

Professional
Engineering and
Individual Plant Construction

Dosing & Mixing
by professionals



#About us

Precise Dosing

Progressing automation and increasing quality requirements are confronting engineers and designers with increasingly tricky challenges. In handling toxic or harmful chemicals, work safety and environmental protection also play a significant role.

Therefore, the controlled, measurement-based dosing of chemicals has become a key factor in process engineering. More than ever before, the teamwork of specialists from different fields of knowledge is essential.

MPT has been familiar with the individual, specification-based engineering and design of systems for decades. No one can beat us when it comes to dosing, controlling and mixing.



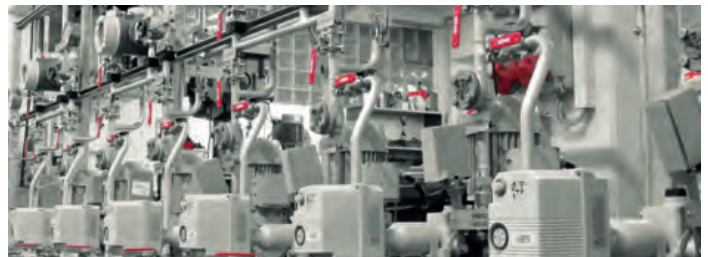
▲ MPT engineering means: single-source planning and construction.

Dosing & Mixing – Made by MPT

Off-the-shelf solutions are not our business. MPT systems are unique. They only fulfil one task: chemical handling, be it dosing or mixing chemicals or even both. And yet they are all different. In fact, they are always perfectly adapted to the respective conditions.

Planning & Construction with Passion

As a healthily grown, medium-sized company, we identify fully with the challenges of our customers. We feel responsible for what we plan. Even during construction and commissioning, we feel responsible for the efficient operation of our systems. It is this practice-oriented focus and the wealth of experience that help us to keep thinking in new ways. And this even though the same subject is always at the heart of our work: to efficiently dose or mix liquids. This is our passion.



▲ Dosing and mixing systems by MPT: designed on the spot and manufactured to the highest quality.

“Individual systems for accurate dosing and mixing of chemicals are our passion.”

Roman Wusch / General Manager of MPT

Homogenous Mixing

Mixing components or homogenizing large volumes are typical tasks in chemical process technology. We solve them by considering all parameters and then deciding whether the best results can be achieved with mechanical agitators or with PULSAIR's compressed air-pulsing systems.

For the continuous mixing of additives and other chemicals, we use static mixers in all standard materials.

An optimized, very effective and resource-saving mixing is achieved with our self-developed, speed-controlled dynamic inline mixer. Please do not hesitate to contact us.

Efficient Control

MPT provides pH, ORP and conductivity controllers as well as special controllers for cooling and boiler water conditioning with the appropriate sensors.

All relevant control variables can be reliably logged and the necessary chemical quantities can be precisely dosed.



▶ MPT is certified to the German Federal Water Act (since 1996) and ISO 9001 (since 1998).



#Engineering

Clear Project Planning

The base of each project is the meticulous compilation of all information and objectives. We develop a clear and transparent workflow upon this basis.

Clever Engineering

Unique solutions do not fall from the sky. Our developments are based on:

- ▶ broad expertise in process technology
- ▶ well thought-out project planning and construction
- ▶ declared intention to optimize each solution
- ▶ long-term professional experience

Customer-oriented Project Management

Having sole responsibility, our project managers work closely with our customers. Coordination takes place in a short way; reliability and flexibility are our hallmarks.



▲ Engineering from the beginning: already in the offer stage.

Skillful Thinking

MPT-Engineering means: Thinking in a holistic process. Because top solutions are not only characterized by tailor-made technology. They are also convincing in economic terms all along the line.

Engineering as a Continuous Improvement Process (CIP)

We think outside the box of standard solutions and consistently strive for individual optimization. Our customers benefit from this even during an advanced project status.

Because in every phase of the development process we act on the maxim "improvements take priority".

This way, better ideas flow into the project even at an advanced stage.



▲ In every phase of the development process, the rule is:
The better idea wins.

“There is a clever engineer behind every good system solution.”

Antonios Verbis / Technical Manager at MPT, Dosing Technology

Compliance with Specifications

The size of an order does not give us more or less pleasure. 100 % compliance with your specification surely does!

Customer-specific Development

MPT is an engineer incubator with an affiliated workbench. Lean organisation, flexibility and solution orientation – it's in our genes. This is why we are able to meet even unusual requirements and often exceed our customers' expectations.

Full Service and Spare Parts

Those who rely on MPT systems do not only get innovative, tailor-made solutions. System design, standard-compliant yet project-specific instructions are also part of our professional engineering work. Technical training, installation, commissioning and maintenance are further keystones of our service package.

Spare parts supply for all MPT systems and components completes our portfolio.



#Markets



Petrochemistry Oil & Gas

In the petrochemical industry, raw materials are produced by fluid catalytic cracking of higher hydrocarbons. For this purpose, numerous chemicals such as corrosion inhibitors, emulsion breakers, oxygen binders and others are added. High precision and maximum reliability are essential.

These are exactly the requirements we meet with our dosing systems. Even when critical or aggressive liquids have to be handled.



Chemicals Trade

We also like to work in the background: On request, we can supply personalized systems with the customer's logo and individual color scheme.

Measuring – mixing – dosing: You get everything from a single source and perfectly coordinated.

An important factor for chemical suppliers: Our controllers can be serviced remotely. This gives you access from anywhere to the units that you have installed at your customers.

We are Improvers

Solutions created in people's heads must succeed in reality. Many a good idea from the draft board fails in this leap. We have been building dosing and mixing systems for over 25 years, so we are very familiar with everyday industrial life. This enables us to quickly assess what will work and what will not.



Power Plant Technology

In boiler water conditioning and condensate cleaning, high demands are made with regard to the safety and reliability of dosing systems. And when optimizing cooling water conditioning, economic and ecological aspects must be reconciled.

If the quality of the raw water is insufficient, treatment is necessary. MPT provides optimum solutions in all fields.



Chemical Industry

In chemical process engineering, toxic liquids in combination with production-related fluctuation in temperature and pressure demand highest reliability from dosing and mixing technology.

Thus our systems are strictly designed to adapt perfectly to the current process conditions. They are flexible, safe and therefore highly reliable.

“Concentrating on the essentials makes us experts.”

Sven Briol / MPT, Dosing Technology



Alternative Energies

No matter whether it is about production of synthetic fuels ("X-to-liquid") or fuels from syngas: MPT is your competent and solution-oriented partner in the field of liquid dosing or additive addition.

Take advantage of our wide range of expertise in dosing and mixing technology.



Industrial Wastewater

In wastewater treatment plants, acids or bases are usually added for neutralisation or precipitants and flocculants are dosed for phosphate elimination and to improve the separation of solids. At other places in activated sludge plants nitrogen or phosphate dosing may be necessary to correct the nutritional requirements.

No matter how, the experts at MPT will provide you with full and competent support. Even when it comes to the preparation and dosing of flocculants in sludge dewatering, you are in the best hands with MPT.



#Partners

WALCHEM Online-controllers

Anyone who needs pH, ORP and conductivity controllers or special controllers for cooling or boiler water conditioning knows WALCHEM. When it comes to sensor and control systems for water and surface technology, this company is one of the top addresses.

WALCHEM controllers are designed for uncompromising quality. It starts with the development work and applies to all phases of the manufacturing process. The result is products that keep their promises. And they do it persistently, for a long time.

W A L C H E M



▲ Intuition-9 : unparalleled versatility in water treatment.



▲ Intuition-6: Reliability and flexibility for water conditioning.

Exclusive Representations

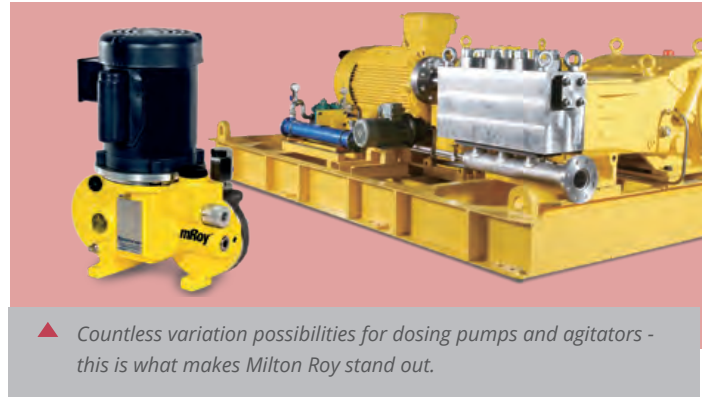
Top systems need top products. Hence we rely on the product quality and superior technology of market leaders. And these rely on MPT as the exclusive partner in Europe.



MILTON ROY

When it comes to dosing, MILTON ROY is one of the first addresses. All the pumps, mixers and accessories are manufactured to the highest standards, are fully certified and meet all current international standards. The range of dosing pumps starts with a few milliliters and extends to several cubic metres per hour. Pressures up to 1,400 bar are supported.

MPT relies on the exceptional quality and wide range of dosing pumps of this market leader.



“Our customers benefit in many ways from our long-standing cooperations and close contacts with world market leaders.”

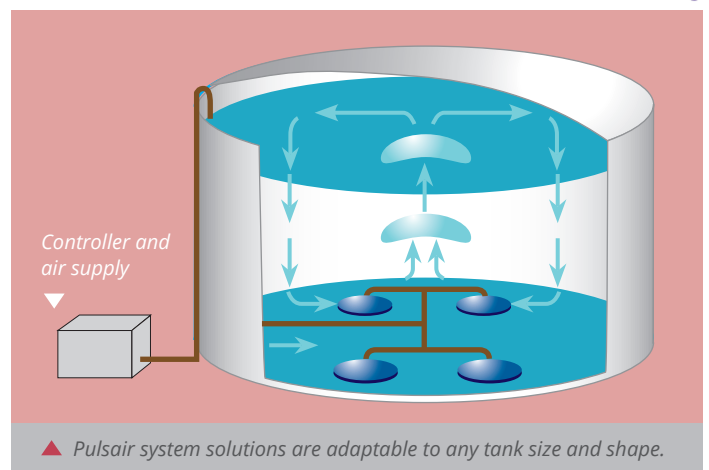
Christian Schein / MPT, Dosing Technology

PULSAIR – the Power of the Air Bubble

The enormous power of controlled release of large-volume air bubbles is often underestimated. And yet it is so simple: Up to 80 % can be saved in energy consumption and maintenance costs compared to conventional mixers.

The advantages of this technology are convincing all along the line:

- ▶ Optimum adaptability to any tank shape and geometry
- ▶ Retrofitting without changing the tank statics
- ▶ Flexible adaptation to changing media or for process optimization
- ▶ No maintenance inside the tank, as no rotating or moving parts are used





#Proprietary Pro

MPT Dynamic Inline Mixers

The MPT dynamic inline mixers are unbeatably efficient when it comes to mixing fluids. As a consequence, active ingredients can be added in a higher concentration, which results in a considerable savings potential. Our experience shows: Up to 40 % are feasible!

For the dewatering of sludge in filter and sieve belt presses there is nothing better than the dynamic inline mixers from MPT. By adding higher concentrated flocculants less water is added. This lowers the consumption. And the best thing about it: the sludgier the flow medium, the better the degree of mixing!



▲ Savings of 40 % for sewage treatment plants are feasible.

MPT Product Lines

"If a product had very specific characteristics, this would be beneficial to our plant." That's how it began. Today we offer a range of our own products and components with special properties.

MPT•DLseries

MPT Suction Lance

The clever design of the MPT suction lance eliminates the shortcomings of other sets. This makes it superior to many comparable products:

- ▶ The gas-tight construction protects user and environment from harmful or even dangerous gases.
- ▶ Two switching contacts provide a pre-warning before the tank runs empty or the pump runs dry.
- ▶ A recirculation connection on the overflow or bleed valve of the pump prevents leakage.



▲ Different versions for optimal adaptation.

"If component solutions don't satisfy our needs, we develop our own brands."

Tobias Grösch / MPT, Dosing and Mixing Technology

The Advantages at a Glance

- ▶ MPT's dynamic inline mixers guarantee intensive, easily adjustable mixing in the pipe – with automatic change of rotation direction.
- ▶ Fluids are fed in the direction of the injection nozzle and mixed in by the paddles immediately.
- ▶ The centrifugal force of the shaft ensures optimum distribution of the injected fluid in the flow-through medium.
- ▶ Continuous stirring prevents stratification so that the injected fluid reaches every single medium particle.
- ▶ Clumps are dissolved before they can affect the process.

MPT•DIMseries



▲ For the perfectionists: the DIM mixers by MPT.



MPT·DosING

by professionals.

MPT DosING is your engineering specialist for design, planning and construction of individualized chemical dosing systems for water treatment and numerous technical processes.

MPT DosING - Your specialist for customized plants and systems

- ▶ accurate dosing
- ▶ optimal control
- ▶ perfect mixing

Key Industries



Power Plant
Technology



Chemical
Industry



Petrochemistry
Oil & Gas



Chemicals
Trade



Alternative
Energies



Industrial
Wastewater

#Engineering + Plant Construction

Exclusive representations

Leading manufacturers are among our exclusive partners for Germany and Europe.

WALCHEM



MILTON ROY

MPT proprietary products

MPT dynamic inline mixers and MPT suction lances: well thought-out solutions resulting from our many years of experience.

MPT·DIN series

MPT·SL series

We look forward to your challenges

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