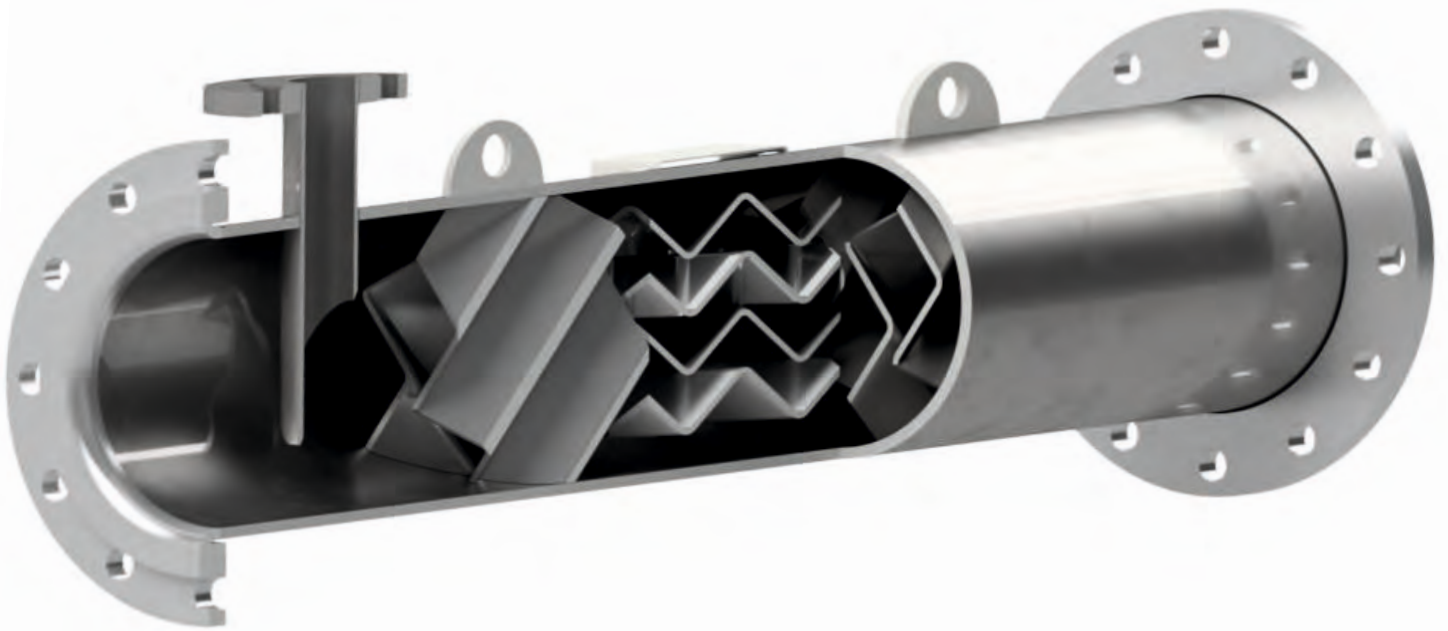




Industrial Process
Solution Partner



CHEM-MIX PROCESS EQUIPMENT
MIXTURE AND REACTION TECHNOLOGIES

STATIC MIXER GENERAL CATALOG

CHEM-MIX PROCESS EQUIPMENT

MSM - STATIC MIXER

MIYAY CHEM-MIX static mixers; It is designed in accordance with customer needs in terms of innovative and high process efficiency. Delivery times are short. These mixers are produced with PTFE and PFA coating in accordance with carbon steel, stainless steel, polyethylene and special chemistry processes. MIYAY static mixers offer significant advantages in the mixtures of difficult to mix liquid-liquid, liquid-gas and gas-gas chemicals.

Usage areas:

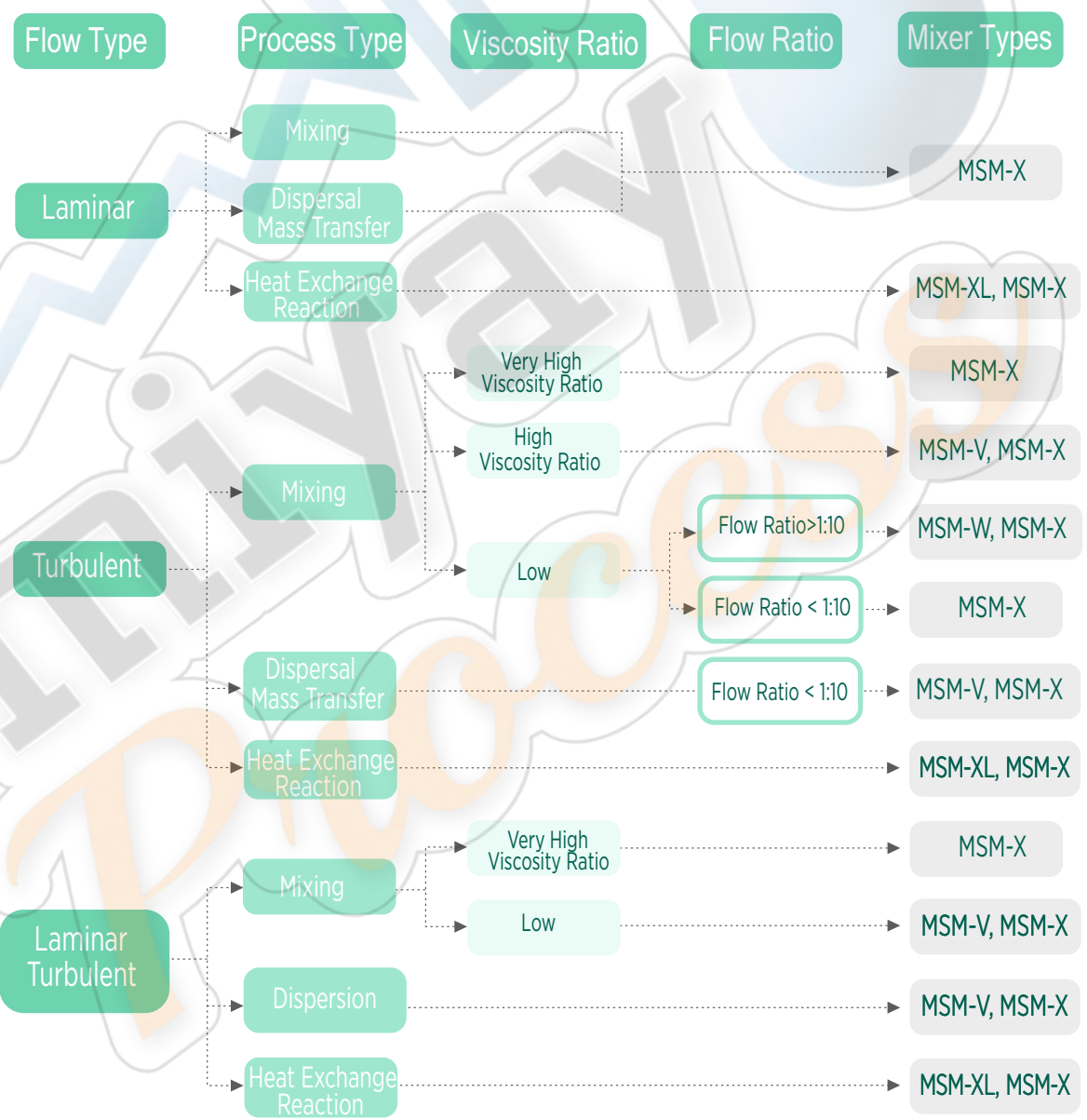
- *Water Treatment
- *Chemical Mixing
- *Soluble Gases
- *Polymer Mixing
- *Floculant Mixing
- *pH Control
- *Drinking water
- *Waste water
- *Chlorination
- *De-Chlorination

Advantages:

- *Perfect Mixing
- *Low cost
- *Integrated Fittings Connection Pieces
- *Low Pressure Loss
- *Easy setup
- *Long Service Life
- *No Maintenance Requirements
- *No Moving Parts
- *Energy-saving
- *Available in All Sizes.
- *Available Material Types: PVC, FRP, 316, Stainless steel, Titanium, Kynar Teflon Etc.

Selection Chart

CHEM-MIX static mixer species according to fluid and process types are as follows.



CATALOG PRODUCT CODE

ME- MSM- M- A22X2

MİYAY PROCESS

MİYAY STATIC MIXER

STATIC MIXER TYPE CODE

ELEMENT CLASS

COATING TYPE

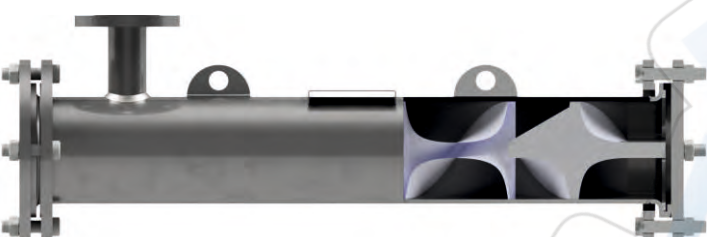
PRESSURE CLASS

DIAMETER

TYPE OF MATERIAL

MATERIAL	DIAMETER	PRESSURE CLASS	COATING TYPE	NUMBER OF ELEMENTS
A- Carbon Steel	1- DN 80	1- PN 10	X- No	1-1 Element
B- AISI 304L	2- DN 100	2- PN 16	Y- PTFE	2-4 Elements
C- AISI 316L	3- DN 125	3- PN 25	Z- PFA	3-6 Elements
D- AISI 904L	4- DN 150	4- PN 40	T- PP	4-8 Elements
E- Polyurethane	5- DN 200	5- Special Product	K- Special Product	5-12 Elements
K- Special Product	6- DN 250	7- DN 300		9- Special Product

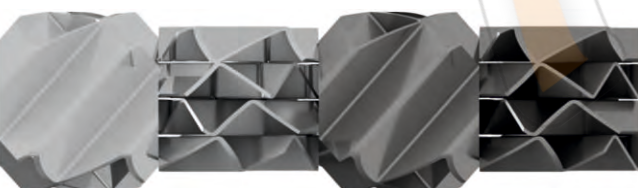
MSM-S



MSM-S mixers have helical type mixing elements for any combination of liquids, solids or gases. Mixer elements can be increased or decreased to achieve the desired mixing efficiency. It is available in various materials such as carbon steel, stainless steel and polyethylene.

INDUSTRY	SCOPE OF APPLICATION	PROCESS
Water Treatment	Concentrated Acid Dilution	Liquid/Liquid Mixing
Oil and Natural Gas	Extreme Temperature Loop Reactors	Liquid/Gas Mixing
Petrochemical	Acid Solvent Stripping	Liquid Mixing Difficult to Mix
Water Treatment	Disinfection Control	Liquid/Liquid Mixing
Chemical	Acid Mixing Reactors	Liquid/Liquid Mixing

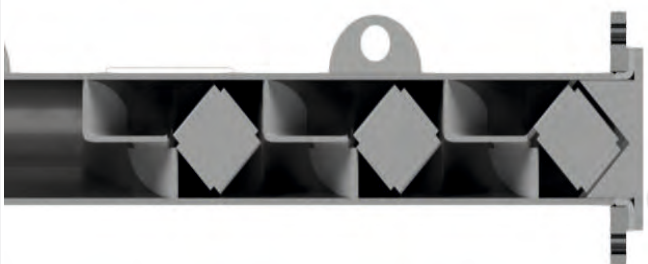
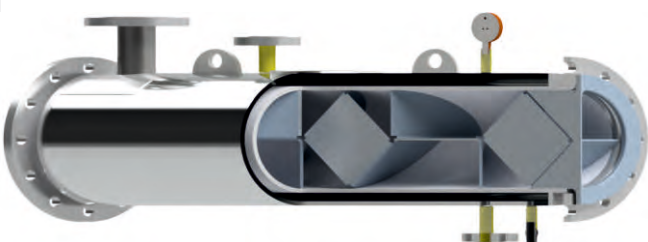
MSM-V



The MSM-V mixer is made of corrugated plates that form open intersecting channels through which the flow is divided into many sub-streams. The MSM-V mixer is especially used in turbulent and transitional flow regime to intensify mass transfer between immiscible fluids.

INDUSTRY	SCOPE OF APPLICATION	PROCESS
Food	Pasteurization of Raw Cocoa Mass	Liquid/Gas Mixing
Petrochemical	Stripping Gas Condensation with Methanol	Liquid Mixing
Petrochemical and Gas	Glycol Gas Drying	Liquid/Gas Mixing
Paper	Pulp Density Control	Liquid/Solid Mixing

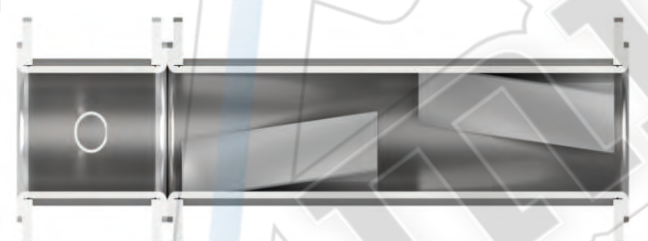
MSM-Q



MSM-Q mixers are easy to clean in a single CIP cycle and depending on process requirements the system can have a completely sterile coating. Removable mixer elements allow cleaning from the outside. It is very practical in processing high viscosity materials. Injectors and heating cooling jackets are also available.

INDUSTRY	SCOPE OF APPLICATION	PROCESS
Food	Yogurt/Fruit Blending	Solid/Gel Mixing
Brewing	Aeration of Wort	Gas/Liquid Mixing
Pharmaceutical	pH Control of Fermentation Broth	Liquid/Pulp Mixing
Soft Drinks	Carbonation of Drinks	Gas Dispersion

MSM-W



MSM-W mixers are vortex mixers which designed for fully turbulent flow. Typically these are two mixing elements configured with an empty tube section between them, designed to form two large counter-rotating vortices that provide intense mixing with very low pressure drop.

INDUSTRY	SCOPE OF APPLICATION	PROCESS
Wastewater	pH Control/Flocculation	High/Low Viscosity Mixing
Water Treatment	Ozonation/Oxidation	Gas/Liquid Mixing
Desalination	Re-Carbon/Chlorination	Gas/Liquid-Liquid/Liquid Mixing
Chemical	Acid Mixing Reactors	Liquid/Liquid Mixing

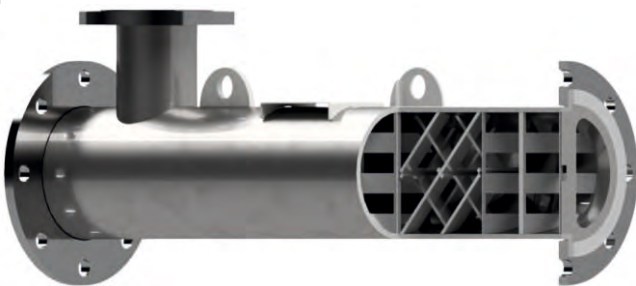
MSM-C



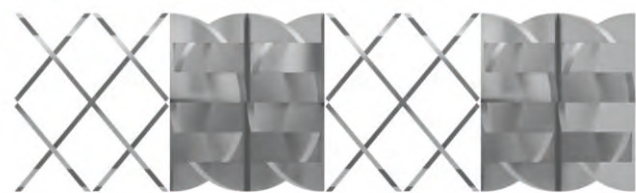
The MSM-C mixer is for fully turbulent flow. It is designed for mixing small quantities of additive into the bulk stream at a very short mixing distance. This mixer can be installed between two flanges of a pipeline and has a single mixing element.

INDUSTRY	SCOPE OF APPLICATION	PROCESS
Water Treatment	Coagulation/Flocculation	High/Low Viscosity Fluid Mixing
Wastewater	pH Control/Flocculation	High Viscosity Sludge Mixing
Swimming Pool	Ozonation/Disinfection	Gas/Liquid Mixing

MSM-X

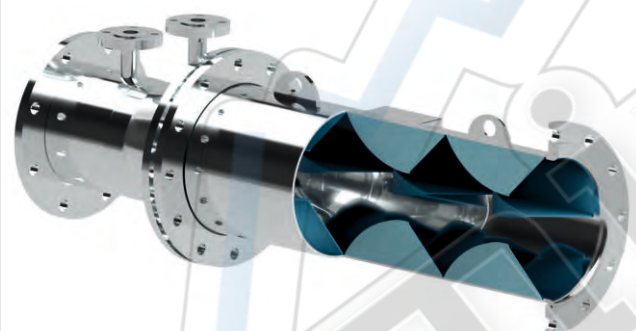


The MSM-X mixer has a grid of curved bars that successively divides the components into layers and spreads them over the entire cross section of the pipe. It is used in very large flow feeds, products with extremely high viscosity and mixtures of chemicals with complex rheological product behavior.

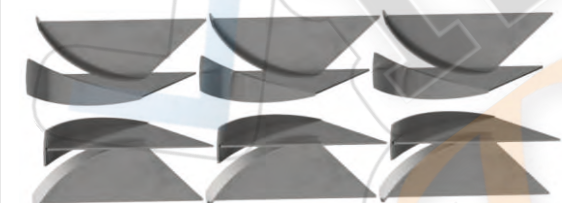


INDUSTRY	SCOPE OF APPLICATION	PROCESS
Synthetic Fibers	Thermal Homogenization/Polymer Exchangers	High Viscosity Liquid Mixing
Polymer Production	ABS/SAN/LLDPE Reaction-Resin Production	High Viscosity Laminar Flow Mixing
Food	Solids Addition/Starch Cooking	High Viscous Flow Mixing

MSM-Y



The MSM-Y mixer consists of a tube equipped with four blades, each strategically placed. The vanes create eddies and multiple intersecting turbulent zones to produce optimum mixing. Its unique geometry protects the mixer from contamination.



INDUSTRY	SCOPE OF APPLICATION	PROCESS
Water Treatment	Coagulation/Flocculation	High/Low Viscosity Fluid Mixing
Wastewater	pH Control/Flocculation	High Viscosity Sludge Mixing
Swimming pool	Ozonation/Disinfection	Gas/Liquid Mixing
Oil-Natural Gas	Acidic pH Control Tasks	Low Viscosity Fluid Mixing

REQUEST A QUOTE

You can request a quote via www.miyay.com or satis@miyay.com by contacting our sales department.

Static Mixer Request Form

Customer Contact Information

Company Name: _____ Customer Reference Number: _____
 Contact: _____ Address: _____
 Phone: _____ Fax: _____
 Email: _____ Date: _____

Mixing or Dispersion

	Units	Process Data Mainstream	Stream 1	Stream 2	Stream 3
Component Name					
Flowrate	(m ³ /h)				
Density	(kg/m ³)				
Dinamic Viscosity	(mPa.s)				
Tempearature	(C°)				
Pressure	[bar(g)]				
Liquid/Gas/Solids					

Components Miscible? Yes No
 Process Requirements Blending Dispersion Reaction Residence Time
 Required Mixing Quality (σ/μ) Maximum Allowable Pressure Drop (mbar)

Heating/Cooling

	Specific gravity	Temp (in)	Temp (out)	Viscosity	Specific Heat	Thermal Cond.	Flowrate
Process Fluid							
Heating/Cooling Fluid							

Allowable Pressure drop Jacket Tube

Mechanical Data

Materials of construction Existing line size Max length allowable:
 Design Tempertaure: Design Pressure: Integral Injection

End Connections Plain Threaded Flanged Type: Class:

ATEX applicable ? Yes No

Requried Tests: Hydostatic Pressure Tests Radiographic Test Sandblasting
 Magnetic Particle Tests Dye Penetrant Tests Picklink

Any other information? _____



Industrial Process
Solution Partner



LOCAL SUPPORT
Field Service



REPAIRS AND UPGRADES
Machine Optimization and
modernization



TRAINING
Operation and Maintenance with
the Operator
Personnel Trainings



SPARE PARTS
Machine Spare Parts Stock
and Supply



SERVICE AGREEMENTS
Preventive Maintenance
Service Contracts



PROCESS OPTIMIZATION
Process Optimization Services



LAB AND ON-SITE TESTS
Laboratory Testing Services

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