





## YOUR PARTNER FOR DURABLE STORAGE SYSTEMS

---

M.I.P. is the supplier par excellence of polyester storage systems. M.I.P. – as a manufacturer of silos and storage tanks– has pioneered the use of polyester and glass fibre reinforced plastic (GRP) and offers all-round solutions for enterprises in a wide variety of sectors of industry, agriculture and nutrition.

In order to meet our customers' storage needs in an effective manner, M.I.P. – as a manufacturer of polyester silos and tanks – strives for the greatest possible polyvalence. M.I.P. covers the entire storage sector and is active throughout Europe. Thanks to its ultramodern production lines and large production capacity, M.I.P. is able to complete both small and large projects within a short lead-time.

M.I.P. considers quality of paramount importance. Our team guarantees swift delivery and accompanies every single project, ranging from the design stage via engineering up to and including delivery and installation.

**With M.I.P. your storage systems are in capable hands.**

# HISTORY

---

## A FAMILY BUSINESS WITH INTERNATIONAL FAME

M.I.P. is a family business with international fame. Since 1984 this company has been a stable partner with a solid relationship based on trust with its customers. M.I.P. has won its spurs in agriculture, where it is still the European market leader. Since 2000 and thanks to heavy investments the company is a solid partner for both the industrial and public sector. A serious fire in 2006 burned the company to the ground. The production units were completely destroyed. Luckily no-one was injured that day but the flames made our staff temporarily unemployed. A few months after the fire the Elst family bought the shares from the other shareholders (partners).

Since then M.I.P. has been led by a young and enthusiastic management team representing a new generation of ambitious silo manufacturers. Over the last years the team has transformed the company into one of the most modern in Europe using vision and audacity. M.I.P. has more than 42,000 square metres of production space with ultramodern machinery at its heart. The staff are a driven team of advisors, engineers and dedicated employees complementing each other. Their qualifications and professional skills are constantly adapted to the demands of a state-of-the-art technology company. Our staff members know what they are talking about and what they are doing. M.I.P. has won the titles **Company of the Year** and **Most Excellent Company**.





## OUR MISSION

---

### **SERVICE ORIENTED**

M.I.P. engineers, manufactures and builds tanks and silos made of polyester and glass fibre reinforced plastic for the storage of liquid and dry bulk goods. We strive to provide our customers with a quality product and a first class service linking project management to a state-of-the-art engineering and production. We provide service within the agreed delivery terms and provide our customers with a first class customer service.

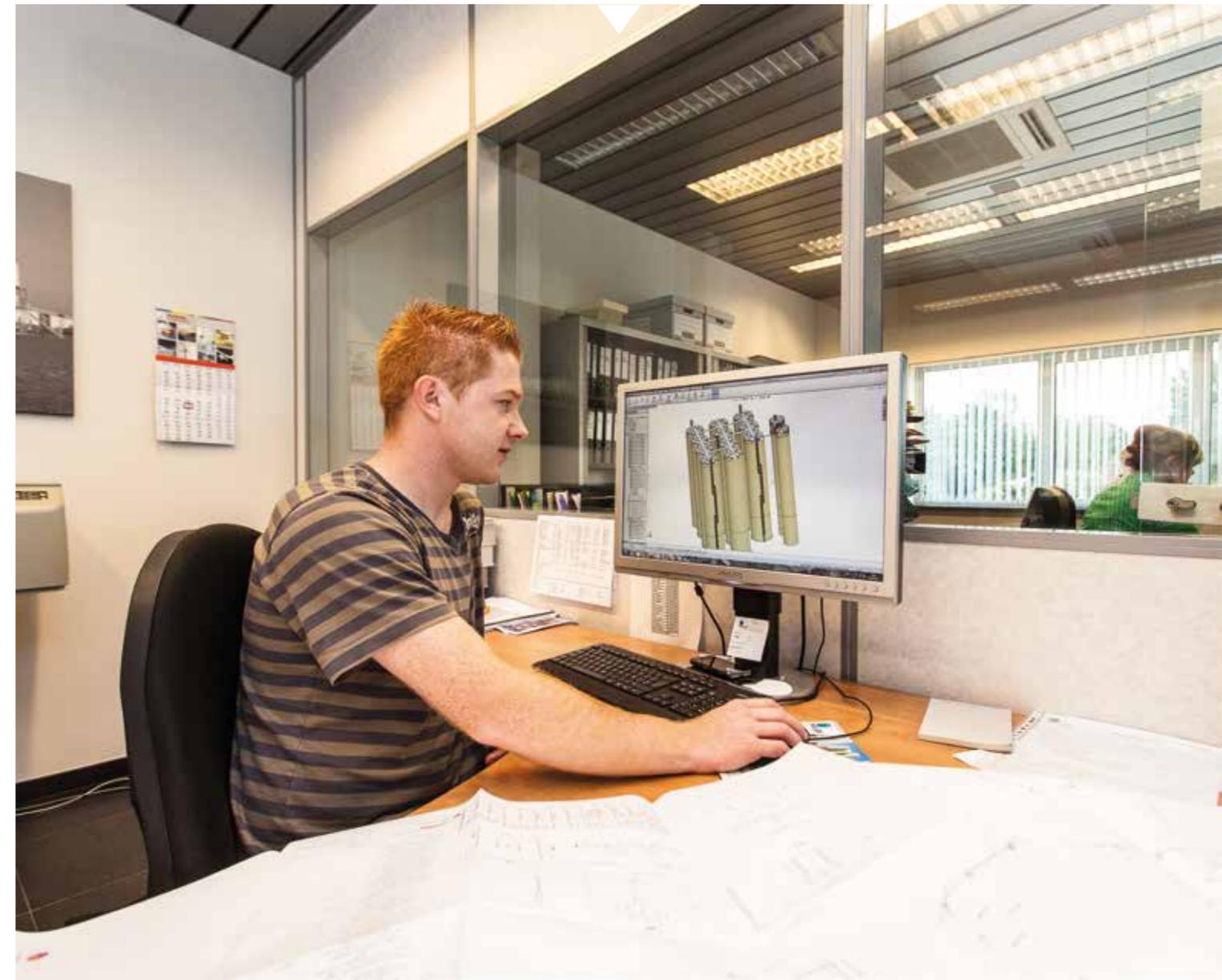
### **PROFESSIONAL TEAMWORK**

Over the last year M.I.P. invested heavily in additional production capacity but also in an IT-system, whereby every step of the production process is scanned and timed, thereby increasing reliability to 99 percent and easily detecting and solving obstacles and bottlenecks. Of course efficiency is not only determined by machines but also by people. Within the company lines are very short, which in turn guarantees that problems can be solved quickly and efficiently. Investments in training and safety, good teamwork and the preservation of knowledge by keeping older employees with us have all contributed to the success M.I.P. is today.

## DESIGN AND ENGINEERING

### TOP QUALITY WITH AN ACCURATE DELIVERY TERM

M.I.P. is more than a manufacturer and supplier of polyester silos and storage tanks. Thanks to the continuous investment in production processes and technologies M.I.P. became a full-service company. We realize turnkey projects of various scopes for customers from varying sectors. Following mutual consultation with the principal M.I.P. takes care of the entire production process, from design and engineering up to transport and the installation of the end product. Moreover, each new project is closely monitored by one project manager taking care of design, installation and even invoicing.





### QUALITY CONTROL

In a modern company such as M.I.P. a thorough organization is also reflected in its quality control systems.

M.I.P. regularly performs quality checks of its production process.

Our silos always meet the most stringent safety standards imposed by Europe. The machine directive, the low voltage directive, the ATEX directive, the building material regulations, specific migration tests... our team knows both the technological and the administrative aspects by heart. It goes without saying that every customer receives a EU certificate of conformity for each silo or tank. M.I.P. is:

**DIBt**-certified (Deutsches Institut für Bautechnik)

**ISO 9001**-certified

**VCA\*\***-certified

**WHG**-certified

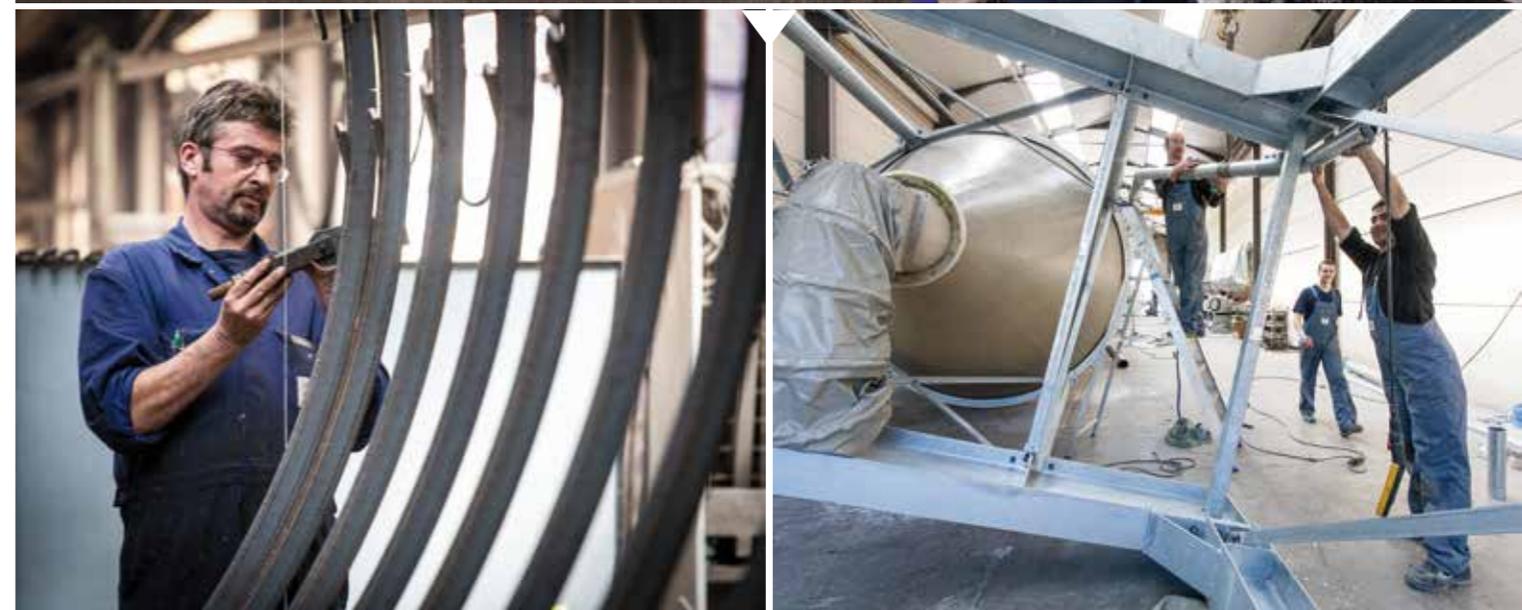
# PRODUCTION

## FLEXIBILITY

Polyester tanks and silos can be equipped with an antistatic device or are manufactured using resins approved for food contact. Other techniques such as particulate removal, filling and unloading systems, ventilation... are seamlessly integrated. M.I.P. always strives for the greatest possible flexibility. We produce our own moulds, thereby ensuring that there are virtually no limits in terms of size and diameter of the silos and tanks. M.I.P. is able to cope with volumes in excess of 700m<sup>3</sup>.

## SERVICE ORIENTED

In order to guarantee the service you deserve, M.I.P. continuously invests in state-of-the-art production processes and a thorough project-oriented approach. Efficient scheduling ensures that we realize industrial projects in record time without compromising the quality and safety of our products. Incoming raw materials are subject to stringent entry checks, our stock is continuously monitored, working hours are constantly timed and costs always calculated. Potential obstacles in the systems can therefore be detected quickly and are solved immediately. In order to leave nothing to chance M.I.P. has an extra supervisory system. No machine can take over the work of one experienced employee. Therefore professional project managers supervise every step of the production process, from the early stages until the end product.





## TECHNICAL ACCESSORIES

---

### **PLUG-AND-PLAY**

M.I.P. offers all-round solutions for the storage of solid and liquid substances and this includes any and all technical accessories necessary for any storage system to function. A separate department within M.I.P. ensures that as soon as the tank or silo is connected to the pipes everything is operational. M.I.P. supplies and installs any and all tank and silo-related components such as mixing gear, pumps, screw conveyors, measuring and control systems.

If following supply and installation any repairs or maintenance are required a service team is available to take the necessary action quickly and efficiently to ensure that the installations are kept operational.

# TRANSPORT AND INSTALLATION

## SAFE TRANSPORT

Of course M.I.P. takes care of both the transport and installation of the equipment. Transport takes place via road or water. The entire logistical file is handled by our specialized forwarders, thereby reducing damage as much as possible. The installation and assembly are performed in a professional manner by our technicians, thereby ensuring an installation that operates perfectly.

## MAINTENANCE

M.I.P. guarantees top-quality end products which can be supplied in record time thanks to state-of-the-art production processes. Following the sale of GRP silos and tanks M.I.P. will remain your loyal partner. The assembly and maintenance of silos after all requires knowhow and skill. M.I.P. has an experienced team of employees to take care of this for you. For our winter service department we therefore offer service contracts whereby our specialized service teams subject the entire installation to an all-encompassing maintenance. If necessary we will make the necessary repairs or carry out preventive replacement of parts.





## WHY GRP?

M.I.P. constantly invests in knowledge of materials and the extension of the life span of our products. Our silos and tanks are made of polyester or glass fibre reinforced plastic (GRP), a flexible material used in various sectors such as ship building, wind turbines, the airline industry,... everywhere people have become convinced of the advantages of polyester.

- Great strength in relation to the weight
- Electrical and thermal insulation
- Resistant to corrosion and chemicals
- Resistant to the influences of weather
- Resistant to temperature fluctuations
- Resistant to acids, bases and alkalis
- Can be supplied in various fire categories
- Low expansion coefficient
- Non-magnetic
- Low maintenance
- Unlimited design possibilities
- Extremely impact-proof
- Can be supplied in various colours
- Easy to process given its light weight
- UV-resistant
- Assembly and processing using standard tools
- Excellent price-quality ratio
- Excellent product output
- High insulation value
- Condensation-resistant
- UV-resistant and requiring little or no maintenance
- Antistatic



# SILOS

## POLYESTER SILOS

All polyester silos from M.I.P. have been wound seamlessly and the ultra smooth inner walls ensure an excellent product output. The storage silos from M.I.P. are equipped standard with filling and ventilation tubes and optionally a lockable access hatch on the roof. The frame is made of hot-dip galvanized thick-walled steel. You can choose frames with 3 or 4 support legs, with or without a support ring (as from 10m<sup>3</sup> a support ring is standard). Our polyester silos are supplied standard with a white roof, other colours or your logo are also available upon request.

### The advantages of silos made of GRP:

- Corrosion-resistant
- An excellent product output
- High insulation value
- Condensation-resistant
- UV-resistant and requiring little or no maintenance
- Antistatic
- Particulate removal
- Transparent

**Diameters (mm):** 1,200, 1,500, 1,900, 2,200, 2,500, 2,800, 3,000, 3,500, 4,000, 5,000 and 6,000

**Volumes:** 1,000 up to in excess of 700,000 litres (1m<sup>3</sup> up to and including 700 m<sup>3</sup>)





### TAILOR-MADE

In addition to the production of standard silos M.I.P. is specialized in turnkey projects, whereby silos are manufactured and configured tailor-made to customer requirements. Our GRP-silos can be equipped with an antistatic device or be manufactured using resins approved for food contact. Other techniques such as particulate removal, filling- and unloading systems, screw conveyors, ventilation... can be integrated seamlessly. M.I.P. always strives for the greatest possible flexibility. We make our own moulds. In doing so, there are virtually any limitations in terms of size and diameter. M.I.P. is able to handle volumes up to and including 700m<sup>3</sup>. M.I.P. has a separate steel manufacturing department where we make all our accessories such as:

- Cage ladders
- Pedestal frames
- Stairs
- Platforms
- Roof railings
- Steel constructions

### EXPORT SILOS

Because the cost of transporting standard silos can be very high, M.I.P. has developed its own sophisticated production techniques enabling silos to be transported at once.

These silos are manufactured in two parts (the top section and the funnel) which can be assembled on location at a later time. Since the top section of the silos is conical, each transport can consist of tens of silos to the various M.I.P. sites throughout Europe. These silos are primarily destined for the agricultural sector.



# TANKS

## GRP STORAGE TANKS

M.I.P. manufactures a wide range of GRP storage tanks, with or without liners, these are resistant to the most aggressive environments and high temperatures, ranging from  $-40^{\circ}\text{C}$  to  $+120^{\circ}\text{C}$ .

### The advantages of polyester storage tanks:

- High mechanical strength and a low weight
- Exceptionally resistant to chemicals
- Excellent resistance to aging and weather-resistant
- Dimensional stability, exceptional thermal insulation, perfectly resistant to temperature fluctuations, low coefficient of thermal expansion





Our GRP or polyester tanks have an excellent resistance to chemicals and excellent mechanical properties. This makes them the ideal solution for aggressive and corrosive environments and underground tanks. Applications can be found in the chemical industry (HCl, NaOH), the petro-chemical industry (fuels) and water purification plants (FeCl<sub>3</sub>, sludge). Moreover, polyester tanks require little or no maintenance, are not conductive and are unaffected by stray currents!

**Applications of plastic storage tanks:**

- Storage tanks for chemicals
- Clean and ultraclean water
- Drinking water
- Waste water
- Food products
- Liquid manure
- Liquid nitrogen
- Brine

**The standard construction has a cylindrical form with convex fronts. In addition we offer:**

- Insulation
- Double-skinned leakage detection
- Insulation of the storage tank: on wooden, steel or concrete pedestal frames or buried underground
- Heating
- Tracing



# BRINE INSTALLATIONS

## SALT DISSOLVERS

Our salt dissolvers are especially designed for dissolving road salt (NaCl). The water is pumped into the salt funnel resulting in the formation of brine. By use of an overflow the brine is stored at the bottom of the tank. The brine is regularly stirred at a programmable interval in order to keep the solution stable. During the generation of brine the concentration is measured and, if necessary, adjusted until the desired concentration has been reached.

## BRINE STORAGE TANKS

Lying or standing tanks with a capacity of max. 300 m<sup>3</sup> for the storage of brine. This storage vessel can be connected to salt dissolvers to cope with demand at peak times. Our salt dissolvers and brine tanks can, in accordance with requirements, be equipped with:

- The necessary connection systems, flanges, shut-off cocks and pipes for filling or emptying tanks (salt, brine, water).
- Level measurement and protection using float level indicators, radar or ultrasonic impulses etc.
- Discharge pipes with shut-off cocks and/or a storage reservoir for undissolved salt residue.
- Double skin with leakage detection system
- Pump systems for stirring brine, adjusting the brine concentration, filling up winter service vehicles and storage tanks etc.
- Fully automated pump and valve control with a control panel and a display. These controls are installed in a cabinet at man height.





### BRINE (NaCl) STORAGE TANKS

M.I.P. supplies winter service vehicles on a steel pedestal the winter service vehicles are able to drive underneath, thereby facilitating the filling process. This 'filling process' takes place using a manually operated valve on the output funnel operated at man height. The winter service vehicle can be filled with brine at the same time as filling the vehicle with salt.

The silos have a capacity of 15m<sup>3</sup> to 700m<sup>3</sup> and a diameter of 1,900 to 6,000 mm; the pedestal frame has a drive through height of 2,000 to 4,000 mm and a drive through width of 2,000 to 4,500 mm.

#### According to your requirements our silos can be equipped with:

- An access hatch on the roof or in the funnel
- Filling pipe made of galvanized or stainless steel with a connection for winter service vehicles
- PVC ventilation tube
- Tilting valve with control at man height
- Telescopic sleeve
- Level measurement using a float level indicator or a radar signal
- Cage ladder with the necessary resting platforms and a safety door
- Continuous safety platform on the roof
- Connections to salt dissolvers
- Cone ventilation, oscillatory floors, air dryers etc.

## ENVIRONMENTAL APPLICATIONS

M.I.P. is a versatile polyester construction company and an absolute specialist in storage systems. However, even in the environmental domain, the company has a strong reputation. For example as producer of the biofilters for Polytec. These are biological deodorization facilities that are mainly used in sludge drying plants. The biological filter material with which the polyester cylinder is filled consists mainly of tree bark, but the composition can be adapted to the type of gas that needs to be removed from the exhaust air.

M.I.P. also supplies gas scrubbers. Each scrubber is custom designed for a specific application in the production process for a given flow rate or type of pollutant ...

Of course our tanks and silos are being used in and around water treatment plants but you can also count on M.I.P. for canopies, polyester pipes or chimneys.



# CONTACT

**M.I.P.** nv

Vaart 20

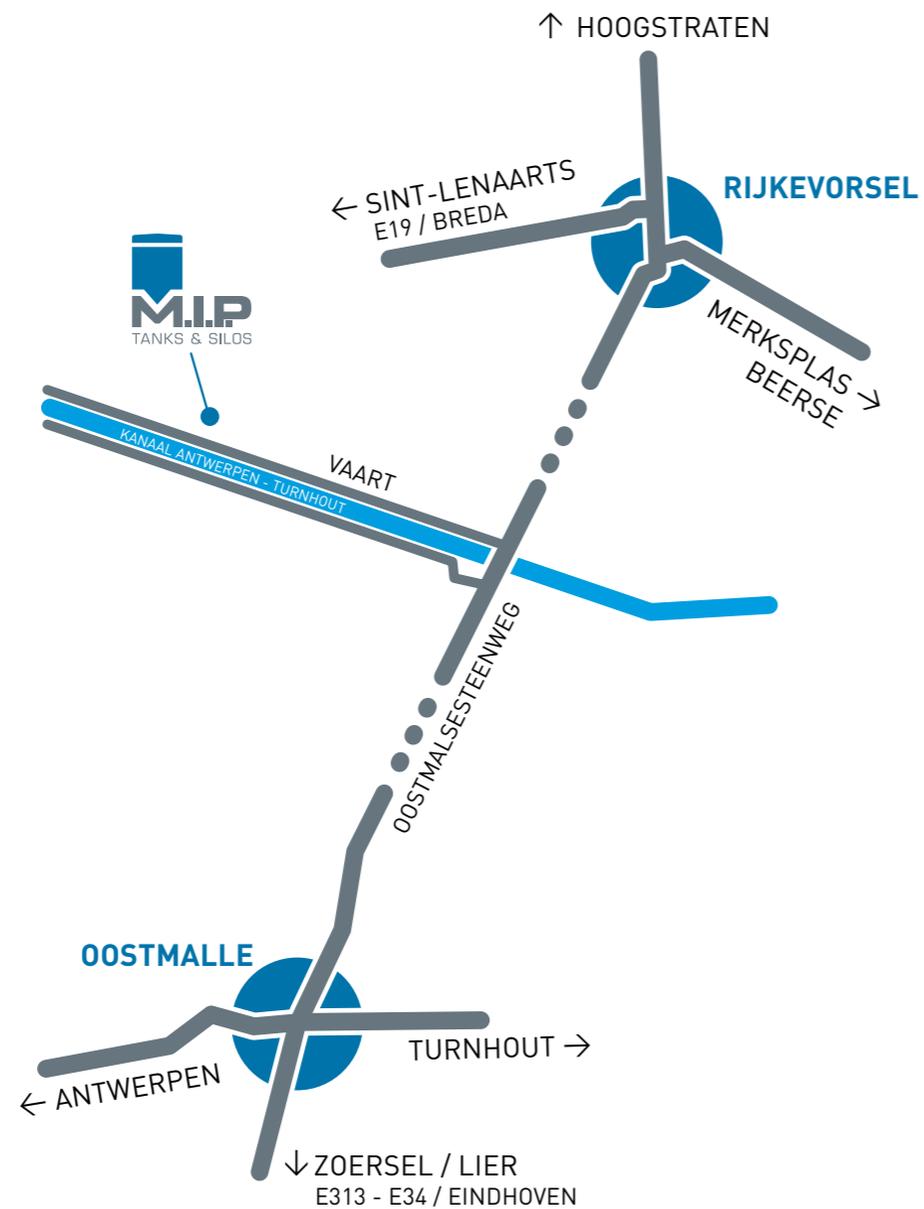
2310 Rijkevorsel, België

t. +32 3 311 68 66

f. +32 3 311 79 38

info@mip-nv.com

www.mip-nv.com





**M.I.P.** nv

Vaart 20

2310 Rijkevorsel, België

t. +32 3 311 68 66

f. +32 3 311 79 38

[info@mip-nv.com](mailto:info@mip-nv.com)

[www.mip-nv.com](http://www.mip-nv.com)

