooling*