

MPE GROUP

Your partner for liquid & solid process systems



Food & Beverage



Milk & Dairy



Chemical



Pharmaceutical



Bio-Tech



Cosmetics

MPE GROUP members:

- **Bolz-Summix** Solids mixing & drying systems
- **Jongia** Stirring & mixing equipment
- **Van Meurs** Bag-in-box filling systems
- **Techno-G** Solids handling & processing
- **Terlet** Process systems & equipment

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MPE GROUP

The MPE GROUP is the holding company of a group of international operating companies with the focus on development, production and selling of high quality installations and components of processing systems and equipment both for liquids and solids.



Globally active

Strategy

We contribute to solving the global needs of complete systems and components for liquids and solids by developing equipment and services that last for many years with the lowest environmental impact.

Optimal Synergy

The MPE GROUP's goal is to create an optimal synergy and exchange of knowledge, innovations and experience between the independent operating MPE GROUP companies with the prospect of improved productivity for our customers.

Innovative

Innovation, quality and more than 85 years experience are the ingredients which have enabled the MPE GROUP to acquire an outstanding reputation on the world market. On-going intensive research and development lay the foundation for continuous innovation. Food technologists and mechanical engineers work together with the customers to develop innovative solutions for turnkey systems .

From Design to Maintenance

Consulting

Feasibility studies
Project definition
Basis budgeting

Implementation

Manufacture
Supply of components
Software development
Contracting
Assembly

Engineering

Process engineering
Mechanical engineering
Project engineering
Control engineering

Testing
Commissioning
Training

Project management

Control of throughput time
Control of specifications
Control of budgets

Service & Maintenance

On contract
On stand-by

The Activities

- Processing Systems
- Tanks & Vessels
- Scraped Surface Heat Exchangers
- Vacuumizing & Gassing Installations
- Installation & Piping
- After sales
- Conical Mixers & Dryers
- Components
- Ball Segment Valves
- Laboratory units
- Mixing & Stirring equipment
- Bag-in-box filling systems
- Solids handling & processing

Worldwide Certified

The MPE GROUP is not only able to meet customer-specific requirements but can also comply with the standards published by all main certification authorities such as: ASME, PED, NEN-EN-ISO 9001, TÜV, SCC, FDA, US Sanitary, C GMP/ GAMP, Validation.



World wide certified

Demonstration & Trial facilities

Process discussions at the MPE GROUP have always been enhanced by the company's ability to offer comprehensive and sophisticated trial facilities in-house as well as on site.

This has enabled many customers to "prove" product manufacturing methods without risking major financial commitment. It also allows small-scale process development of new products prior to advancing to large-scale production units.

The MPE GROUP's extensive range of process systems and equipment is supported by in-house process knowledge covering the Food & Beverage, Milk & Dairy, Chemical & Cosmetic and Pharmaceutical markets.

MPE GROUP

Your partner for liquid & solid process systems



Applications

- Cook & Cool systems
- Soups & Sauces
- Mayonnaise, Ketchup
- Starch (heating & cooling)
- Meat fillings
- Fruit fillings
- Jams & Preserves
- Convenience food



Soups & Sauces



Installation of a sauce preparation line

Food & Beverage

The continuous development of new tastes and brands in these markets has given the MPE GROUP the opportunity to demonstrate its ability to adapt and develop processing systems in line with market preferences.

Stringent legislation within the Food & Beverage industry has provided the background of the MPE GROUP's successful endeavours to keep its customers at the forefront of modern-processing. These improvements have been achieved not only with higher specifications, but also with superior control systems incorporating enhanced process recording, tighter recipe management and full ingredient traceability facilities.

The MPE GROUP has a wide range of components such as:

- Aseptic valves
- Pumps
- Hoses
- Spray balls



- Margarine Fat & Oil processing
- Egg processing
- Fruit juices
- Aseptic fruit preparation

- Gel products
- Bakery
- Confectionary
- Potatoes



Potatoes



Manufacturing Jongia mixers

Ketchup- and Mayonnaise process line

Ketchup preparation

Water
Starch
Herbs
Tomato puree

Starch preparation

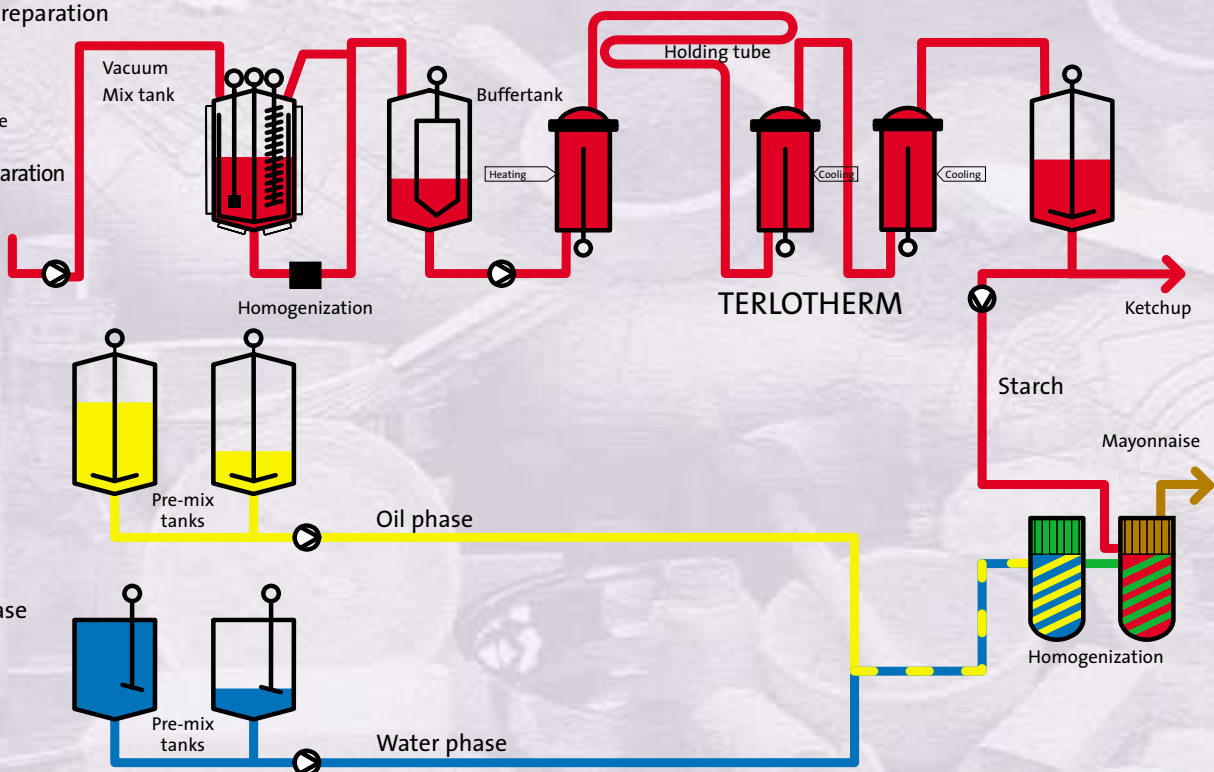
Water
Starch
Herbs

Oil phase

Oil
Egg yolk

Water phase

Water
Vinegar
Mustard



Applications

- Desserts
- Processed cheese
- Milk powder
- Butter
- Fermented products
- Cooling yogurt
- Conservation of products
- Lactose/Whey crystallization



Milk & Dairy



Vacuumizing & Gassing unit

Milk & Dairy

The Milk & Dairy industry is perpetually changing, forever searching for new products to meet rapid changes in market demand. Consumers are increasingly demanding easily identifiable, high quality products and a wider selection. Product differentiation is increasing and as it does so, often implies far-reaching consequences for the processing technology used.

The technique is also affected by the need to extend shelf-life of products, to produce greater quantities with fewer production units, to change to continuous processes while still maintaining product quality. For the industry this means calling for both specialized and, at the same time, flexible production systems with the emphasis on multipurpose equipment.

New varieties and combinations of products give mixing techniques integrated in heating and cooling solutions an important role to play. The MPE GROUP's wide-ranging and innovative expertise in this area guarantees an exact solution for every application.



- Filling systems
- CIP units / sets
- Manifolds
- Skids

- Cook & Cool tanks
- Piping systems
- Concentrated milk
- Whey Heating



Milk & Dairy



Terlotherm scraped surface heat exchangers



Applications

- Hair conditioners
- Hair cream
- Hand cream
- Lipstick & Mascara
- Deodorants
- Face creams
- Lotions
- Shampoo
- Shower gels
- Shaving cream
- Suntan products



Chemical



Storage hoppers

Chemical & Cosmetic

In the Chemical & Cosmetic industry the MPE GROUP is the ideal partner to provide refined solutions. The processing systems and equipment can meet the most extreme requirements and distinguishes itself by its reliability, durability and efficiency. Not only complying with requirements for mixing, heat transfer and reliability, but also with the prescribed noise standards.

The MPE GROUP ability to pre-build or skid mount complete systems is an important factor. It gives our customers in these markets the opportunity to preview or trial the units.

An advantage of approaching projects in this manner is the reduction of on-site installation and commissioning time. The MPE GROUP has typically supplied purpose-built systems for the Chemical & Cosmetic market.

For almost all processes in the Chemical & Cosmetic industry the MPE GROUP can provide high quality solutions.



- Toothpaste
- Tobacco sauce
- Glue
- Adhesives
- Hot melts
- Impregnating agents

- Lubricants
- Paints
- Inks
- Photographic emulsions
- Polishes
- Polymers & resins



Cosmetics



Big bag with feeder



Conical mixer

Applications

- Aerosols
- Creams
- Eye, ear and nose preparations
- Medicine
- Tonic
- Syrups
- Ointment
- Vaccines



Pharmaceutical



30m³ conical mixers

Pharmaceutical

Health cannot be compromised. In the pharmaceutical industry the accurate control of processes and the utmost attention to hygienic aspects are vitally important.

Also, the effects of scale are being increasingly sought after. Products are made in ever larger quantities and this affects the cleaning of the equipment used. All equipment meeting the strict requirements dictated by sterile processing conditions and preserving product integrity, but also providing homogeneous mixing without product degradation.

MPE GROUP technology allows tailor-made solutions to be designed for even the most complex solids and liquid handling stages in pharmaceutical processes. No other company knows the standard to which aseptic seals and sterile, validatable mixing systems must comply, better than the companies of the MPE GROUP. The product range varies from conical screw mixers and dryers, process vessels, scraped surface heat exchangers (Terlotherm) to processing lines dedicated to both solid and liquid handling & processing.



- Intravenous fluids
- Vitamins
- Sterile operations
- Dryer systems

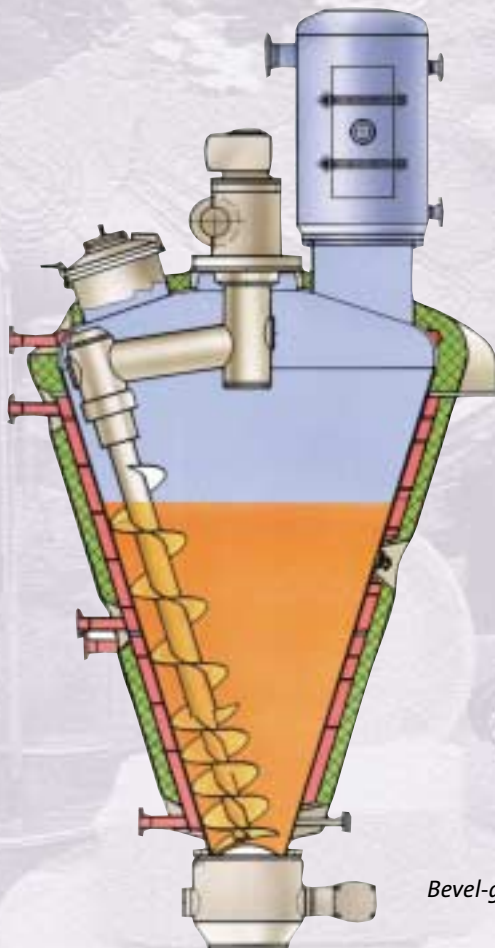
- Containment
- Mobile mixers
- Coating carriers
- Creme preparations



Pharmaceutical



Conical mixer & dryer



Bevel-gear type



Belt-drive type

Product range

- Processing systems
- Tank & Vessels
- Scraped surface heat exchangers: Terlotherm
- Vacuum gassing units
- Test and loan equipment



Terlotherm scraped surface heat exchanger



Batch preparation tank

Profile

Terlet is specialised in the development and manufacturing of high quality processing systems and equipment for stirring, mixing, heating and cooling liquids. A team of experts work together with the customer to develop innovative solutions for production processes and optimisation of production processes.

Successful in-house designs such as the Terlotherm, scraped surface heat exchanger and Tanks & Vessels make up the heart of customised process lines supplied as turnkey projects.

Terlet is the worldwide market leader in advanced vacuum gassing installations, developed for preserving canned milk and baby foods.

Applications

Processing Tanks & Vessels

- | | |
|----------------------|--------------------|
| ■ Agitators | ■ Mixers/ blenders |
| ■ Sanitary valves | ■ Vacuum operation |
| ■ Pressure operation | ■ Cooking/ Cooling |

Terlotherm scraped surface heat exchanger:

- | | |
|--------------------|-----------------------|
| ■ Crystallization | ■ Heating and cooling |
| ■ Reaction control | ■ Aseptic processing |
| ■ Slush freezing | ■ Polymerization |
| ■ Aeration | ■ Mixing Gelling |

Product range

- Aseptic bag-in-box filling systems
- Roller conveyors with height adjustment
- Filling valves with height adjustment
- Twin head filling systems



*Twin head
filling system*



*Single head
filling system*

Profile

For many years Van Meurs has been one of the leading Bag-in-Box filling systems producers. Van Meurs systems have a high output, as a result of this increased output the handling cost per litre of product is very low compared to many competitors. Van Meurs has a wide range of filling systems and options to meet your demands for extending the life of your product at competitive prices.

Suitable for packaging such as:

Flexible

- All current types of bags
- Round & rectangular containers

Non-flexible

- Buckets
- Stainless steel containers

Advantages

- All bag brands
- All closure types
- For packages such as containers, bags, buckets and cans
- Capacity up to 1.200 litres/ 317 gallons
- No risk of recontamination
- High filling capacity
- Low maintenance
- Reliable
- Long life span
- Flexible, short adjustment times
- Accurate dosing

Product range

- High shear mixers
- Low speed mixers
- Mixer units
- Static mixers
- Multifunctional mixers
- Fast running mixers
- Counter-rotating mixers
- In-line mixers
- Jet mixers
- Side entry mixers



Mixer inside the vessel



Mixers on location

Profile

Jongia is a leading mixer manufacturer with in-house design and R & D facilities. The mixers are components meant to operate in a perfect match with the vessel and fulfil the client's process requirements with no concessions.

The requirements of the client, the vessel dimensions and the process technical design are decisive elements in the mechanical design of the mixer.

The Jongia delivery program includes a variety of advanced process equipment, supplied as components as well as complete pilot plants, production units and production lines.

Jongia offers excellent facilities to achieve optimum performance.

Applications/Descriptions

- | | |
|---|-------|
| ■ Light mixer (portable) | KL/TS |
| ■ Hollow shaft motor without gearbox | JDR |
| ■ Light industrial | L/JR |
| ■ Normal industrial | N |
| ■ Heavy industrial | HD |
| ■ Side entry | JDRW |
| ■ Side entry for heavy industrial and large tanks | RWM |
| ■ Counter-rotating mixers for complex processes | CRM |

Depending on the duty, various mixing elements and sealing devices can be used for the above mentioned mixer types.

Advantages

- | | |
|---|-------------------------|
| ■ Well-equipped testing facilities | ■ Maximum reliability |
| ■ Partnership for tailor-made solutions | ■ Refined solutions |
| ■ Comprehensive product range | ■ Hygienic applications |
| ■ Balance between price and quality | ■ Low maintenance costs |

Product range

- Conical mixers & dryers
- Laboratory equipment
- Pilot equipment
- Conical mixer: Cystone
- Ball segment outlet valves
- Test and loan equipment



Conical mixer & dryer



Ball segment valve

Profile

Bolz-Summix engineers, supplies, installs and services conical screw mixers and dryers for powders, including the operating and control systems.

The comprehensive know-how gained over the years in the development of large-sized conical screw dryers and mixers has been successfully transferred to the manufacturing of laboratory and pilot equipment.

On-going intensive research and development lay the foundation for continuous innovation. Even where the demands are highly specific, for example with regard to aseptic or explosion-proof characteristics, Bolz-Summix has the answer.

Applications

- Mixing & Drying
- Heating & Cooling
- Sterilizing & Cooking
- Addition or injection of liquids
- De-aeration
- Vacuum/ Pressure agglomeration
- Crystallization

Advantages

- High mixing accuracy
- Low shear mixing
- Suitable for cohesive products
- Variable product filling
- Full bore discharge
- Closed sanitary design
- Multi-purpose
- Extensive option range

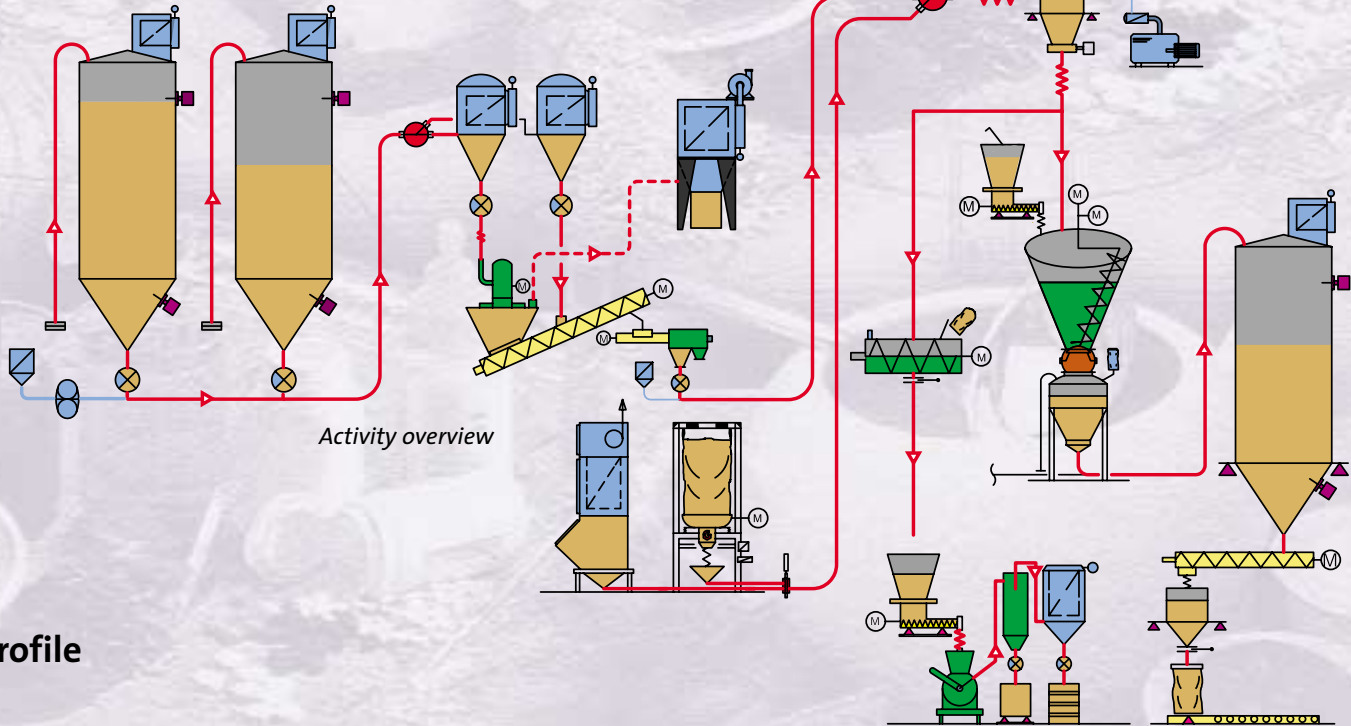
Product range

- Storage of solids
- Weighing-feeding
- Drying
- Granulating
- Separation
- Components
- Powder surface modification
- Conveying
- Milling
- Mixing
- De-dusting
- E & I
- Erection

Components

Techno-G has its own range of components in the area of pneumatic transport. Standard components that are delivered by Techno-G are:

- Product dividers
- Angled valves
- Flexible hose diverters
- Mixers
- Big bag filling stations



Profile

Techno-G has a leading position in the solids technology market and has extensive know-how in the field of storage, transport, weighing and metering, grinding agglomeration, drying and mixing of powders and granulates.

The aim of Techno-G is to ensure that the customer returns the maximum profit from the raw materials he has purchased.

In addition to its engineering activities and its role as a components supplier, Techno-G is increasingly taking on work as the contractor for turnkey systems. The development of specific hardware and software for process regulation and control systems is a further specialist activity of Techno-G.

Applications

- Turnkey systems
- Storage & transport
- Mixing and drying
- Product modification
- Process automation
- Installation & service
- Process development & engineering

Project Phases

- Define the design
- Engineering
- WTB Automation
- Maintenance
- Preparations
- Realization
- Training



Engineering

Specialized knowledge

By means of clear internal communication structures and the combination of specialized knowledge it is possible to handle and execute simple or multi-disciplinary projects. Furthermore in partial projects, renovations, optimizations, extensions and turn-key projects the MPE GROUP has specialized knowledge.



Advising and consulting

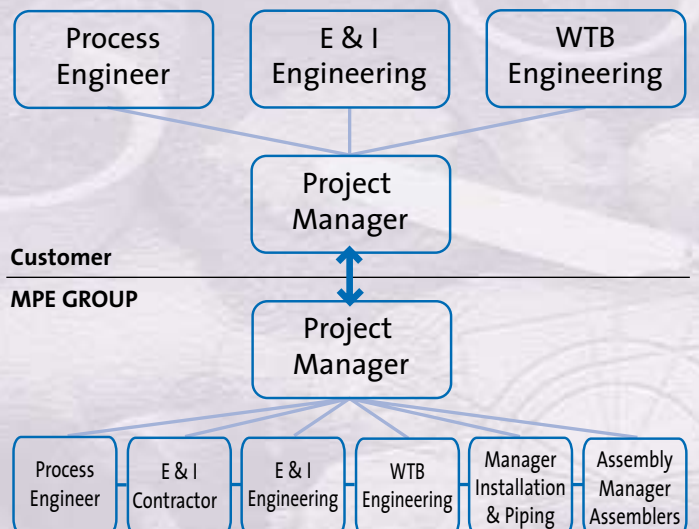
Profile

As a member of the MPE GROUP the process systems department designs, in close cooperation with the user, an optimal system for a new process installation.

Our experienced engineers have obtained great expertise and therefore they are the best qualified in designing and building processing installations, food preparation lines and complex turnkey projects.

They are also able to advise you in optimizing your existing processing lines. We use high quality accessories, valves, pumps and measuring- and regulation components.

There is a thorough knowledge of suppliers, and quality in materials, which is also guaranteed by our internal ISO-procedures and the measuring and/or quality department.



Activities

- Turn-key projects
- Process parts
- Pilot plants
- Prefab installations
- Removals of processing systems
- CIP installations
- Unit skid construction
- Optimization of process systems



Installation of a sauce line



Piping

Profile

The MPE GROUP Installation & Piping department is an independent international operating group which, besides contributing to MPE GROUP projects, also uses its craftsmanship and experience in many other projects and markets.

The combined knowhow of the independent MPE GROUP companies is the guarantee for an optimal solution when you need an Installation & Piping team.

For the construction of prefab process lines the Installation & Piping Group builds skids in-house.

This makes it possible, under ideal conditions, to prepare and , if necessary, to test process installations or parts of them.

In every detail you will find the craftsmanship of the MPE GROUP Installation & Piping team resulting in perfectly welded and efficient pipework systems.

Applications

- Site supervising
- Assembly planning and execution
- Assembly partial and complete projects
- Construction of process systems in-house
- Skid unit construction
- Assembly abroad
- Extension and renovation

Turnkey projects

Our process experience and components knowledge, achieved from our own manufacturing as well having the ability to work in conjunction with other key sub-suppliers is an important foundation for the execution of large turnkey projects.

Besides that the MPE GROUP Installation & Piping department has a state-of-the-art project organization with the vision that every project big or small is unique and deserves the utmost attention.

Activities

- Prevention periodic controls
- Mechanical seals, drives, vessels, tanks, Terlotherms, etc
- Complete and partial process lines
- Estimates, calculations
- Valves, seals, scrapers, header tanks, filters etc.



Installation of a conical mixer

Components

The MPE GROUP has a wide range of components such as:

- Aseptic valves
- Pumps
- Hoses
- Spray balls



After Sales

Profile

The reason you invest in equipment is to produce products. The same goes for the equipment built by the companies of the MPE GROUP. In case of a standstill of the equipment you cannot produce and as a result of that, you will lose money.

Engineers of the MPE GROUP can keep your equipment in good condition by regular controls and maintenance service, or complete revisions of your equipment.

Within 24 hours After Sales can deliver, all over the world, a large range of spare parts. We also have the knowledge and experience in materials, accessories, measuring and control equipment.

The After Sales group is able to help you reduce maintenance costs and that starts with thorough advice in the engineering phase up to the maintenance of your installed equipment.

Applications

- 24 hours service & maintenance
- Revisions
- Removals
- Advice
- Spare parts

Personal approach and advice

When large repairs are to be done, we prefer to carry them out inside of our well utilized workshop with all spare parts and accessories in stock. We can make a calculation of the expected costs of the repair or revision.

When you do business, your choice for MPE GROUP equipment not only depends on quality, reliability, technical knowledge or keen prices. A good personal approach and advice are also very important. We keep our promises and even more than that! MPE GROUP is VCA certified, which guarantees a safe working environment for our employees.

MPE GROUP

The Multi Processing Equipment Group N.V. is the holding company of 5 international operating companies with the focus on development, production and selling of high quality installations and components of processing systems and equipment for liquids and solids

The MPE GROUP holding is based in Zutphen The Netherlands and is mainly active in the following market segments:

- Food & Beverage
- Milk & Dairy
- Chemical & Cosmetic
- Pharmaceutical

The activities of the individual companies contribute to the group strength. This includes materials used, production techniques and industrial customer segments. The management goal is an optimal synergy and exchange of knowledge and experience between the independent operating companies.

The MPE GROUP has subsidiaries in Leeuwarden and Zutphen (The Netherlands) and in Wangen im Allgäu (Germany), Pennsauken (USA) and also has a worldwide agent network.

The MPE GROUP members are:

- Bolz-Summix *Solids mixing & drying systems*
- Jongia *Stirring & mixing equipment*
- Van Meurs *Bag-in-box filling systems*
- Techno-G *Solids handling & processing*
- Terlet *Process systems & equipment*

For more information please visit: www.mpegroup.com

MPE GROUP members:

Bolz-Summix

Active in development and production of conical mixers & dryers, ball segment valves and containment systems. Bolz-Summix has a complete range of mixers & dryers which are designed to suit the requirements of the food, pharmaceutical and chemical industry. For more information please visit: www.bolz-summix.com

Jongia

Well-known specialist in the development and production of mixers and stirring equipment with applications in the chemical, petro-chemical, pharmaceutical, food, bio-tech and dairy industry. For more information please visit: www.jongia.com

Van Meurs

Produces a complete range of aseptic filling machines for bag-in-box packaging. Van Meurs aseptic filling machines are used in the drinks, convenience-, fruit-, dairy- and egg processing industry. For more information please visit: www.vanmeurs.nl

Techno-G

Specialist in turn key installations in the bulk solids handling and processing area including operating systems. Specific know-how in the area of storage, conveying, de-dusting, discharging, drying, dosing, weighing, grinding, mixing, screening and controlling of powders and granulates. For more information please visit: www.techno-g.com

Terlet

Terlet develops and produces complete production lines and process equipment especially for the dairy and food industry. Terlet is also active in the production of process equipment for the pharmaceutical and chemical industry. For more information please visit: www.terlet.com

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