

MIXING SOLUTIONS
FOR SPECIALTY
CHEMICALS
AND COATING
INDUSTRIES

**Enhance
your process
optimize your
production
costs**



Highly efficient mixing at the right energy cost



The entire range of VMI mixers dedicated to the markets of specialty chemicals and coating is distinguished by its intelligent technical choices guaranteeing optimal performance in terms of agitation/dispersion/mixing and optimal equipment reliability time, while limiting energy consumption.

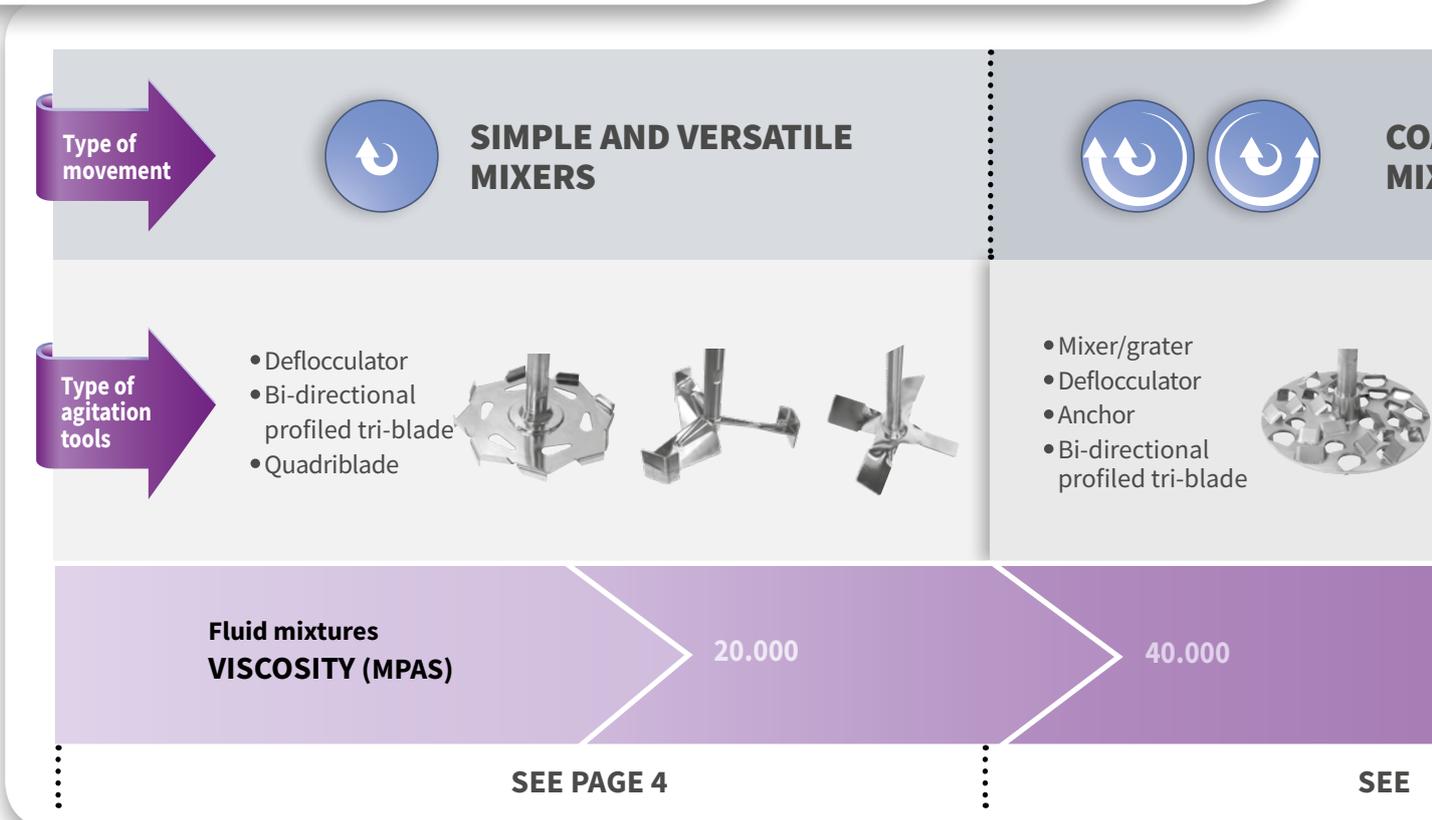
The approach adopted by VMI consists therefore in designing and producing mixing mobile components and technologies, thus applying the principles of an agitation/mixing system correctly compatible with the client's needs. As such, VMI machines are designed with the aim of adapting mixing tools – motor, coupling power and

structure – in order to ensure the targeted performance as well as simplicity and sustainable reliability of operations.

Being additionally efficient, ergonomic and reliable, machines VMI are easier to use on a daily basis as they offer new capabilities, including integration within the existing workshop.

Our methodology, targeting a sustainable long-term partnership, is also designed to support the evolution of our clients' processes and products.

 **VMI mixers.** A suitable solution for every rheology.





VISCOSITY



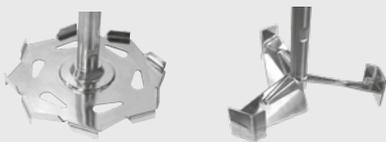
- Automotive and aeronautical paints
- Oils



- Ceramics - enamel
- Resins
- Gels - emulsions
- Glue - coatings
- Dissolution of polymers
- Specialty chemicals - stains, varnishes...



AXIAL DUAL AGITATION MIXERS



100.000



PLANETARY MIXERS

- Paddle
- Scraper
- Spiral



500.000

1.000.000

HIGLY PASTY /
LOADED /
STRUCTURED
MIXTURES

Mixers for fluids or low viscosity products



FEATURES

- Our machines are renowned **for their simplicity and versatility**. They are ergonomically designed for easy operation and low maintenance. Whatever the speed, they facilitate working with a wide range of bowl volumes, i.e., from 40 to 2700 litres.
- Their **robust construction** makes them especially efficient in demanding and complex operating conditions, such as in difficult operations: pressure-based or vacuum-based mixing, specific thermal conditions, explosive environments, etc...
- Their **mobile frame** allows meeting sensible ergonomic constraints and promotes use as a unit, thus ensuring an effective rearrangement of workflow.



Agitators only

The wide choice of mobile agitation equipment, whether based on a radial or an axial effect or both, helps optimizing circulation and shearing phenomena, regardless of the required capacity and of the rheological characteristics of the products manufactured.

Mobimix

These machines are particularly suitable for production using a suitable mixing tool for mobile bowls. This series, which is perfectly adapted for uses in optimal safety conditions, provides production capabilities ranging from 10 to 1600 litres. It also stands out in terms of ergonomics and versatility.

Mixing operations:

Dissolution

Homogenization

Dilution

Continuous suspension

Dispersion



DEDICATED MACHINES

- Agitators with, or for, existing bowls/vessels
- Supermix II
- Mobimix



Supermix II

The Supermix II series has been specially designed to achieve dispersion of solids in liquids, such as typically used in the manufacture of paints, inks, varnishes and other covering coatings.

Mixers for thick or high viscosity products



FEATURES

The mixture of thick and heavily loaded products and the dispersion of particularly dense ingredients are regarded as complex issues in which VMI has specialized for many years.

Capable of combining the particularities of slow and fast agitation, these coaxial dual agitation mixers are the perfect production tools for plastisols,

inks, sealants or other complex coating products. They are fitted with a central tool capable of homogenizing the product, dispersing powders and granulates, and associated to a second coaxial movement for scraping and heat transfers.



Pressmatic

For emptying viscous products, such as polyurethane sealants.



Multimix

Having a working volume of 100 to 20 000 litres, these machines are specifically adapted to producing highly viscous mixes such as tile adhesives, façade sealants, plasters, etc. Thanks to their shorter production time and lower power consumption, Multimix machines ensure an extra performance during the mixing phase.



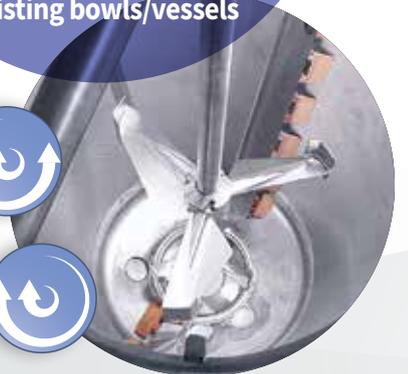
Mixing operations:

Dispersion
Emulsion De-aeration
Powder wetting
Pastes Dilution

 **Agitators only**

DEDICATED MACHINES

- Multimix Slow/Fast
- Multimix Slow/Slow
- Pressmatic
- Agitator, with or for, existing bowls/vessels



Planetary mixers for highly thick or very high viscosity products



FEATURES

VMI planetary mixers are ideally useful for mixing and kneading heavily viscous or pasty products requiring high proportions of powders or mineral fillers. By facilitating work in a controlled environment, in vacuum-based or pressure-based situations, in conjunction with localized

heating/cooling and cleaning functions, the VMI series of planetary mixers will surely guarantee you great versatility associated with a high level of performance.



Bitumen/ asphalt mixers

VMI bitumen/asphalt mixers are perfectly suited for the development of homogeneous samples of hydrocarbon products in the laboratory. They use a steel Archimedes' screw that is specially treated to resist to abrasion. They are equipped with an adjustable and removable scraper.

Column type planetary mixers

Thanks to their 3-speed or 5-speed satellite movement or to their continuous variable speed, column type mixers facilitate the homogeneous mixture of powders as well as the pasting/kneading of highly viscous products. They are provided with 3 standard tools – paddle, whip and hook made of aluminum or stainless steel – which give them great versatility in the development of various products. Their removable bowl allows easy emptying of products, and their easily dismantlable tools are easy to clean.

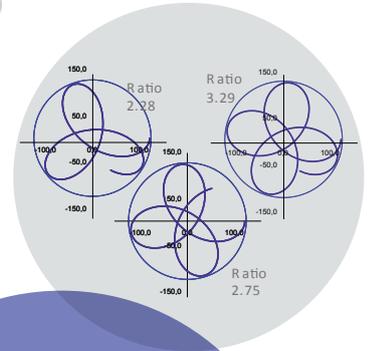
Mixing operations:

Pastes

Heat transfers

Stirring

Mixtures of aggregates



DEDICATED MACHINES

- Column type planetary mixers
- Bridge type planetary mixers
- Bitumen/asphalt mixers



Ultimix

The Ultimix, being the latest model in the range of VMI mixers, is the result of extensive R&D efforts aiming at understanding and controlling planetary movement. Modeling of such a phenomenon has to act on and improve various parameters that ensure an accurate and efficient mixing function: tool/satellite ratio, dimensions/shape of the tool, trajectory in the bowl, mechanical design and power consumption. The design and materials used have been elaborated to save space and optimize hygiene-related tasks.



VMI.

Provider of customized solutions



VMI is committed to offering well thought out solutions that best suit your needs.

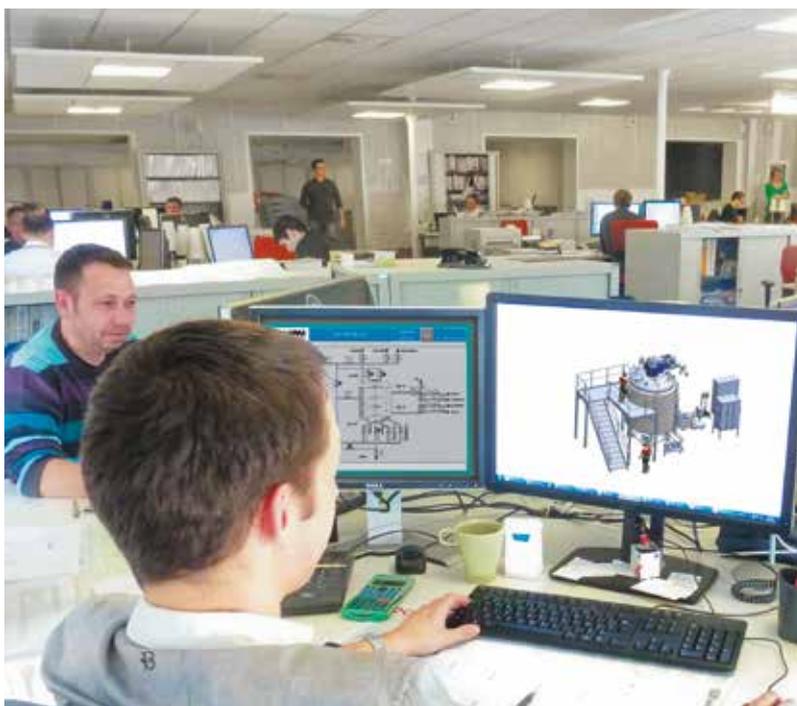
A dedicated team is assigned to each and every project. This team shall be responsible for evaluating your requirements, specifications and for conducting the design and other processes up to the ultimate production set up of the equipment.

Relying on his thorough knowledge of your production processes, **your dedicated and unique project manager** transcribes your needs, throughout the production process, and transfers them to our technical teams.

Comprising more than 40 individuals, the VMI design office offers practical solutions within

the framework of a structured approach and in full compliance with **an ISO 9001:2008 certified procedure.**

Depending on the operational conditions and the performance criteria to achieve, we will offer you the mixing solution that best suits your needs. Once our proposal is validated, we will also follow-up the production and assembly phase, up to the control of the production process.





Automation

Our engineering team will assist you in the implementation of your machine's control systems, in a way that meets your needs. VMI's automation and software solutions, which are associated to your equipment or production unit, are designed in an ergonomic manner to strengthen the operator's efficiency. Our solutions allow improving your productivity throughout the various production stages of your products, starting from the introduction of raw materials and up to the operation of the numerous traceability data related to your productions. Our systems, which comply with the recommendations of the 21 CFR Part 11 (US FDA), rely on **standard and interfaced software solutions** that are developed and configured in accordance with best practices (such as GMP, GAMP, etc.). Since they only require low maintenance, VMI solutions are **truly customized to suit your needs**. They are also scalable in order to keep supporting your projects on a long-term basis.

Quality

Chaque étape de votre projet est systématiquement contrôlée suivant des **procédures internes rigoureuses, standardisées et adaptées à votre besoin**, qui garantissent une technique de mise en œuvre parfaitement maîtrisée. En fonction de vos souhaits, nous mettons en place les étapes de qualification qui permettront de valider la conformité de nos équipements avec vos spécifications (QC/QI/QO/FAT/SAT).

VMI at your service

The high level of quality and responsiveness provided by our testing laboratories and our after-sales service guarantee you receive appropriate assistance, no matter where your facilities are located. VMI offers preventive maintenance contracts to assist clients in their use of their mixers. A structured offer based on several criteria can be proposed to VMI clients who can, thus, confidently plan **the maintenance operations** necessary for keeping their equipment in perfect working conditions. VMI is committed, in particular, to abide by **guaranteed response time**, thereby limiting equipment downtime to a minimum.





VMI, The Mixing Company



Dedicated exclusively to mixing, VMI is one of the rare companies worldwide who can offer a complete range of solutions perfectly adapted to the mixing of a wide variety of raw materials.

Originating from the development of bakery kneaders, VMI machines are used by almost all French artisans. VMI teams have extended their knowledge to provide services to the industries for which mixing, kneading, blending, homogenization, dispersion or emulsion are important steps in their production processes. The passion of the teams, the correlation and synergy that exists in these domains of application has forged the exclusive expertise that VMI provides to the most demanding industries.

For applications in the Bakery - Fine Pastries-Pastry (industrial and artisanal), from the pharmaceutical and cosmetics industry to the specialty chemical product sector, VMI mixing machines are at the forefront in these sectors thanks to their innovation, performance and their capacity to adapt products to the specifics of each type of production process. Today, the efficient and cost effective solutions offered by VMI are recognized by clients in over 50 countries.

From artisan kneading to complete mixing systems that satisfy the needs of laboratories as well as complete industrial installations, VMI - The Mixing Company has a solution for every mixing requirement.



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A company of 