



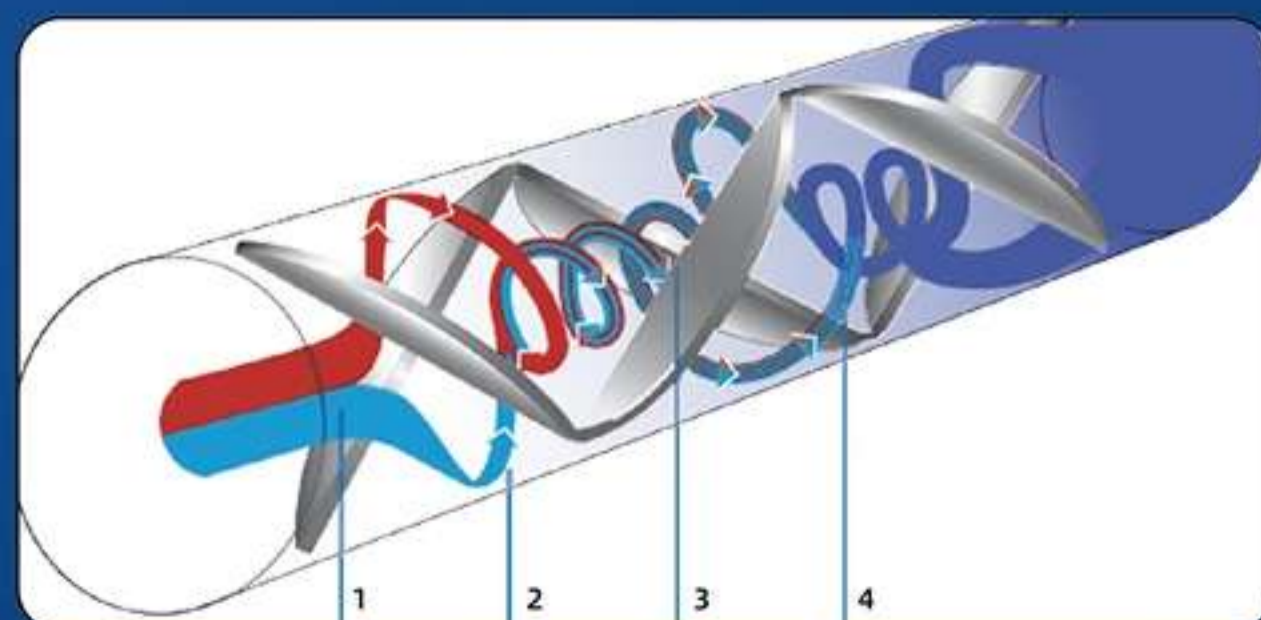
STATIC MIXER SMB Model

Simple structure

► Product Introduction

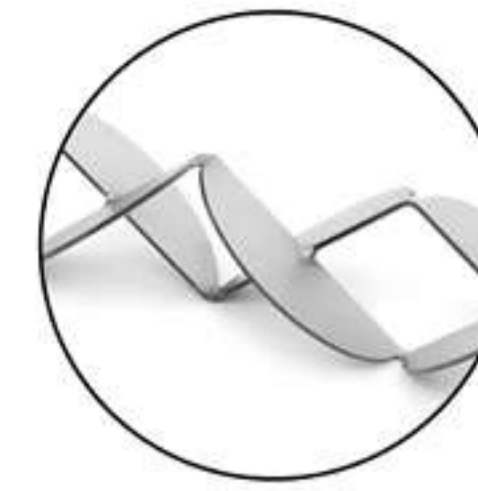
OMORIS SMB Model Static Mixer is an exceptionally efficient in-line mixer that contains no moving parts. It is easily installed in new and existing pipelines and offers both low installation and low operating costs. With no moving parts it is completely trouble free, requires no maintenance and has an infinite life. Its patented design provides mathematically predictable mixing results of liquids or gases with very low pressure drop.

► Operating Principle



- 1 Division of main stream.
- 2 Streams are forced to opposite outside walls.
- 3 Creating a mixing vortex axial to the centerline of the second element.
- 4 Mixing vortex shears, step 1 re-occurs in opposite rotation.

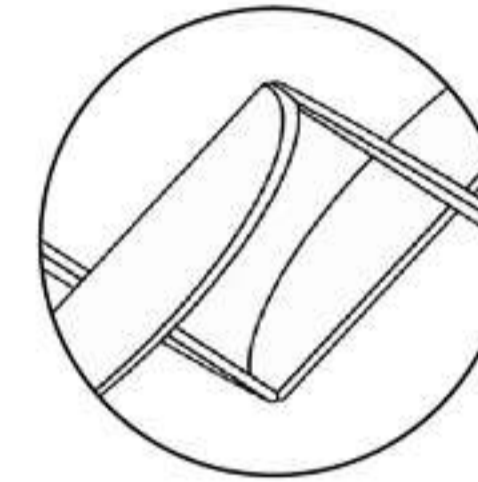
► Structure



OMORIS SMD model static mixer consists of a series of semi-elliptical plates discriminately positioned in series.

Two plates perpendicular to each other make up a single element. The mixing operation in this type of static mixer is based on the splitting and diverting of the input stream(s).

As the product moves through each element, flow is continuously split into layers and rotated 90° in alternating clockwise and counterclockwise directions.



This method of subdividing the flow and generating striations results in a highly predictable and repeatable mixing way for high flowrate, low viscosity applications.

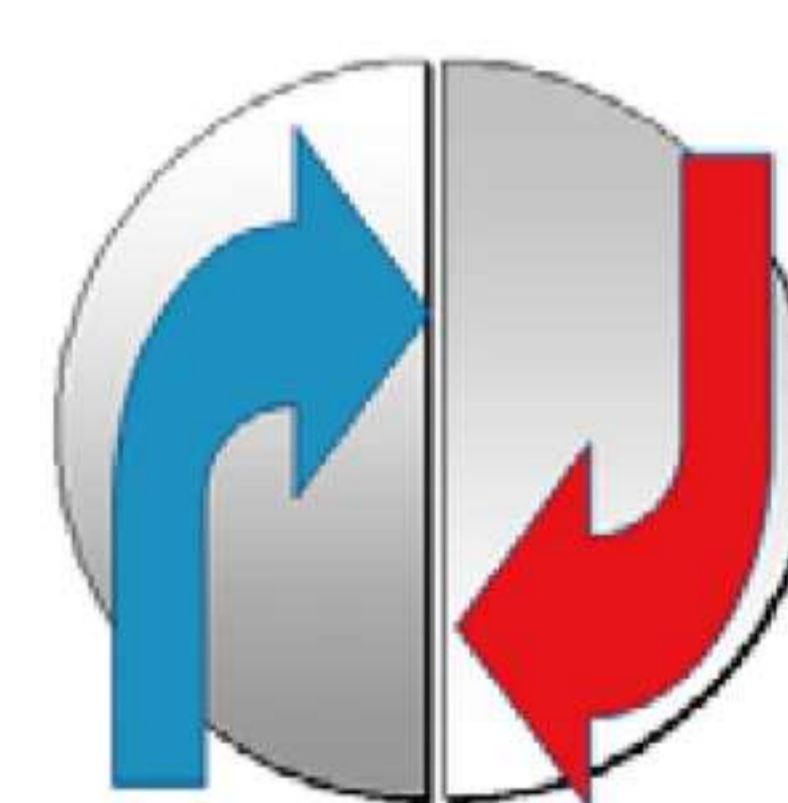
During turbulent flow, the mixer elements enhance the random motion of molecules and formation of eddies.

SMD 4-6 elements are usually sufficient for most low viscosity mixing requirements.

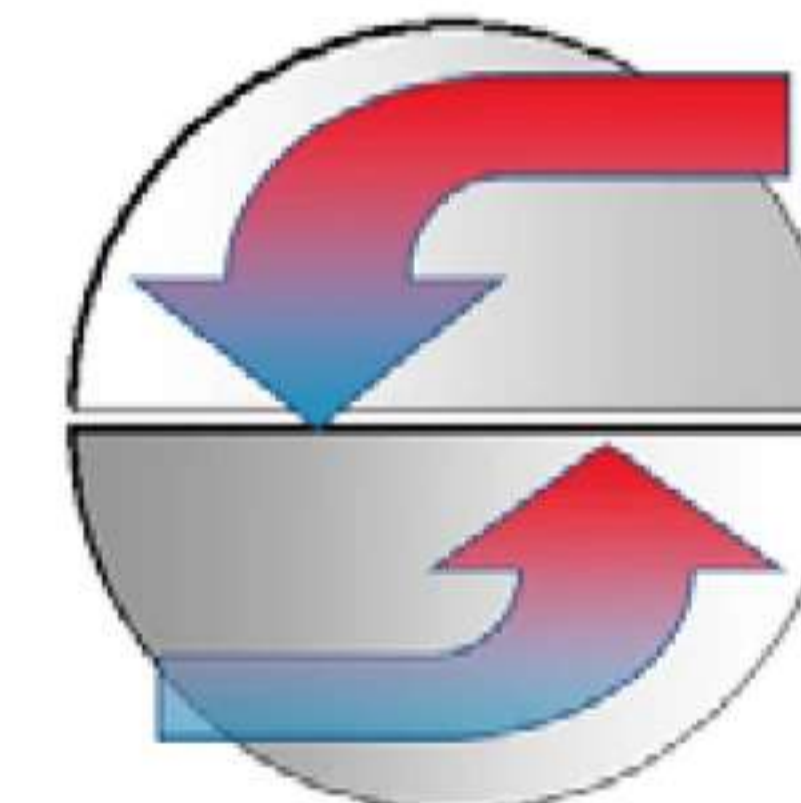
► OMORIS SMB MODEL

- For simple mixing applications.
- Special design for low pressure drop.
- High mixing efficiency.
- Suitable for high flowrate and big size piping mixing condition, widely used in pipe size DN10 - DN2400 (3/8 inch to 100 inch)

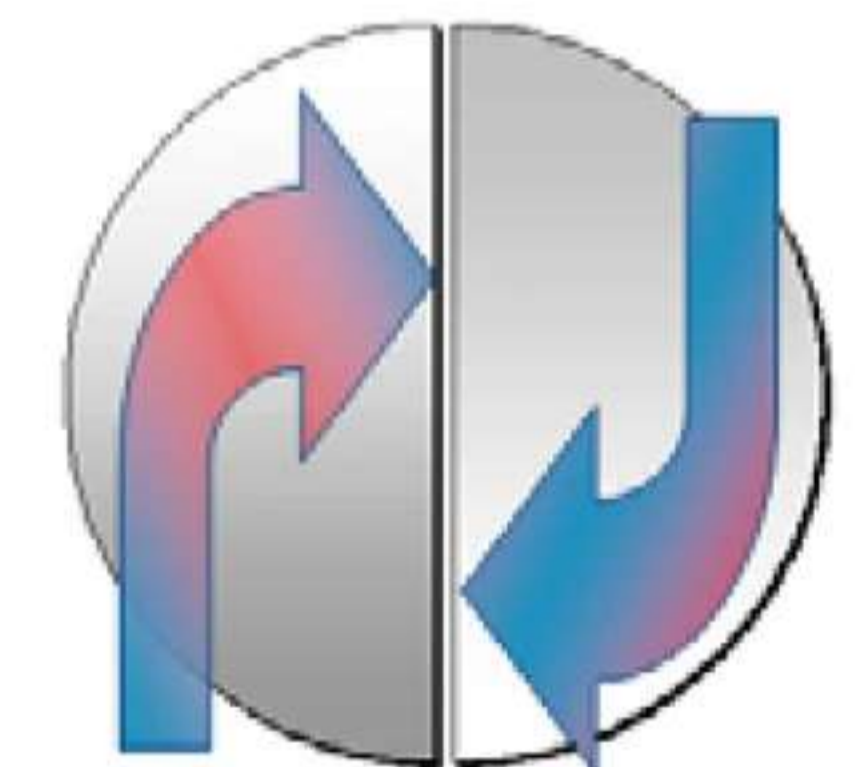
- Step 1: Split and Rotate 90° (CW)
- Step 2: Split and Rotate 90° (CCW)
- Step 3: Repeat Step 1
- Step 4: Repeat Step 2



STEP 1



STEP 2



STEP 3

