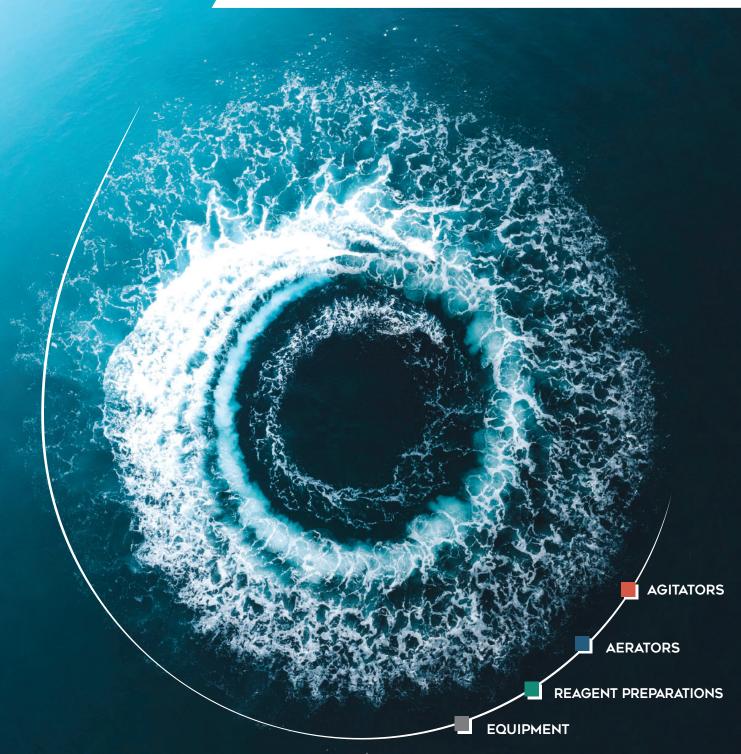
At your side for over 40 years!





www.tmi.fr



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#### **BACKGROUND**

TMI industrial mixing technologies was founded in 1982 by Jean-Louis Saussac, and specialises in the design and development of preparation equipment for powder and liquid flocculants.

We manufacture specialised water treatment machinery such as agitators, surface aerators and reagent preparation stations.

Our outstanding reputation is built on our expertise and our experience, which has made us one of the leading names in the field. We never stop innovating, and have attracted a large number of companies of all sizes who come to us for their water treatment solutions. Our company was certified ISO 9001 compliant in 1992. We now use QR code technologies that allow our customers to download user manuals simply by scanning our products. We can also provide 3D drawings on request to integrate our machines into your factory.

Backed by our meticulous methods and organisation, we have sold over 10,000 machines worldwide, in partnership with major water treatment and chemical manufacturing groups, and manufacturers for the Defence industry.

TMI is also a family business. We are focused on the wellbeing of our employees, working with local suppliers, and delivering the quality that comes with products that are «Made in France». We are proud of our company policy, under which TMI has become a major exporter to all four corners of the globe.

#### **CONTACTS**

#### **Chairman and Managing Director** Fabien SAUSSAC fabien@tmi.fr **Engineering Office & Technical Director** Admin, Finance & HR Purch. Manager Sébastien GALLON Carole FOUVET Franck BEFORT technique@tmi.fr adm@tmi.fr bef@tmi.fr Sales **Technical sales** Accounts administration Hélène Moulet com@tmi.fr Stéphanie MARION compta@tmi.fr adv@tmi.fr

## O1 | AGITATORS



#### **APPLICATION**

TMI specialises in the design and manufacture of mixing devices for a wide range of production processes:

- Homogenisation
- Slurrying
- Flocculation
- Reagent preparations
- Mixtures in general:
  - Liquid/liquid
  - Liquid/solid
  - Liquid/gas

#### **SOMMAIRE**

- 1-01 AB Agitators
- 1-02 AFS Agitators
- 1-03 P Agitators
- 1-04 F Agitators
- 1-05 PPR Agitators
- 1-06 PPR lime slurry Agitators
- 1-07 MT Agitators
- 1-08 M3 Agitators
- 1-09 Side-entry Agitators
- 1-10 ML Agitators
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- 1-12 MF Agitators
- 1-13 MI Agitators
- 1-14 IN LINE Mixers
- 1-15 Coatings







## 01 | AGITATORS

## Read about our full product range:





#### **APPLICATION**

The AB agitator has a shaft-welded impeller driven by a socket system mounted directly to the motor shaft. TMI recommends this type of appliance for small volumes and simple mixing applications. Agitation is determined by the required application. AB agitators have a 120 or 160 diameter turbine, and can also be secured by a mounting plate or screw-clamp system. We supply with three-phase 50 Hertz tropicalized motors as standard. The standard impeller shaft is made from 316L stainless steel.

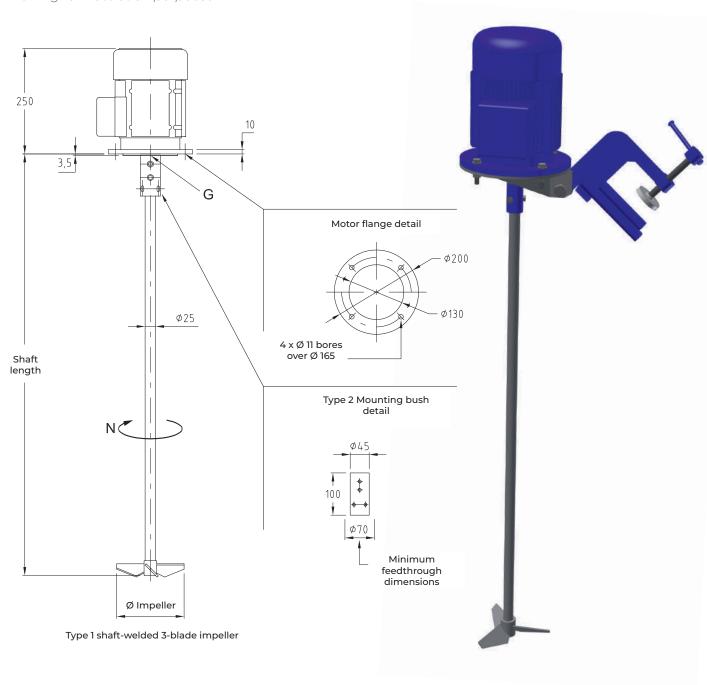
For high-speed operation (695 rpm), the motors power the impeller shaft by direct drive. The shaft length must not exceed 1 m. A low-speed agitator should be used for longer shafts.

#### **OPTIONS**

- Specific voltages
- 60 Hz
- Atex motor
- Compressed air motor
- Single-phase motor
- Power cord and plug
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

- Reagent preparations
- Batch treatment 1 hour a day
- Max. volume 1,000 litres
- Max. shaft length: 1,000 millimetres
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Mounting plate or clamp attachment

| Туре   | Ø Impeller | P (kw) | N (tr/min) | Q (m3/h) | Weight (kg) |
|--------|------------|--------|------------|----------|-------------|
| A110-6 | 160        | 1,1    | 920        | 203      | 20          |
| A75-6  | 160        | 0,75   | 930        | 203      | 20          |
| A18-8  | 160        | 0,18   | 920        | 152      | 13          |
| A18-7  | 120        | 0,18   | 690        | 90       | 13          |





#### **APPLICATION**

The twin paddles on the drum agitator fold back to fit through the bung on standard containers. TMI recommends this type of appliance for small volumes and simple mixing applications. The type of agitator is determined by the required application. We supply with three-phase 50 Hertz tropicalized motors as standard. The standard impeller shaft is made from 316L stainless steel. The agitator can be inserted through a 60 mm or wider bung opening for greater versatility if required.

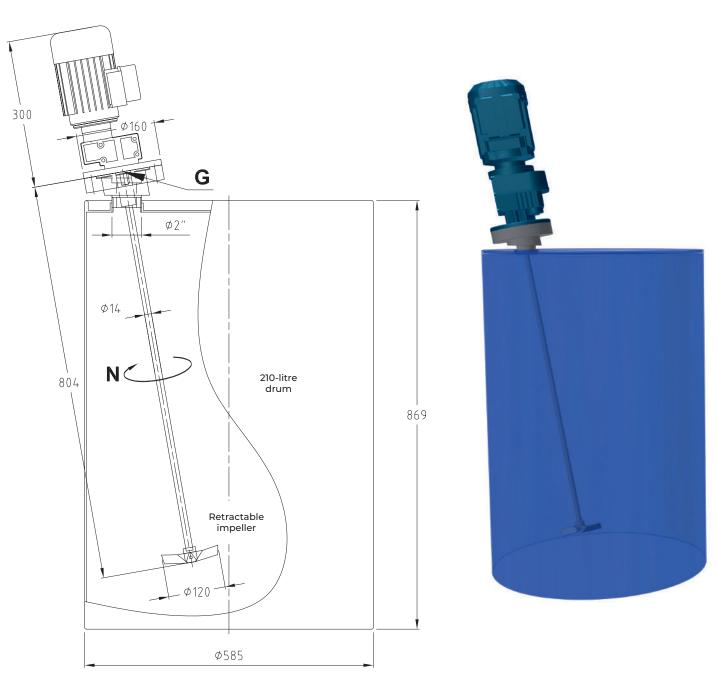
A polypropylene or PVC clamp is included for attaching the motor unit to the drum.

#### **OPTIONS**

- Other voltages
- 60 Hz
- Atex motor
- Compressed air motor
- Single-phase motor
- Power cord and plug
- High-specification materials (Uranus 52N, Uranus B6, etc)
- Other options are available according to requirements. Contact us for information.

- Agitateur pour fût avec pâles rétractables
- Diamètre minimum de passage 60 millimètres
- Traitement en bâchée 1 heure par jour
- Volume max 200 Litres
   Standard 230/400 V Triphasé 50 Hz Tropicalisé

| Туре        | Ø Impeller | P (kw) | N (tr/min) | Q (m3/h) | Weight (kg) |
|-------------|------------|--------|------------|----------|-------------|
| AFS 12 285T | 120        | 0,12   | 285        | 14       | 8           |
| AFS 12 285M | 120        | 0,12   | 299        | 15       | 9           |





#### **APPLICATION**

The P agitator has a shaft-welded turbine and is driven by a socket system mounted directly to the gear shaft. The type of agitator is determined by the required application: reagent preparations, homogenisation, polyelectrolyte preparation, etc

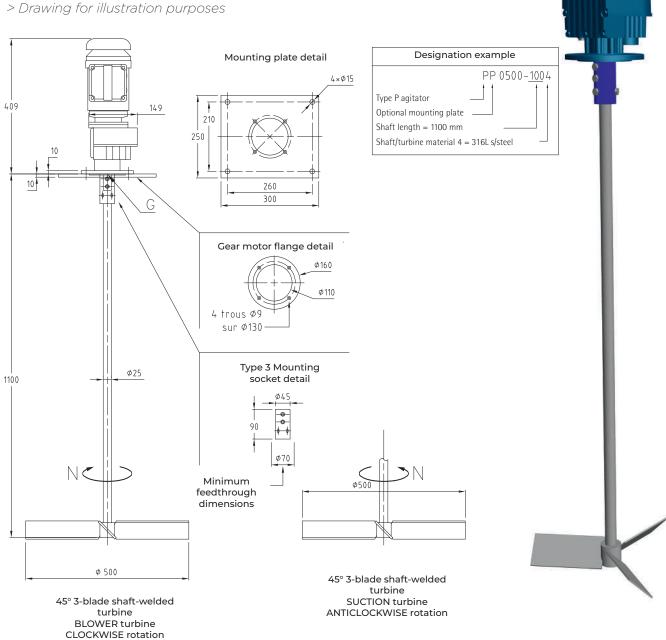
P agitators have a 250 or 700 diameter turbine, and can also be secured by a mounting plate or screw-clamp system. We supply with three-phase 50 Hertz tropicalized motors as standard. The standard impeller shaft is made from 316l stainless steel. The P agitator can be fitted with one or two turbines, and is available with multiple options.

#### **OPTIONS**

- Specific voltages
- 60 Hz
- Atex motor
- Compressed air motor
- Single-phase motor
- Angle gear
- Variable frequency drive
- Rain cover
- Double turbine capability
- Power cord and plug
- High-specification materials (Uranus 52N, Uranus B6, PVC, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

- Reagent preparations, homogenisation, polyelectrolyte preparation
- Max. shaft length: 1,500 millimetres
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Mounting plate or clamp attachment
- Multiple options available

| Туре  | Ø Impeller | P (kw) | N (tr/min) | Q (m3/h) | Weight (kg) |
|-------|------------|--------|------------|----------|-------------|
| P250  | 250        | 0,55   | 102        | 90       | 29          |
| P300  | 300        | 0,55   | 102        | 150      | 32          |
| P500  | 350        | 0,55   | 102        | 180      | 29          |
| P750  | 450        | 0,55   | 102        | 250      | 32          |
| P1000 | 500        | 0,55   | 102        | 350      | 32          |
| P1200 | 500        | 1,1    | 90         | 350      | 47          |
| P1400 | 500        | 1,5    | 93         | 350      | 50          |
| P1500 | 500        | 0,55   | 102        | 350      | 32          |
| P2000 | 550        | 0,55   | 102        | 465      | 33          |
| P2200 | 550        | 1,1    | 90         | 465      | 47          |
| P2400 | 550        | 1,5    | 93         | 465      | 50          |
| P2500 | 600        | 1,1    | 90         | 567      | 47          |
| P3000 | 600        | 1,1    | 90         | 623      | 48          |
| P3200 | 600        | 1,5    | 93         | 623      | 50          |
| P3400 | 600        | 2,2    | 100        | 623      | 54          |
| P4000 | 700        | 1,5    | 93         | 780      | 50          |
| P5000 | 700        | 2,2    | 100        | 901      | 54          |





#### **APPLICATION**

The F-Type agitator has a shaft-welded impeller and is driven by a socket system mounted directly to the gear shaft. The F-Type is designed for flocculation. It operates at low speed to avoid breaking up the flocs while ensuring extremely high flocculation performance.

This flocculator is available with 250 to 1,000 mm diameter impellers and includes a mounting plate. We supply with three-phase 50 Hertz tropicalized motors as standard. The standard impeller shaft is made from 316L stainless steel.

The F-Type agitator is often ordered with the optional variable frequency drive. This flocculator can be fitted with one or two impellers and offers a range of options.

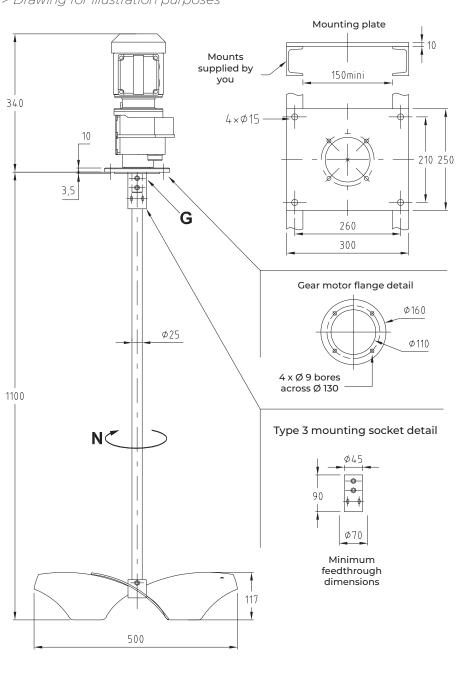
#### **OPTIONS**

- Specific voltages
- 60 Hz
- Atex motor
- Compressed air motor
- Single-phase motor
- Angle gear
- Variable frequency drive
- Rain cover
- Double prop capability
- Power cord and plug
- High-specification materials (Uranus 52N, Uranus B6, PVC, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

- Flocculation
- Max. shaft length: 1,500 millimetres
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Mounting plate attachment
- Multiple options available

| Туре  | Ø Impeller | P (kw) | N (tr/min) | Q (m3/h) | Weight (kg) |
|-------|------------|--------|------------|----------|-------------|
| F0201 | 200        | 0,12   | 31         | 20       | 19          |
| F0301 | 300        | 0,12   | 31         | 50       | 20          |
| F0401 | 400        | 0,12   | 31         | 115      | 20,5        |
| F0501 | 500        | 0,12   | 31         | 210      | 21          |
| F0601 | 600        | 0,12   | 31         | 355      | 22          |
| F0701 | 700        | 0,12   | 31         | 570      | 24          |
| F0801 | 800        | 0,18   | 36         | 960      | 30          |
| F0902 | 900        | 0,18   | 28         | 1106     | 42          |
| F1002 | 1000       | 0,18   | 24         | 1258     | 44          |

# Designation example FF 0501-1104-31 FF type flocculator Ø 500 mm impeller Type 1 gear motor Height: gear motor flange/impeller bottom = 1100 mm Shaft/turbine material: 4 = 316L s/steel Speed of rotation





#### TYPE PPR



#### **APPLICATION**

The PPR-Type agitator has a retractable paddle turbine attached to the shaft end and is driven by a socket system mounted directly to the gear shaft. The impeller profile is specially engineered to open out automatically when the shaft begins to turn and fold back when the agitator is switched off. The impeller section can be passed through a bung diameter of just 115 mm.

PPR agitators have a turbine up to 500 mm in diameter, and can also be secured by a mounting plate or a bridge mount with handles for IBCs. We supply with three-phase 50 Hertz tropicalized motors as standard. The standard impeller shaft is made from 316L stainless steel. The PPR agitator is available with multiple options.

#### **OPTIONS**

- Other voltages
- 60 Hz
- Atex motor
- Compressed air motor
- Single-phase motor
- Bevel gear
- Variable frequency drive
- Rain cover
- Power cord and plug
- Control unit with daily timer
- High-specification materials (Uranus 52N, Uranus B6, PVC, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.



- Reagent preparations, homogenous mixing, polyelectrolyte preparation
- Perfect for IBCs
- Max. shaft length: 1,050 millimetres
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Mounting plate or cross beam with handles
- Multiple options available

#### **OPTIONS** Ø400 FOLDING 2ND IMPELLER 1.1 kW MOTOR - ACC. DENSITY/VISCOSITY 1.5 kW MOTOR - STORAGE > 1 MONTH 460V / 60 Hz MOTOR SINGLE-PHASE 220 VOLT MOTOR 0.55 kW BEVEL GEAR MOTOR ATEX II 2G EEX D II CT4 MOTOR ACS GEAR OIL IP55 CONTROL UNIT WITH ON/OFF BUTTON IP55 CONTROL UNIT WITH ON/OFF BUTTON + EMERGENCY SHUTOFF IP55 CONTROL UNIT WITH ON/OFF BUTTON + DAILY TIMER IP55 VARIABLE FREQUENCY DRIVE 380 3P POWER STANDARD 380 3P ELECTRICAL PLUG CABLE ASSEMBLY WITH 5-METRE CABLE 220 VOLT SINGLE-PHASE IP55 VARIABLE FREQUENCY DRIVE STANDARD 220 VOLT SINGLE-PHASE ELECTRICAL PLUG CABLE ASSEMBLY WITH 5-METRE CABLE 1.5 kW COMPRESSED AIR MOTOR CONTROL UNIT FILTER/LUBRICATOR/ISOLATION VALVE DIRECT DRIVE HYDRAULIC MOTOR SLING RINGS FORK-LIFT ATTACHMENT LUGS SAFETY SENSOR (STOPS IF NO CONTACT/CONTAINER) ONLY POSSIBLE WITH VARIABLE FREQ. ATEX SAFETY SENSOR (STOPS IF NO CONTACT/CONTAINER) ONLY POSSIBLE WITH VARIABLE FREQ. HOPPER ON AGITATOR CROSS BEAM

Ø 25 sling eyebolts

Ø 12 bore

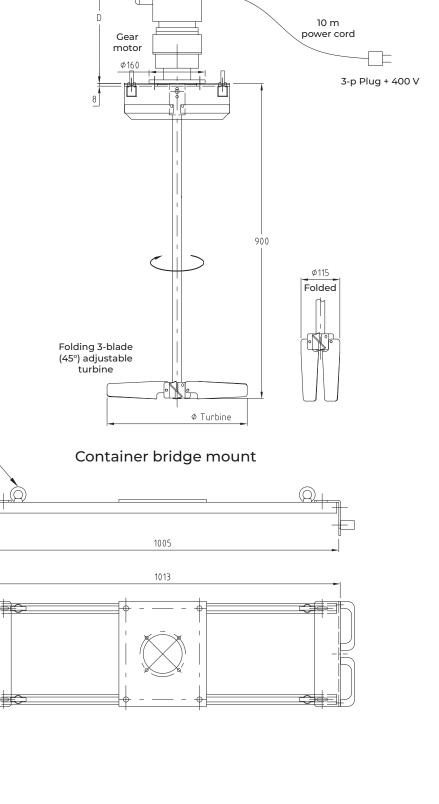
260

300

100

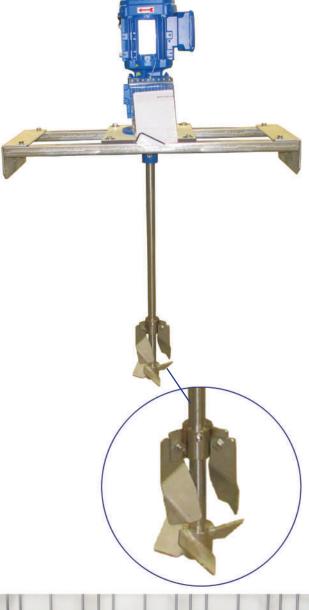
#### > Drawing for illustration purposes

Motor



## TYPE PPR LIME SLURRY

## **AGITATORS**





#### **APPLICATION**

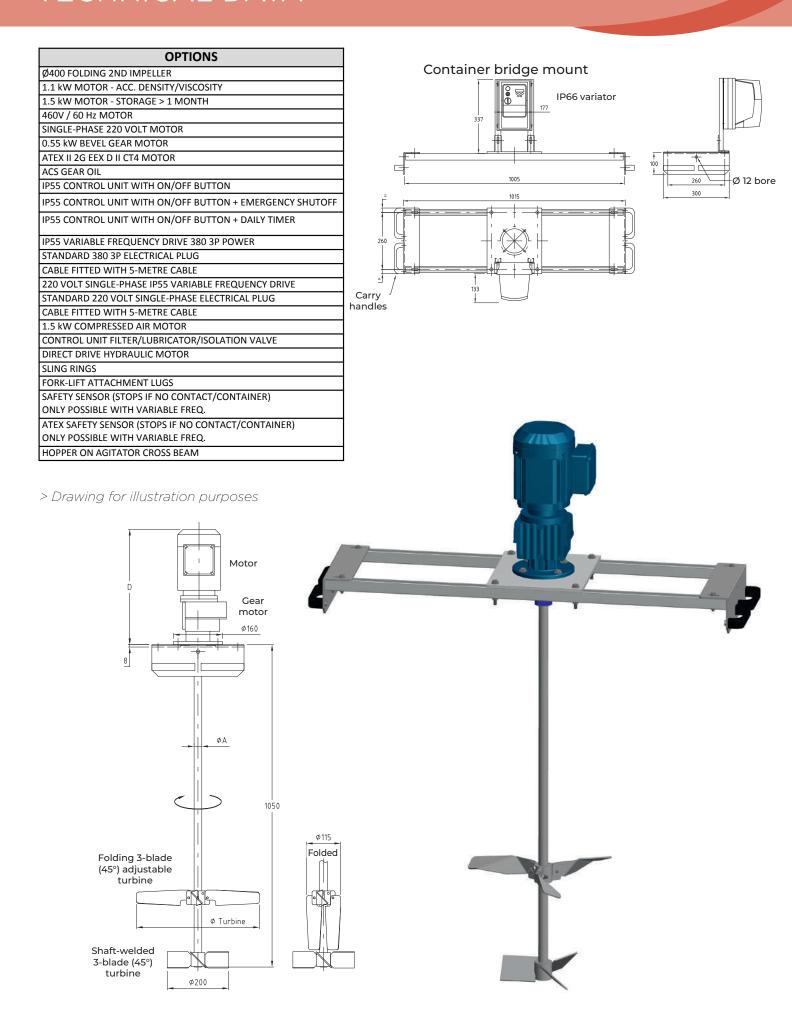
The PPR agitator has a folding turbine screwed to the shaft end and is driven by a socket system mounted directly to the gear shaft. The specially engineered impeller profile opens out automatically when the shaft begins to turn and folds back when the agitator is switched off. The impeller section fits through a bung diameter of just 115 mm. This agitator is designed for lime slurry IBCs. It features an additional 135 mm turbine impeller on the shaft end to prevent the lime slurry from settling for an optimal homogenous mix.

PPR agitators have a turbine diameter of 400 mm (folding blade), and can also be secured by a mounting plate or a cross beam with handles for IBCs. We supply with three-phase 50 Hertz tropicalized motors as standard. The standard impeller shaft is made from 316l stainless steel. The PPR agitator is available with multiple options.

#### **OPTIONS**

- Other voltages
- 60 Hz
- Atex motor
- Compressed air motor
- Single-phase motor
- Bevel gear
- Variable frequency drive
- Rain cover
- Power cord and plug
- Control unit with daily timer
- High-specification materials (Uranus 52N, Uranus B6, PVC, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

- Lime slurry agitator
- Perfect for IBCs
- Second turbine at container floor height to prevent settling
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Mounting plate or cross beam with handles
- Multiple options available







#### **APPLICATION**

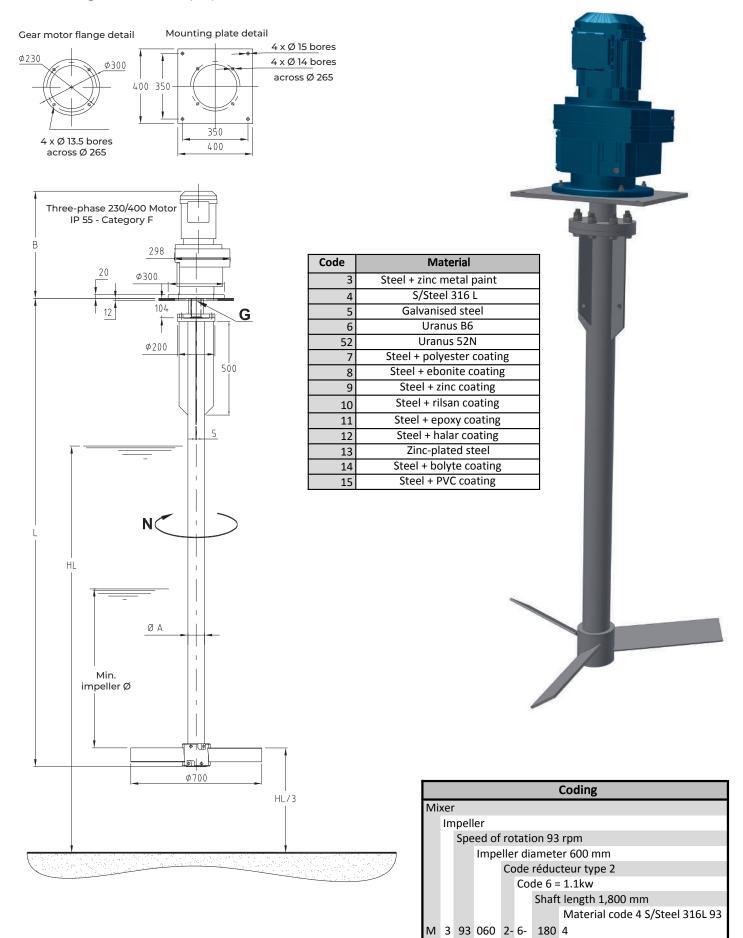
The MT agitator has a three-part shaft-end turbine and is driven by a double sleeve on the gear shaft. The type of agitator is determined by the required application: reagent preparations, homogenisation, neutralisation and all mixing operations. This type of agitator is mainly used to generate a radial flow; we usually suggest it when a coated agitator is required.

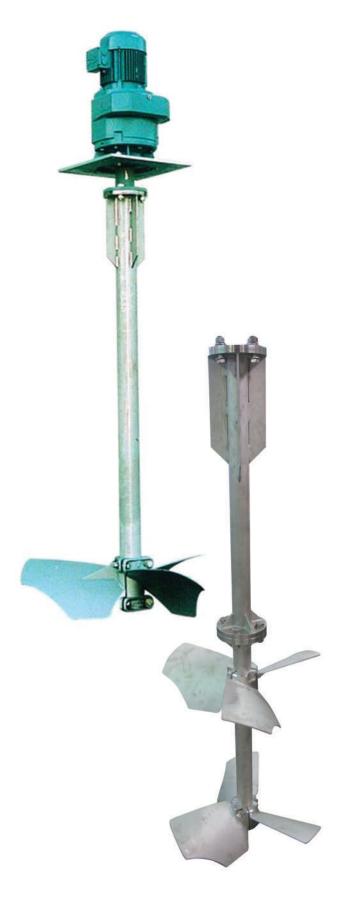
We supply with three-phase 50 Hertz tropicalized motors as standard. The standard impeller shaft is made from 316L stainless steel. The MT agitator can be fitted with one or two turbines, and is available with multiple options.

#### **OPTIONS**

- Specific voltages
- 60 Hz
- Atex motor
- Bevel gear
- Variable frequency drive
- Rain cover
- Double turbine capability
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

- All types of mixing operation
- 3-part hub
- With or without mounting plate
- Radial flow
- Coating option available
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Multiple options available





#### **APPLICATION**

The M3 agitator has a three-part shaft-end impeller and is driven by a double sleeve on the gear shaft. The type of agitator is determined by the required application: reagent preparations, homogenisation, neutralisation and all mixing operations. This type of agitator is mainly used to generate an axial flow

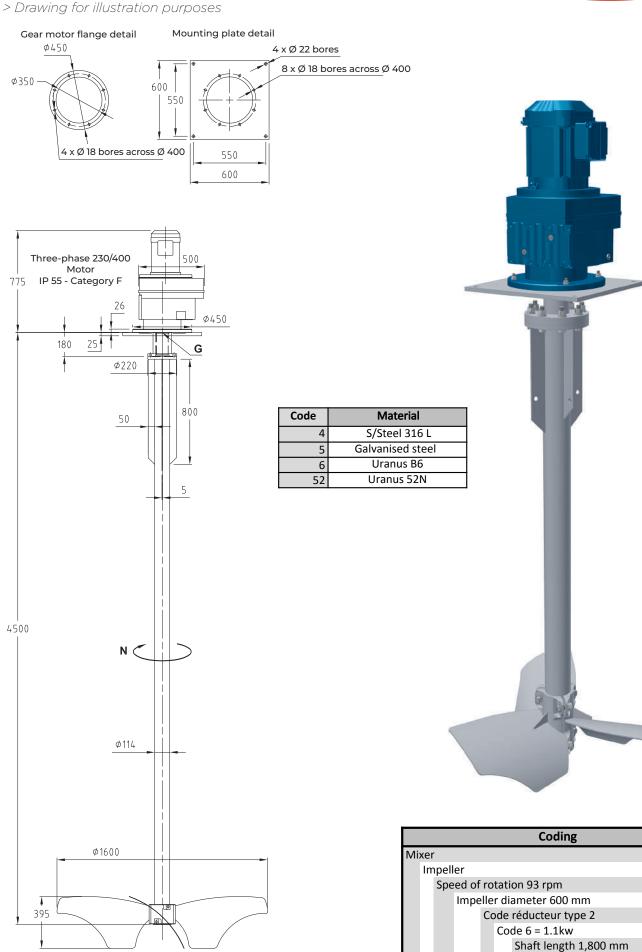
In addition, the M3 flocculates very well at low speed. Its gentle mixing action avoids breaking up the flocs while ensuring an extremely high level of flocculation.

We supply with three-phase 50 Hertz tropicalized motors as standard. The standard impeller shaft is made from 316L stainless steel. The M3 agitator can be fitted with one or two turbines, and is available with multiple options.

#### **OPTIONS**

- Specific voltages
- 60 Hz
- Atex motor
- Bevel gear
- Two-part shaft
- Variable frequency drive
- Rain cover
- Double impeller capability
- High-specification materials (Uranus 52N, Uranus B6, etc)
- Other options are available according to requirements. Contact us for information.

- All types of mixing operation
- Three-part hub
- With or without mounting plate
- Radial flow
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Multiple options available



Material code 4 S/Steel 316L 93

M 3 93 060 2-6- 180 4



#### **APPLICATION**

The layout of some tanks prevents the use of top-entry vertical agitators. We have developed a range of side-entry agitators for use with very high cylinder tanks. The MB3 side-entry agitator attaches to the tank wall by a coupling box. It has a shaft-end impeller and is driven by a double sleeve on the gear shaft. A stuffing box or mechanical seal, or both, provide the seal. The type of agitator is determined by the required application: reagent preparations, homogenisation, neutralisation and all types of mixing operations.

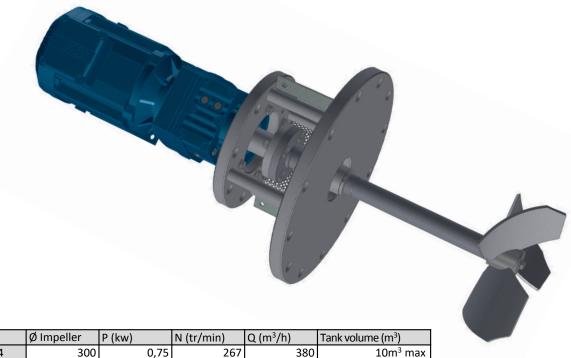
Our side-entry agitators are available in 300 to 800 mm diameter versions. We supply with three-phase 50 Hertz tropicalized motors as standard. The standard impeller shaft is made from 316L stainless steel. The MB3 agitator has a single-piece or three-piece impeller, and is available with multiple options. Some models also have an optional seal that can be removed while the tank is full.

#### **OPTIONS**

- Specific voltages
- 60 Hz
- Atex motor
- Removable mechanical seal (full tank)
- Variable frequency drive
- Rain cover
- High-specification materials (Uranus 52N, Uranus B6, etc)
- Other options are available according to requirements. Contact us for information.

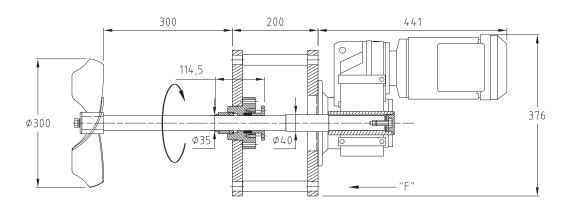
- All types of mixing operation
- Side-mounted coupling box agitator
- Stuffing box or mechanical seal, or both
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Multiple options available





Туре MD3 267 0302-5-0304 300 0,75 380 267 10m3 max MD3 291 0432-8-0304 430 291 1213 10 < V < 20 m<sup>3</sup>  $20 < V < 40m^3$ MD3 176 0504-10-0504 500 176 1150

These three agitators are availables with gland packaging, mechanical seal, or both.



Vue "F"
(sans motoréducteur)

2 Bride DN200 - \$\phi 340 - \text{ép.24}}
8 trous \$\phi 22 \text{ sur } \$\phi 295}

## TYPE ML COUPLING BOX MIXERS



#### **APPLICATION**

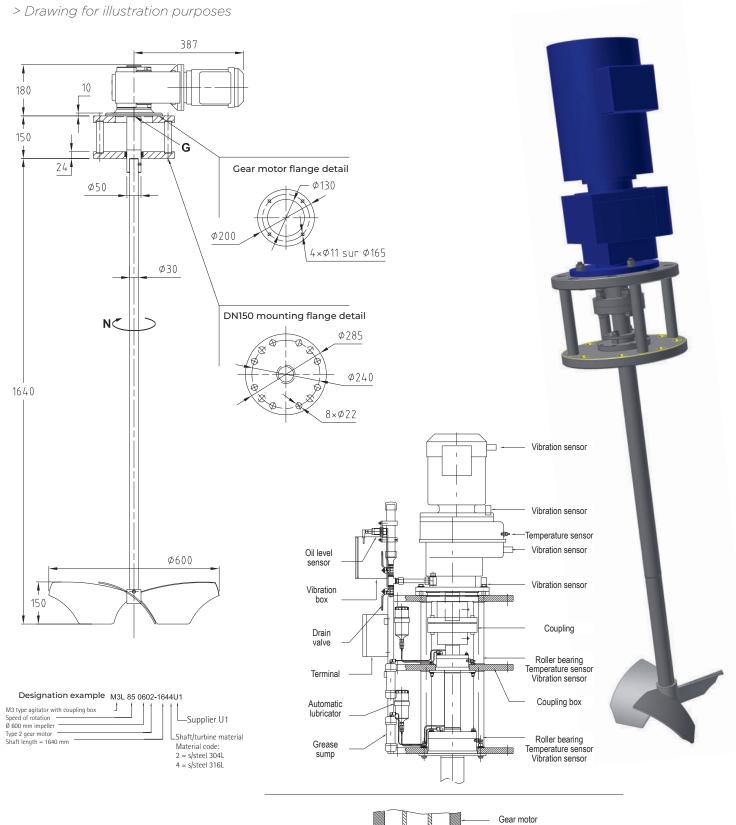
Certain mixing applications require a coupling box to ensure a seal against fluids or corrosive vapours, or for mounting on large agitators. Coupling boxes maintain the axial alignment of the through-tank unit. They can include roller bearings, lubricators and rotation sensors. The seal is provided either by a stuffing box or a mechanical seal, or by both simultaneously.

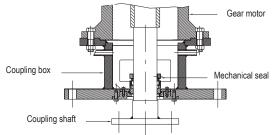
Our ML range of coupling box agitators is available in a choice of diameters. We supply with three-phase 50 Hertz tropicalized motors as standard. The standard impeller shaft is made from 316L stainless steel. The ML range has a single-piece or three-piece impeller, and is available with multiple options.

#### **OPTIONS**

- Specific voltages
- 60 Hz
- Atex motor
- Sealed or unsealed
- With or without bearings
- Sensors
- Lubricators
- Variable frequency drive
- Rain cover
- High-specification materials (Uranus 52N, Uranus B6, coating, etc)
- End bearing
- Other options are available according to requirements. Contact us for information.

- All types of mixing operation
- Practical solution for steady axial alignment on large agitators
- Agitator with top-entry coupling box
- Can be fitted with a seal
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Multiple options available





### **SCRAPERS**



#### APPLICATION

As the name suggests, scrapers sweep along the tank floor to gather up sludge in the centre for removal. They consist of paddles screw-mounted to the shaft, which is connected to the gear drive by a flange and mating flange assembly.

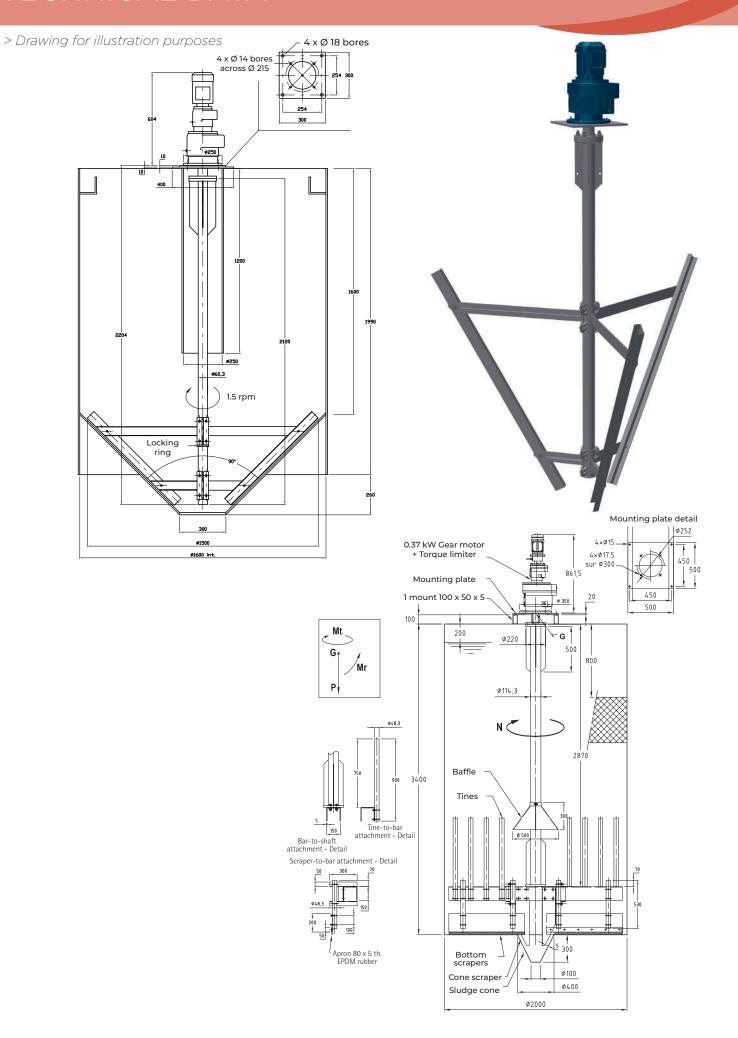
The scrapers adapt to any shape and diameter of flat or pitched tank floor. Their low rpm allows tines to be added to the centre to separate sludge from the water more easily, causing high-density matter to fall to the bottom and the water to rise. The tines significantly increase the performance of the scraper.

We supply with three-phase 50 Hertz tropicalized motors as standard. The standard impeller shaft is made from 316L stainless steel.

#### **OPTIONS**

- Specific voltages
- 60 Hz
- Atex motor
- Variable frequency drive
- High-specification materials (Uranus 52N, Uranus B6, etc)
- Tines
- End bearing
- Other options are available according to requirements. Contact us for information.

- Very low speed
- Tank floor scrapers
- Performance-enhancing tines
- For any type of tank floor
- Sludge concentrated in tank centre
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Multiple options available



## TYPE MF FLOATING MIXERS





#### **APPLICATION**

Floating mixers are designed for mixing operations in homogenisation tanks and slurrying in denitrification tanks. When equipped with a variable speed system, they can also be used in flocculating tanks, drinking water treatment plants, and physical-chemical treatment plants. Floating mixers consist of a low-speed turbine inside a sleeve, attached to the underside of a round, polyester float. Our MF floating mixers deliver significant cost savings in civil engineering work and can be used on tanks of varying capacities. They are easy to install and easy to move using the mooring lines.

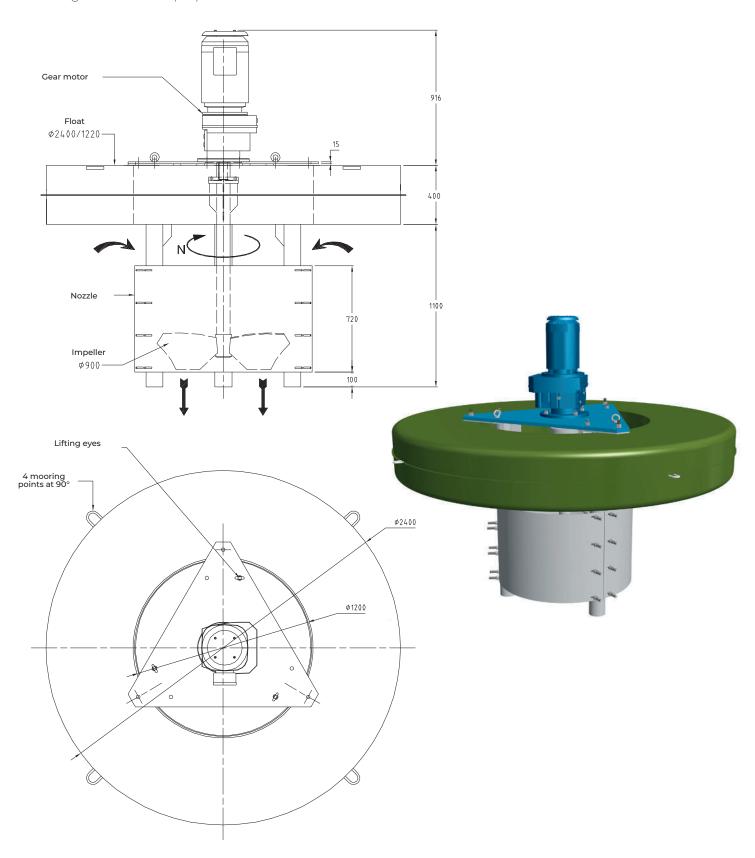
Our floating agitators are available in 450 to 900 mm diameter versions and 2.2 to 11 kW power systems. We supply with three-phase 50 Hertz tropicalized motors as standard. The standard impeller shaft is made from 316L stainless steel.

#### **OPTIONS**

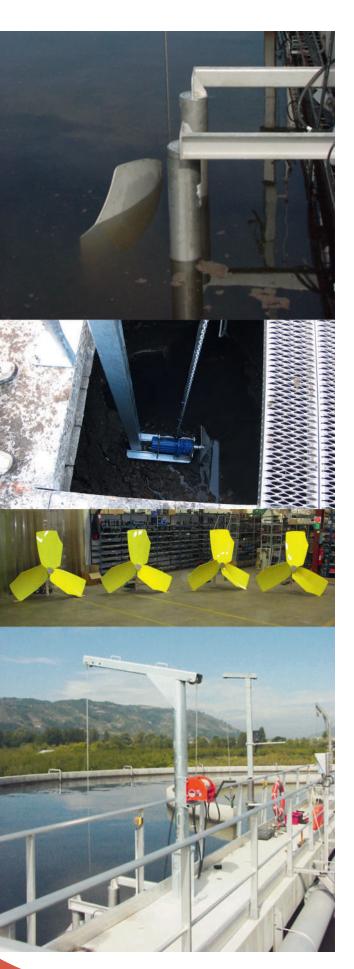
- Specific voltages
- 60 Hz
- Atex motor
- Variable frequency drive
- High-specification materials (Uranus 52N, Uranus B6, coating, etc)
- Other options are available according to requirements. Contact us for information.

- All types of mixing operation
- Floating mixer
- Centre-mounted impeller sleeve
- Variable water levels
- Mooring lines
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Multiple options available

| Туре   | Ø Impeller | P (kw) | N (tr/min) | Q (m3/h) | Weight (kg) |
|--------|------------|--------|------------|----------|-------------|
| MF 022 | 450        | 2,2    | 232        | 1110     | 250         |
| MF 055 | 700        | 5,5    | 163        | 2930     | 380         |
| MF 110 | 900        | 11     | 110        | 4508     | 730         |



## TYPE MI SUBMERSIBLE MIXERS



#### APPLICATION

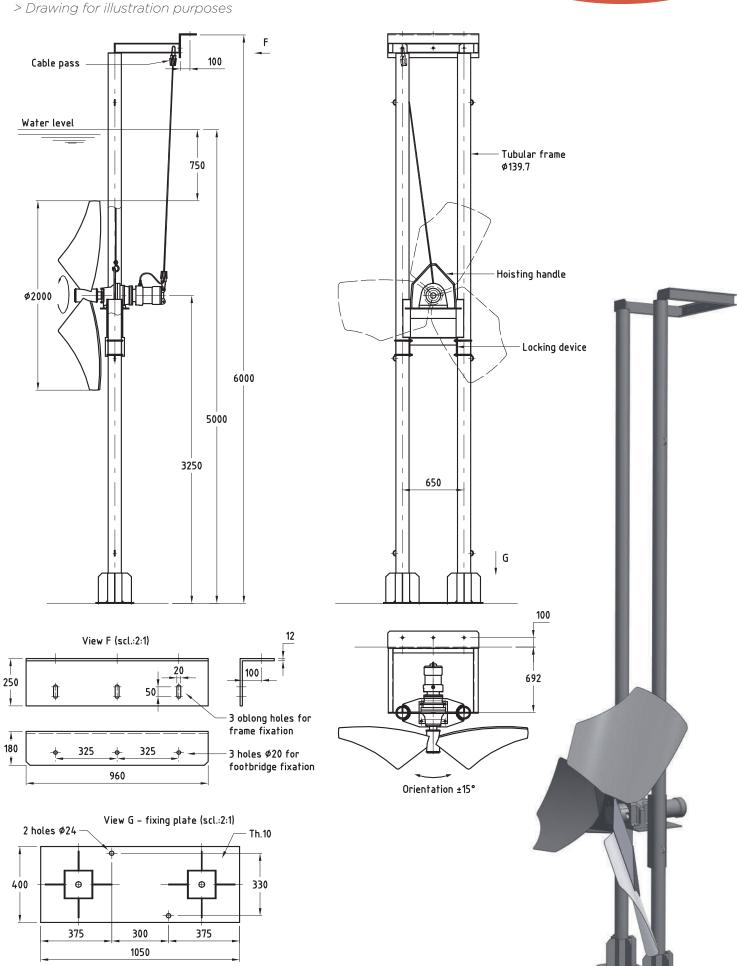
The submersible mixer from TMI is a one-piece unit with an impeller driven by an in-water electrical gear motor. The unit is transportable and can be installed on a vertical pole frame. The thin-profile impeller is designed to produce a circulation flow with reduced peripheral turbulence for optimum hydraulic efficiency. The result is lower electricity consumption than other equipment currently available. This mixer is available with 430 to 1,000 mm diameter impellers and is designed for continuous use.

The shaft is sealed externally and internally by two mechanical seals mounted either side of an oil sump.

#### **OPTIONS**

- Specific voltages
- 60 Hz
- Atex motor
- Variable frequency drive
- High-specification materials (Uranus 52N, Uranus B6, coating, etc)
- Other options are available according to requirements. Contact us for information.

- All types of mixing operation
- Industrial mixer that adapts to your requirements
- Can be fitted with a seal
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Multiple options available



## TYPE IN-LINE MIXERS







#### **APPLICATION**

Each mixer consists of a sealed main tank with capacities ranging from a few to several dozen litres, a high-speed agitator for the intimate mixing of effluents, and a mechanical seal or stuffing box. They work by mixing rapidly during the short residence time of the effluents. This is known as «Flash mixing», which dissipates a large amount of energy for the low volume that is treated. The velocity gradient is usually very high (> 500 s-1).

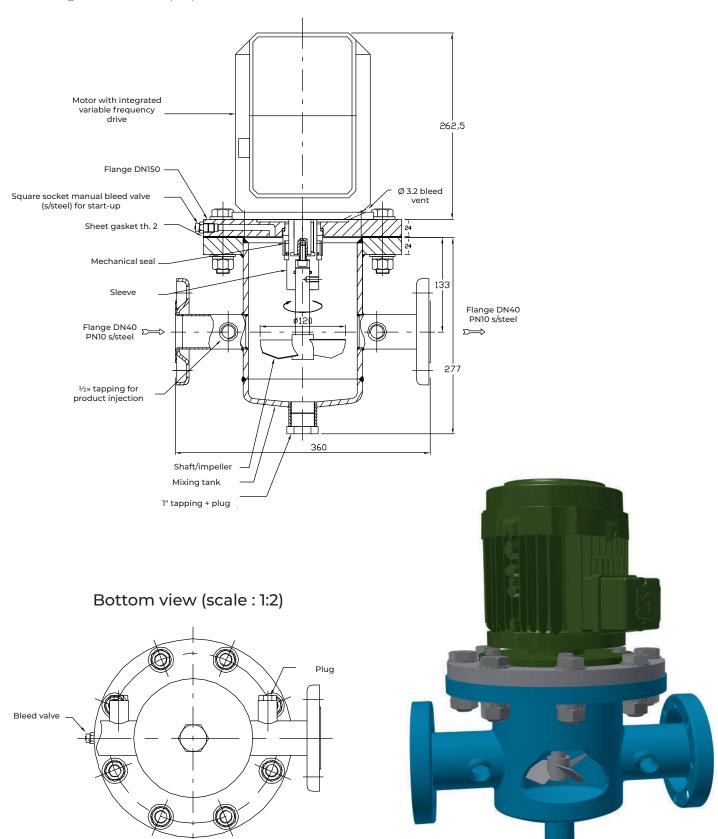
We supply with three-phase 50 Hertz tropicalized motors as standard. The standard impeller shaft is made from 316L stainless steel.

#### **OPTIONS**

- Specific voltages
- 60 Hz
- Atex motor
- Mechanical seal or stuffing box
- Sensors
- Lubricators
- Variable frequency drive
- Rain cover
- High-specification materials (Uranus 52N, Uranus B6, coating, etc)
- Other options are available according to requirements. Contact us for information.

- In-line mixing
- Compact build with minimum footprint
- Easy to operate, install and maintain
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Multiple options available

| Туре         | Ø Impeller | P (kw) | N (tr/min) | Q (m3/h) | Weight (kg) |
|--------------|------------|--------|------------|----------|-------------|
| 3-E-22-430   | 430        | 2,2    | 267        | 1251     | 80          |
| 3-E-40-500   | 500        | 4      | 267        | 1800     | 85          |
| 3-I-75-1000  | 1000       | 7,5    | 97         | 5100     | 160         |
| 3-Q-40-20019 | 2000       | 4      | 27         | 11400    | 250         |



## COATINGS HIGH-SPECIFICATION MATERIALS





#### **APPLICATION**

Agitators that operate in aggressive environments require special protective coatings both on the moving mixing parts and on the gear motor.

Standard stainless steel agitators may not be rugged enough for applications in highly aggressive environments. Highly advanced coatings are required, and must be compatible with the product being processed. We offer a full range of tailored coating solutions.

The choice of material used for the parts that come into contact with the product is crucial. We supply shafts, impellers and mounting plates made from the following materials:

- 316L Stainless steel shafts/impellers
- UB6 shafts/impellers
- Polyester mounting plates

In highly aggressive chemical applications, only the following coatings are effective:

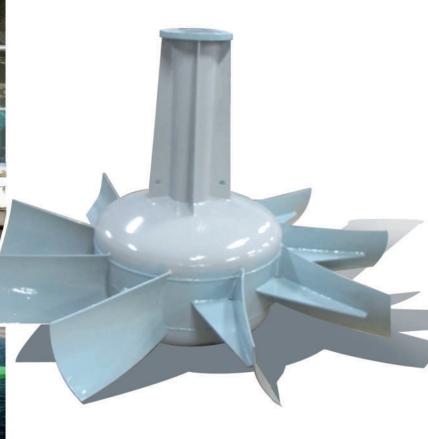
- Halar
- PVC
- Ebonite
- Polypropylene

|                                    | Steels |                           |                     |  |
|------------------------------------|--------|---------------------------|---------------------|--|
| Solution                           | Steel  | S/STEEL<br>316L<br>1.4404 | Uranus B6<br>1.4539 |  |
| Hydrochloric acid => muriatic acid | 1      | 1                         | D                   |  |
| Sulphuric acid                     | D      | D                         | Α                   |  |
| Iron (III) chloride                | D      | 1                         | 1                   |  |
| Potassium cyanide                  | Α      | Е                         | Е                   |  |
| Aluminium fluoride                 | D      | D                         | 0                   |  |
| lodine                             | 1      | 1                         | Α                   |  |
| Ammonium nitrate                   | 1      | Α                         | Е                   |  |
| Aluminium sulphate                 | I      | D                         | 0                   |  |
| Urea                               | Е      | Α                         | 0                   |  |
| Emulsion polymersion               | D      | Е                         | Е                   |  |

| Е | : Excellent                 |
|---|-----------------------------|
| Α | : Acceptable                |
| D | : Not recommended           |
| 1 | : Incompatible : do not use |
| 0 | : No available data         |

# 02 AERATORS





### **APPLICATION**

In order for biological water treatment systems to work properly, enough oxygen has to be introduced to allow the microorganisms to develop.

Furthermore, effluent has to be mixed with bio-sludge that is held in suspension. The aerators from TMI do three jobs in one by:

- 1. Introducing oxygen
- 2. Mixing effluent/sludge
- 3. Holding the sludge in suspension

This makes them especially suitable for biodegradable industrial and residential wastewater treatment.

### **CONTENTS**

2-01 AVL 1 Aerators

2-02 AVL 2 Aerators

2-03 AVLF Aerators

2-04 AVR Aerators

2-05 Noise control cover/Spray cover

2-06 Optional mounting frame





# 02 | AERATORS

## Read about our full product range:































### **AERATORS**

# AVL 1 1,1kW to 4kW





### **APPLICATION**

Our AVL 1 aerators consist of a drive unit and a low-rpm, surface-level turbine. The thin-blade, hub-welded turbines are designed to ensure a high oxygen transfer rate and to effectively keep the sludge in suspension. The turbines are made of carbon steel and driven at a low rpm by a specific reduction gear system with a high AGMA rating. Our fixed aerators are secured to the footbridge by mounting plates and plate brackets that are available as optional items.

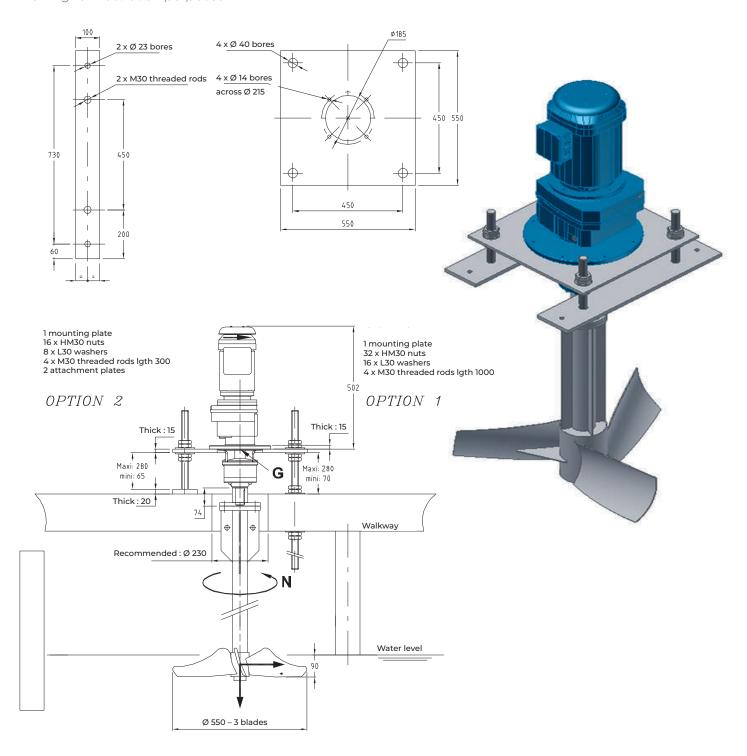
These low-speed aerators are available in 1.1 kW to 4 kW versions. The turbines are available in 600 to 1050 mm diameter, 3- to 5-blade versions.

### **OPTIONS**

- Specific voltages
- Variator
- High-specification materials (Uranus 52N, Uranus B6, coating, etc)
- Other options are available according to requirements. Contact us for information.

- Low-speed aerators, suitable for high oxygenation
- Wide range of sizes
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Fit with or without anchor plates or mounting plate
- Numerous options

| Туре     | P (kw) | N (tr/min) | Q (m3/h) | Ø Turbine | Blades | Oxygenation<br>capacity<br>(kgo2/h) | Specific<br>capacity<br>(kgo2/kw/h) | H maxi plan<br>pose / niv.<br>haut | H mini :<br>passerelle /<br>niv. haut | freeboard<br>height B | Min.<br>water<br>height | Max.<br>water<br>height | Ø max<br>pond | Ø min<br>pond |
|----------|--------|------------|----------|-----------|--------|-------------------------------------|-------------------------------------|------------------------------------|---------------------------------------|-----------------------|-------------------------|-------------------------|---------------|---------------|
| AVLE 111 | 1,1    | 156        | 540      | 600       | 3      | 1,5                                 | 1,4                                 | 1200                               | 800                                   | 500                   | 1200                    | 2200                    | 6000          | 4600          |
| AVLE 115 | 1,5    | 168        | 760      | 600       | 5      | 2,2                                 | 1,5                                 | 1200                               | 800                                   | 500                   | 1200                    | 2200                    | 7000          | 5000          |
| AVLE 122 | 2,2    | 118        | 1100     | 850       | 3      | 3                                   | 1,4                                 | 1200                               | 900                                   | 500                   | 1700                    | 2500                    | 7000          | 5700          |
| AVLE 130 | 3      | 122        | 1500     | 850       | 5      | 4,4                                 | 1,5                                 | 1200                               | 900                                   | 500                   | 1700                    | 3000                    | 8500          | 6200          |
| AVLE 140 | 4      | 100        | 2300     | 1050      | 5      | 6                                   | 1,5                                 | 1200                               | 900                                   | 600                   | 2100                    | 3000                    | 8500          | 7000          |



### **AERATORS**

# AVL 2 **5,5kW à 45kW**



### **APPLICATION**

Our AVL 2 aerators consist of a drive unit and a low-rpm, surface-level turbine. The thin-blade, hub-welded turbines are designed to ensure a high oxygen transfer rate and to effectively keep the sludge in suspension. The turbines are made of carbon steel and driven at a low rpm by a specific reduction gear system with a high AGMA rating. Our fixed aerators are secured to the footbridge by mounting plates and plate brackets that are available as optional items.

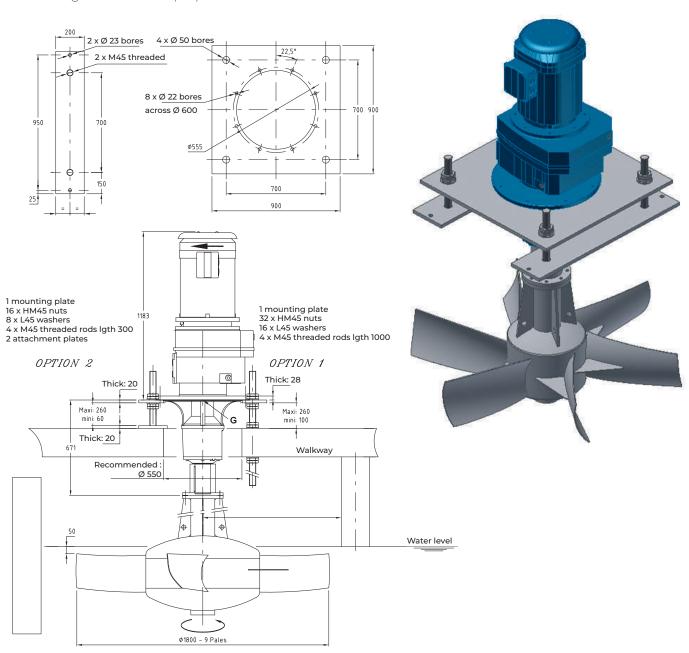
These low-speed aerators are available in 5.5 kW to 75 kW versions. The turbines are available in 1,220 to 2,800 mm diameter, 3- to 18-blade versions.

### **OPTIONS**

- Specific voltages
- Variator
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

- Low-speed aerators, suitable for high oxygenation
- Wide range of sizes
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Fit with or without anchor plates or mounting plate
- Numerous options

| Туре      | P (kw) | N (tr/min) | Q (m3/h) | Ø Turbine | Blades | Oxygenation capacity (kgo2/h) | Specific<br>capacity<br>(kgo2/kw/h) | Hauteur maxi<br>plan de pose /<br>niv. haut | Distance H<br>mini :<br>passerelle /<br>niv. haut | freeboard<br>height B | Min.<br>water<br>height | Max.<br>water<br>height | Ø max<br>pond | Ø min<br>pond |
|-----------|--------|------------|----------|-----------|--------|-------------------------------|-------------------------------------|---|---|-----------------------|-------------------------|-------------------------|---------------|---------------|
| AVLE 255  | 5,5    | 80         | 2500     | 1220      | 3      | 8                             | 1,5                                 | 1200  | 900   | 600                   | 2500                    | 3400                    | 9200          | 7500          |
| AVLE 275  | 7,5    | 80         | 2800     | 1220      | 3      | 11                            | 1,5                                 | 1200  | 900   | 600                   | 2500                    | 3800                    | 11000         | 8600          |
| AVLE 292  | 9,2    | 81         | 3420     | 1220      | 3      | 14                            | 1,5                                 | 1200  | 900   | 600                   | 2500                    | 4000                    | 12000         | 9000          |
| AVLE 2110 | 11     | 81         | 3960     | 1220      | 3      | 17                            | 1,6                                 | 1200  | 900   | 600                   | 2500                    | 4200                    | 13000         | 10000         |
| AVLE 2150 | 15     | 67         | 5500     | 1400      | 6      | 25                            | 1,7                                 | 1200  | 1000  | 700                   | 2800                    | 4300                    | 14000         | 11500         |
| AVLE 2185 | 18,5   | 67         | 6500     | 1500      | 6      | 31                            | 1,7                                 | 1200  | 1000  | 700                   | 3000                    | 4500                    | 15400         | 12500         |
| AVLE 2220 | 22     | 49         | 11000    | 1700      | 6      | 37                            | 1,7                                 | 1200  | 1000  | 700                   | 3500                    | 5000                    | 15500         | 13000         |
| AVLE 2300 | 30     | 61         | 11000    | 1800      | 9      | 51                            | 1,7                                 | 1200  | 1000  | 800                   | 3600                    | 5300                    | 17900         | 14700         |
| AVLE 2370 | 37     | 53         | 13000    | 1800      | 11     | 62                            | 1,7                                 | 1200  | 1000  | 800                   | 3600                    | 5500                    | 20000         | 16000         |
| AVLE 2450 | 45     | 53         | 17000    | 2000      | 12     | 75                            | 1,7                                 | 1200  | 1000  | 800                   | 4000                    | 6000                    | 23000         | 18000         |



### **AVLF**



### **APPLICATION**

Floating aerators from TMI are primarily used on lagoons where civil engineering works would be very costly or unfeasible. These floating aerators share the same design characteristics as fixed aerators, in which a gear motor with a high AGMA rating drives a surface turbine at low rpm.

The only difference is in the installation: these aerators sit atop a floating frame mounted on three floats to prevent any risk of leaks. They are attached to threaded rods to enable fine adjustments. Our AVLF aerators not only significant reduce the cost of civil engineering works; they can also be used on tanks where levels fluctuate. They are easy to install and easy to move using the mooring lines.

These low-speed aerators are available in 1.1 kW to 45 kW versions. The turbines are available in 600 to 2,000 mm diameter versions.

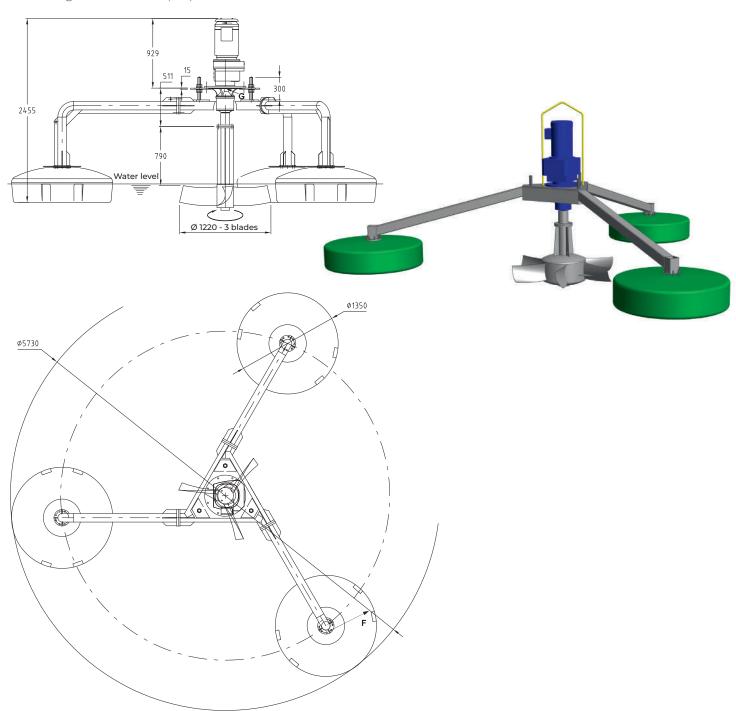


### **OPTIONS**

- Specific voltages
- Electrical wiring
- Mooring slings
- Atex motor
- Variator
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

- Low-speed aerators suited to high oxygen transfer
- Floating aerator
- Easy to operate and install
- Wide range of sizes
- Standard 230/400 V  $\bullet$  Three-phase 50 Hz Tropicalized
- Numerous options

| Туре       | P (kw) | N (tr/min) | Q (m3/h) | Ø Turbine | Oxygenation capacity (kgo2/h) | Specific<br>capacity<br>(kgo2/kw/h) | freeboard<br>height B | Min.<br>water<br>height | Max.<br>water<br>height | Ø max<br>pond | Ø min<br>pond |
|------------|--------|------------|----------|-----------|-------------------------------|-------------------------------------|-----------------------|-------------------------|-------------------------|---------------|---------------|
| AVLE 111F  | 1,1    | 1400       | 540      | 600       | 1,5                           | 1,4                                 | 500                   | 1200                    | 2000                    | 6             | 4,6           |
| AVLE 115F  | 1,5    | 1420       | 760      | 600       | 2,2                           | 1,5                                 | 500                   | 1200                    | 2200                    | 7             | 5             |
| AVLE 122F  | 2,2    | 1400       | 1100     | 850       | 3                             | 1,4                                 | 500                   | 1700                    | 2500                    | 7             | 5,7           |
| AVLE 130F  | 3      | 1400       | 1500     | 850       | 4,4                           | 1,5                                 | 500                   | 1700                    | 3000                    | 8,5           | 6,2           |
| AVLE 140F  | 4      | 1420       | 2300     | 1050      | 6                             | 1,5                                 | 600                   | 2100                    | 3000                    | 8,6           | 7             |
| AVLE 255F  | 5,5    | 1430       | 2500     | 1220      | 8                             | 1,5                                 | 600                   | 2500                    | 3400                    | 9,2           | 7,5           |
| AVLE 275F  | 7,5    | 1450       | 2800     | 1220      | 11                            | 1,5                                 | 600                   | 2500                    | 3500                    | 11            | 8,6           |
| AVLE 2110F | 11     | 1440       | 4000     | 1220      | 17                            | 1,6                                 | 600                   | 2500                    | 4200                    | 13            | 10            |
| AVLE 2150F | 15     | 1450       | 5500     | 1400      | 25                            | 1,7                                 | 700                   | 2800                    | 4300                    | 14            | 11,5          |
| AVLE 2185F | 18,5   | 1460       | 6500     | 1500      | 31                            | 1,7                                 | 700                   | 3000                    | 4500                    | 15,4          | 12,5          |
| AVLE 2220F | 22     | 1460       | 10000    | 1750      | 36                            | 1,7                                 | 700                   | 3500                    | 5000                    | 15,5          | 13            |
| AVLE 2300F | 30     | 1470       | 11000    | 1800      | 48                            | 1,7                                 | 800                   | 3600                    | 5300                    | 17,9          | 14,7          |
| AVLE 2370F | 37     | 1470       | 13000    | 1800      | 62                            | 1,7                                 | 800                   | 3600                    | 5500                    | 20            | 16            |
| AVLE 2450F | 45     | 1470       | 17000    | 2000      | 73                            | 1,7                                 | 800                   | 4000                    | 6000                    | 23            | 18            |



### **AVR**







### APPLICATION

High-speed aerators differ from low-speed versions in that they are mainly used for processes in which the oxygen transfer rate is not a crucial factor (under 1.1 kg of O2/kW/h). They consist of a high-rpm turbine inside a pipe. The pump-impeller assembly is mounted on a polyester float. The motor used is determined by the power supply characteristics.

Our AVR aerators not only significantly reduce the cost of civil engineering works; they can also be used to aerate tanks where levels fluctuate. They are easy to install and easy to move using the 4 mooring lines.

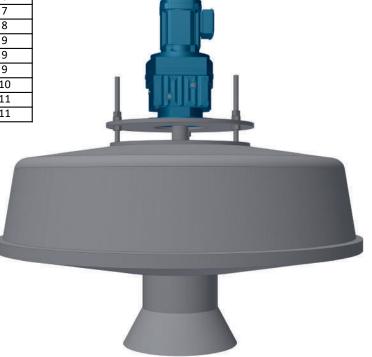
These high-speed aerators are available in 3 kW to 75 kW versions, with oxygenation capacities ranging from 3.2 to 85 kg O2/h.

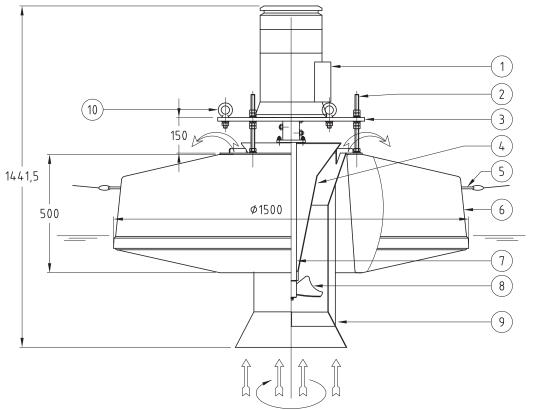
### **OPTIONS**

- Specific voltages
- Electrical wiring
- Mooring slings
- Variator
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

- High-speed aerator
- Floating aerator
- Easy to operate and install
- Wide range of sizes
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Numerous options

| Туре    | P (kw) | Q (m3/h) | Ø Total | Oxygenation capacity (kgo2/h) | Ø Spray |
|---------|--------|----------|---------|-------------------------------|---------|
| AVR 30  | 3      | 730      | 1500    | 3,2                           | 4       |
| AVR 40  | 4      | 780      | 1500    | 4,2                           | 4       |
| AVR 55  | 5,5    | 880      | 1500    | 5,8                           | 5       |
| AVR 75  | 7,5    | 990      | 1500    | 7,9                           | 6       |
| AVR 110 | 11     | 1200     | 2400    | 12                            | 7       |
| AVR 150 | 15     | 1820     | 2400    | 15,8                          | 8       |
| AVR 185 | 18,5   | 1940     | 2400    | 19,5                          | 9       |
| AVR 220 | 22     | 2070     | 2400    | 25                            | 9       |
| AVR 300 | 30     | 2600     | 2400    | 34                            | 9       |
| AVR 370 | 37     | 3330     | 2400    | 38,9                          | 10      |
| AVR 450 | 45     | 3570     | 3000    | 47,3                          | 11      |
| AVR 750 | 75     | 5800     | 3000    | 85                            | 11      |





- 1 Motor
- 2 Spacer
- 3 Mounting plate
- 4 Inner nozzle
- 5 3 Moorings at 120°
- 6 Float
- 7 Shaft
- 8 Impeller Ø 266
- 9 Outer nozzle
- 10 3 Lifting eye bolts at 120°

Weight: 241 kg

### **AERATORS**

## NOISE CONTROL COVER/ SPRAY COVER







### **APPLICATION**

A noise control cover mounted around the motor unit significantly reduces the audible noise level. Its open-top design ensures that the motor unit remains properly vented, removing the need for a fan.

The surface aerator sprays are hooded for two main reasons:

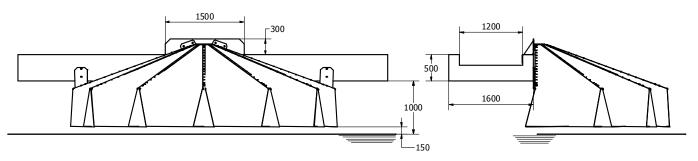
- As an abatement measure to reduce noise emissions from the downward water flow.
- As a containment dome against aerosols discharged by the effluent spray into the atmosphere,

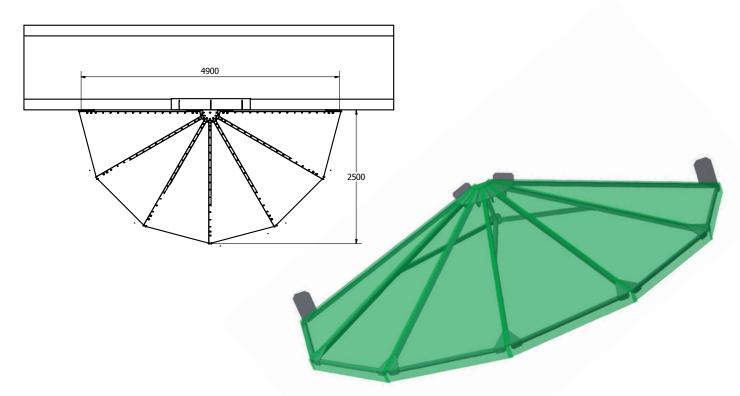
Covers are often installed by widening the walkways above the aerators and fitting synthetic skirts that run all around the resulting platform. This work-intensive and costly method is difficult to install as a retrofit or during renovations. The cover system developed by TMI uses two half domes made from fibreglass-reinforced polyester resin. The two sections are bolted onto and supported by the walkway's concrete guard walls. They can be enlarged if necessary (e.g. high freeboard) by coated canvas extensions. Galvanised steel fittings can be supplied for attaching them to walls that are too low. The covers are designed to be rugged, and are sloped to allow snow to slide off unaided.

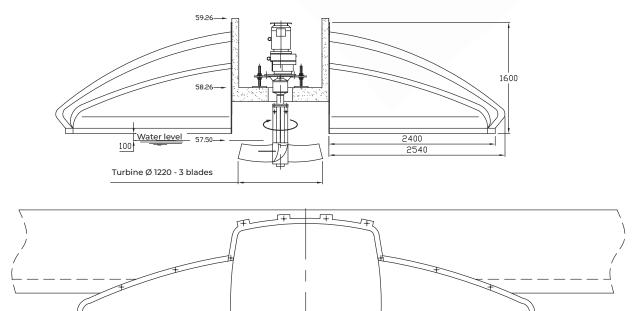
Our covers are built from highly durable materials that are corrosion resistant yet lightweight for easy installation. The only civil engineering work required is a walkway with walls that give the construction strength and act as a safety barrier. Installation is quick and easy and can be completed on a full or empty tank.

- Noise control cover
- Spray cover
- Two polyester resin half domes
- Designed for all weather conditions

### > Drawing for illustration purposes







## **AERATORS**

## OPTIONAL MOUNTING FRAME



### **APPLICATION**

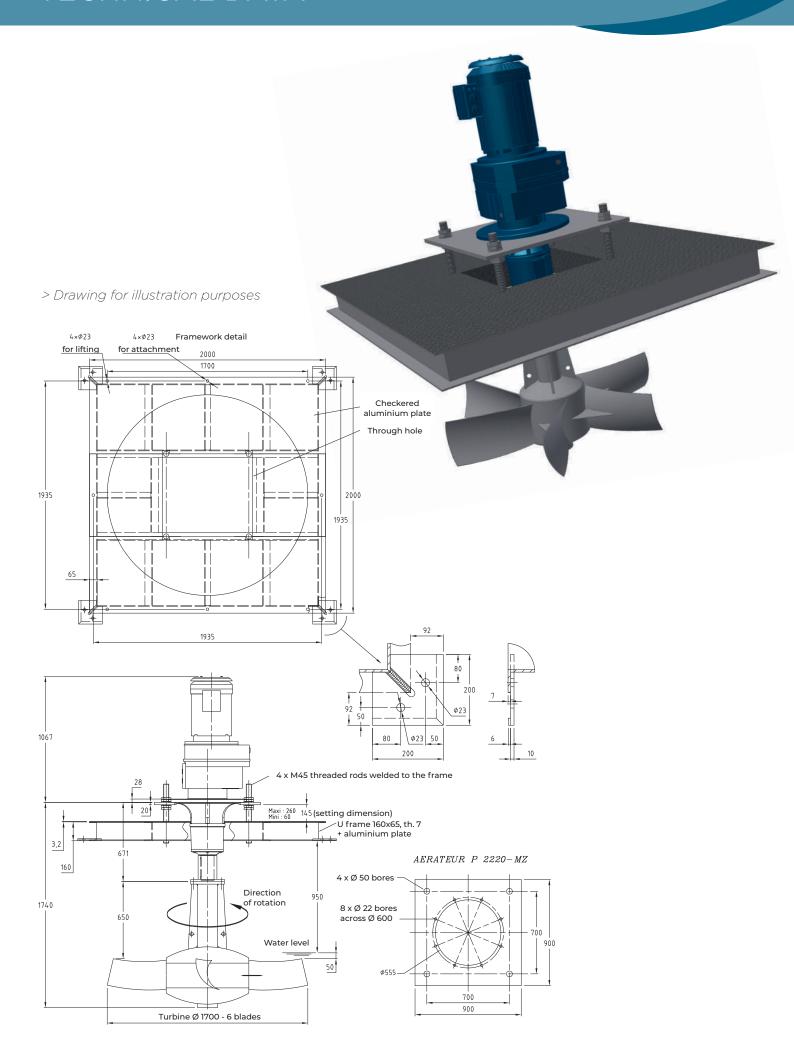
The optional mounting frame offers a significant benefit when installing and servicing an aerator. With a mounting frame, the aerator can be fitted and removed in one piece and in one operation, without having to be disassembled. On a normal aerator, the relatively large moving mixing section requires the turbine to be disassembled and the gear motor and mounting parts to be individually removed, followed by the moving section from underneath. Our frame is wider than the diameter of the aerator, which allows the entire unit to be lifted by the four corner-mounted lifting lugs.

The mounting frame is an extremely useful option for facilities with difficult access. The result is easy handling and maintenance.



- The aerator can be removed in one step.
- Easy handling
- Easy to dismantle and maintain
- Solid build





# O3 | REAGENT PREPARATIONS













### **APPLICATION**

In addition to agitators and aerators, TMI also designs and develops a complete range of equipment for preparing flocculants in powdered and liquid forms.

Synthetic organic flocculants (polyacrylamides) are used in a number of industries.

- · Water treatment
- Ore processing
- Paper manufacturing
- Chemical industry
- Etc.

### **CONTENTS**

- Manufloc 85001 85005 3-01
- 3-02 Manufloc 85006 - 85080
- 3-03 **Autofloc C27E**
- 3-04 **Autofloc C27P**
- **Autofloc 27E** 3-05
- 3-06 **Autofloc 27P**
- 3-07 **Autofloc 87E**
- 3-08 **Autofloc 87P** 3-09 **Autofloc 89P**
- 3-10 Autofloc 89E
- 3-11 **Autofloc 88P**
- 3-12 **Autofloc 88E**
- 3-13 **Autofloc 85P**
- 3-14 **Autofloc 85E**
- 3-15 Liquifloc 97W
- 3-16 Liquifloc 96
- 3-17 **Prepafloc**
- 3-18 Contifloc
- 3-19 Skid







# 03 | REAGENT PREPARATIONS

### Read about our full product range:











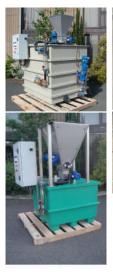






































# REAGENT PREPARATION

# MANUFLOC **85001 - 85005**



### **APPLICATION**

Manufloc is a manual reagent preparation station that consists of a 100- to 500-litre PEHD tank with a <sup>3</sup>/<sub>4</sub>- to 2-inch tapping at the bottom, an agitator, and a flocculant disperser made up of a water inlet and a variable-size hopper.

#### Operation:

- 1. Partially fill the tank with water and switch on the agitator.
- 2. Pour the product through the Venturi disperser funnel.
- 3. Fill the tank completely.
- 4. Agitate the solution for 30 min. to 1 hour.

The agitators for these preparation stations are available with a 0.18 kW or 1.1 kW drive.

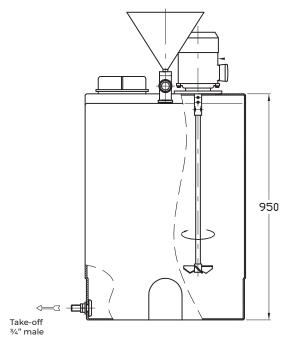
### **OPTIONS**

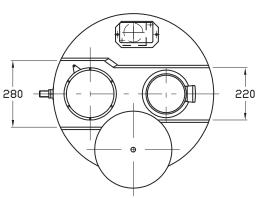
- Specific voltages
- Atex motor
- Variator
- Pumps
- Float switch
- Overflow and additional tappings
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

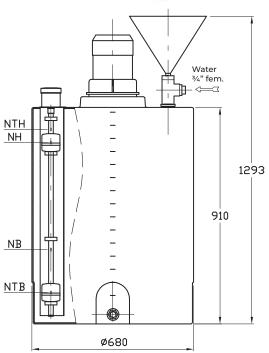
- Manual reagent preparation station
- PEHD tank
- 100 to 500 litres
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Tapping at base of tank
- Numerous options

| Type  | 1   | ank dim | ensions | Agitator       |        |
|-------|-----|---------|---------|----------------|--------|
| туре  | (L) | Ø Tank  | Heigth  | Overall height | P (kw) |
| 85001 | 100 | 465     | 785     | 1110           | 0,18   |
| 85002 | 200 | 560     | 950     | 1280           | 0,18   |
| 85003 | 300 | 675     | 950     | 1280           | 0,18   |
| 85005 | 500 | 810     | 1070    | 1400           | 1,1    |









## MANUFLOC 85006 - 85080







### **APPLICATION**

Manufloc 85006 - 85080 is a manual reagent preparation station that consists of a 600- to 8,000-litre PEHD tank with a  $\frac{3}{4}$ - to 2-inch tapping at the bottom, an agitator mounting frame, an agitator, and a flocculant disperser made up of a water inlet and a variable-size hopper.

#### Operation:

- 1. Partially fill the tank with water and switch on the agitator.
- 2. Pour the product through the Venturi disperser funnel.
- 3. Fill the tank completely.
- 4. Agitate the solution for 30 min. to 1 hour.

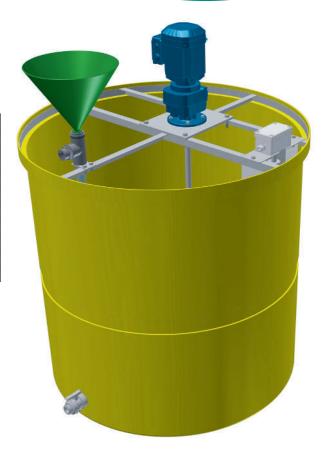
The agitators for these preparation stations are available with a 0.55 kW or 2.2 kW drive.

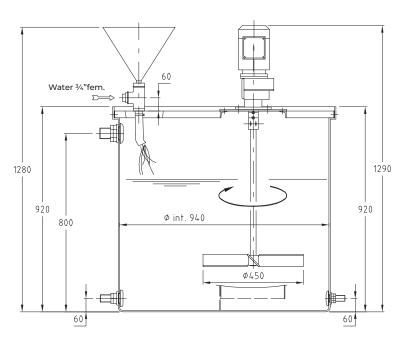
### **OPTIONS**

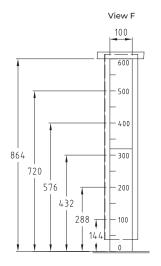
- Specific voltages
- Atex motor
- Variator
- Pumps
- Level probe
- Overflow and additional tappings
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

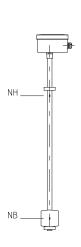
- Manual reagent preparation station
- Optional level probe
- PEHD tank
- 600 to 8000 litres
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Tapping at base of tank
- Numerous options

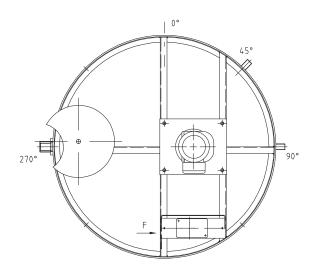
| Typo  | Volume | Ta     | ınk dimer | nsions         | Agita  | ator      |
|-------|--------|--------|-----------|----------------|--------|-----------|
| Type  | (L)    | Ø Tank | Height    | Overall height | P (kw) | Ø turbine |
| 85006 | 600    | 950    | 920       | 1330           | 0,55   | 450       |
| 85010 | 1000   | 1102   | 1115      | 1545           | 0,55   | 500       |
| 85015 | 1500   | 1200   | 1425      | 1855           | 0,55   | 500       |
| 85020 | 2000   | 1406   | 1390      | 1810           | 0,55   | 500       |
| 85030 | 3000   | 1406   | 2000      | 2490           | 1,1    | 2*500     |
| 85040 | 4000   | 1700   | 1800      | 2275           | 1,5    | 600       |
| 85050 | 5000   | 1910   | 1820      | 2300           | 1,5    | 600       |
| 85060 | 6000   | 2092   | 1800      | 2285           | 2,2    | 700       |
| 85080 | 8000   | 2370   | 1760      | 2250           | 2,2    | 700       |











# REAGENT PREPARATION

## **AUTOFLOC C27E**





### **APPLICATION**

The Autofloc C27 is TMI's most compact polymer preparation station. With fewer options than other stations, it is easy to operate and available in 300- and 500-litre versions. Continuous flocculant production is vital even with low flocculant consumption. Our AUTOFLOC stations are ready to be hooked up to the water and electricity supplies. They are fully automated and prepare the solution in continuous mode.

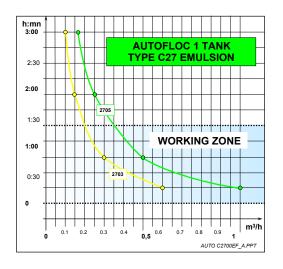
#### **Benefits**

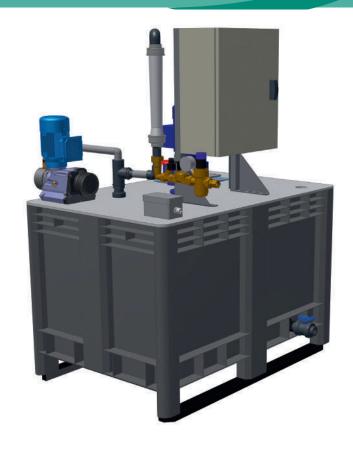
- Compact build for minimum footprint
- Easy to operate and maintain
- Quick preparation times in a fully automated system: little operator input and monitoring.
- Short leadtime

The flocculant stored in a tank (optional) is fed into a variable-rate metering pump. A station consists of a main tank with a low-speed agitator. A flow meter indicates the through-flow rate and a minimum flow switch triggers a low-water alarm and cuts out the metering pump. The dilution ratio is obtained by adjusting the water and flocculant flow rates. The flocculant solution is ready for use in the process once the tank has been filled. At low level (10% used), the station prepares a new solution until the volume is at the high fill mark. This dilutes the 10% new solution in the 90% mature solution. The control unit houses all the supply systems (agitator, pumps, solenoid, control, safety device).

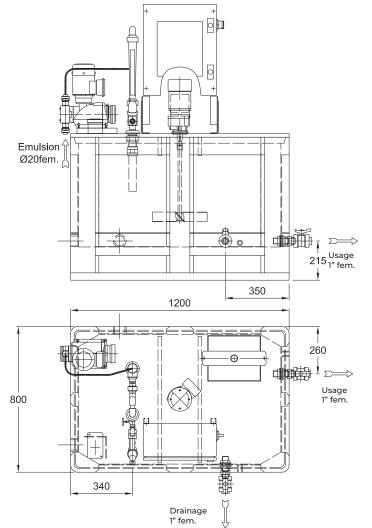
- Specific voltages
- Atex motor
- Variator
- Final pumps
- Secondary dilution
- Emulsion storage tank
- Overflow and additional tappings
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

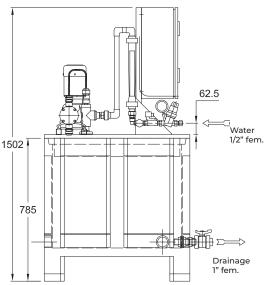
| Type   | Volume | Tank dimensions |       |        |                |  |  |
|--------|--------|-----------------|-------|--------|----------------|--|--|
| Туре   | (L)    | Length          | Width | Height | Overall height |  |  |
| C2703E | 300    | 1200            | 800   | 785    | 1595           |  |  |
| C2705E | 500    | 1200            | 1000  | 860    | 1690           |  |  |





### > Drawing for illustration purposes





NTH

NH

NB

NTB

Empty weight : 135 kg Loaded weight : 635 kg

# REAGENT PREPARATION

## **AUTOFLOC C27P**





### **APPLICATION**

The Autofloc C27 is TMI's most compact polymer preparation station. With fewer options than other stations, it is easy to operate and available in 300- and 500-litre versions. Continuous flocculant production is vital even with low flocculant consumption. Our AUTOFLOC stations are ready to be hooked up to the water and electricity supplies. They are fully automated and prepare the solution in continuous mode.

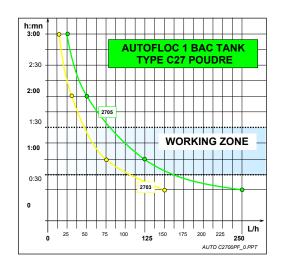
#### **Benefits**

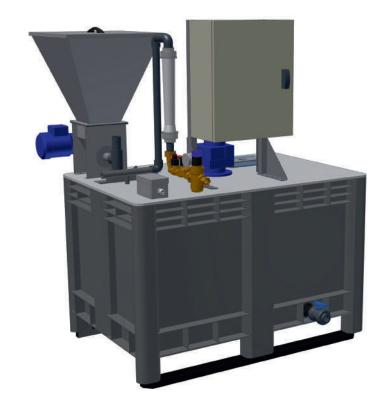
- Compact build for minimum footprint
- Easy to operate and maintain
- Quick preparation times in a fully automated system: little operator input and monitoring
- Short leadtime

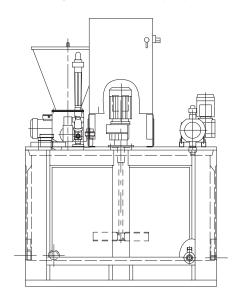
A station consists of a hopper with a metering screw and a main tank with a low-speed agitator. A flow meter indicates the through-flow rate and a minimum flow switch triggers a low-water alarm and cuts out the metering hopper. The dilution ratio is obtained by adjusting the water flow and flocculant metering rates. The flocculant solution is ready for use in the process once the tank has been filled. At low level (10% used), the station prepares a new solution until the volume is at the high fill mark. This dilutes the 10% new solution in the 90% mature solution. The control unit houses all the supply systems (agitator, dosing hopper, solenoid, control, safety device).

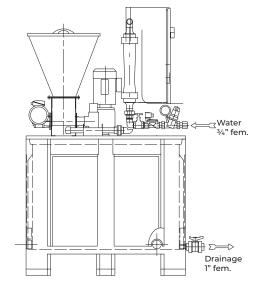
- Specific voltages
- Atex motor
- Variator
- Final pumps
- Secondary dilution
- Overflow and additional tappings
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

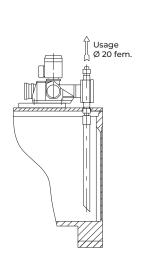
| Type   | Volume | Tank dimensions |       |        |                |  |  |
|--------|--------|-----------------|-------|--------|----------------|--|--|
| Type   | (L)    | Length          | Width | Height | Overall height |  |  |
| C2703P | 300    | 1200            | 800   | 785    | 1595           |  |  |
| C2705P | 500    | 1200            | 1000  | 860    | 1690           |  |  |

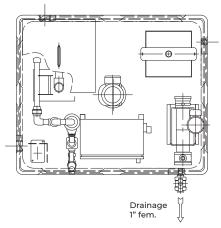


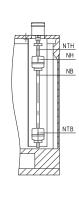












# REAGENT PREPARATION

## **AUTOFLOC 27E**





### **APPLICATION**

Continuous flocculant production is vital even with low flocculant consumption. Our AUTOFLOC stations are ready to be hooked up to the water and electricity supplies. They are fully automated and prepare the solution in continuous mode. Some processes are upgradable and the type of polymer used may change. This is why we have developed stations that can work easily with powder and emulsion polymers. The Autofloc 27 is available in 300- to 1,000-litre versions.

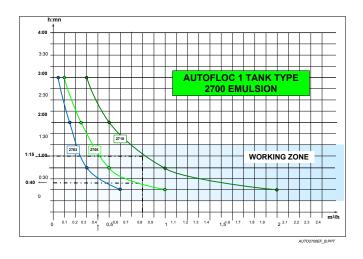
#### **Benefits**

- Compact build for minimum footprint
- Easy to operate and maintain
- Quick preparation times in a fully automated system: little operator input and monitoring.

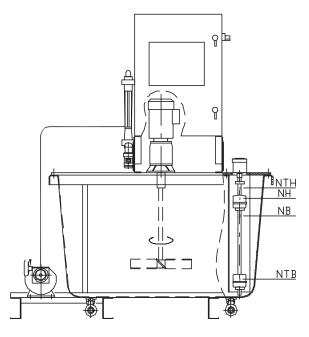
Emulsions: the flocculant stored in a tank is fed into a variable-rate metering pump. A station consists of a main tank with a low-speed agitator. A flow meter indicates the through-flow rate and a minimum flow switch triggers a low-water alarm and cuts out the powder metering device. The dilution ratio is obtained by adjusting the water inlet and the flocculant flow. The flocculant solution is ready for use in the process once the tank has been filled. At low level (10% used), the station prepares a new solution until the volume is at the high fill mark. This dilutes the 10% new solution in the 90% mature solution. The upper and lower fill levels represent 10% of the station's fill volume. The control unit houses all the supply systems (agitators, dosing device, solenoid, control, safety device).

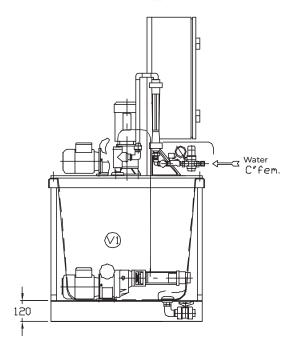
- Specific voltages
- Atex motor
- Variator
- Final pumps
- Electromagnetic flow meters
- Secondary dilution
- Powder and emulsion system
- Emulsion storage tank
- Overflow and additional tappings
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

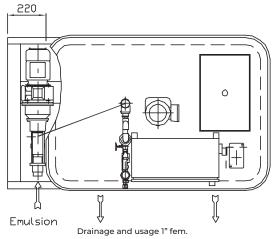
| Typo  | Volume | Tank dimensions |       |                |  |  |
|-------|--------|-----------------|-------|----------------|--|--|
| Туре  | (L)    | Length          | Width | Overall height |  |  |
| 2703E | 300    | 1395            | 690   | 1660           |  |  |
| 2705E | 500    | 1545            | 970   | 1695           |  |  |
| 2710E | 1000   | 1845            | 1190  | 1875           |  |  |



> Drawing for illustration purposes







# REAGENT PREPARATION

## **AUTOFLOC 27P**





### **APPLICATION**

Continuous flocculant production is vital even with low flocculant consumption. Our AUTOFLOC stations are ready to be hooked up to the water and electricity supplies. They are fully automated and prepare the solution in continuous mode. Some processes are upgradable and the type of polymer used may change. This is why we have developed stations that can work easily with powder and emulsion polymers. The Autofloc 27 is available in 300- to 1,000-litre versions.

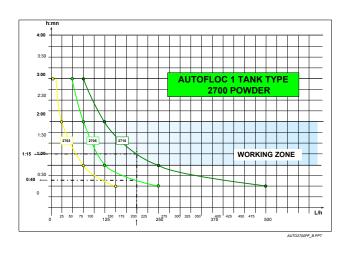
#### **Benefits**

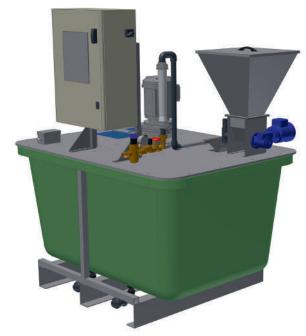
- Compact build for minimum footprint
- Easy to operate and maintain
- Quick preparation times in a fully automated system: little operator input and monitoring.

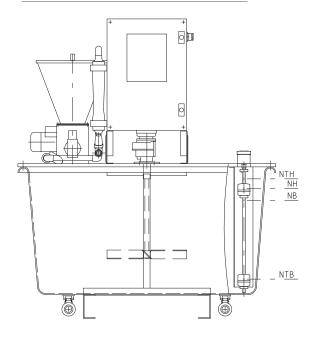
Powders: the flocculant is stored in a hopper that feeds a variable-rate metering device. A station consists of a main tank with a low-speed agitator. A flow meter indicates the through-flow rate and a minimum flow switch triggers a low-water alarm and cuts out the powder metering device. The dilution ratio is obtained by adjusting the water inlet and the flocculant flow. The flocculant solution is ready for use in the process once the tank has been filled. At low level (10% used), the station prepares a new solution until the volume is at the high fill mark. This dilutes the 10% new solution in the 90% mature solution. The upper and lower fill levels represent 10% of the station's fill volume. The control unit houses all the supply systems (agitators, dosing device, solenoid, control, safety device).

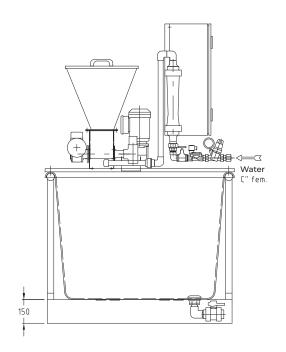
- Specific voltages
- Atex motor
- Variator
- Final pumps
- Electromagnetic flow meters
- Secondary dilution
- Powder and emulsion system
- Overflow and additional tappings
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

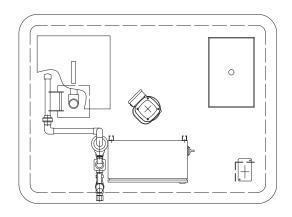
| Type  | Volume | 7      | ank dime | ensions        |
|-------|--------|--------|----------|----------------|
| туре  | (L)    | Length | Width    | Overall height |
| 2703P | 300    | 1170   | 690      | 1660           |
| 2705P | 500    | 1320   | 970      | 1695           |
| 2710P | 1000   | 1620   | 1190     | 1875           |











### **AUTOFLOC 87E**

# REAGENT PREPARATION





### **APPLICATION**

The Autofloc 87 is a larger version of the Autofloc 27 for preparing flocculants and any other reagent more intensively and at higher rates, in a single tank. Our AUTOFLOC stations are ready to be hooked up to the water and electricity supplies. They are fully automated and prepare the solution in continuous mode. Some processes are upgradable and the type of polymer used may change.

This is why we have developed stations that can work easily with powder and emulsion polymers. The Autofloc 87 is available in 600- to 6,000-litre versions.

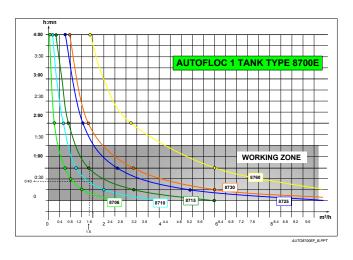
#### **Benefits**

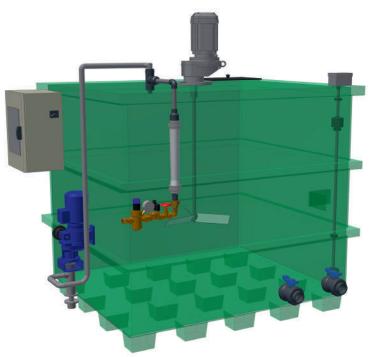
- A larger preparation station, but still with a single tank
- Easy to operate and maintain
- Quick preparation times in a fully automated system: little operator input and monitoring.

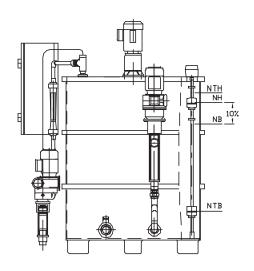
Emulsions: the flocculant stored in a tank is fed into a variable-rate metering pump. A station consists of a main tank with a low-speed agitator. A flow meter indicates the through-flow rate and a minimum flow switch triggers a low-water alarm and cuts out the powder metering device. The dilution ratio is obtained by adjusting the water inlet and the flocculant flow. The flocculant solution is ready for use in the process once the tank has been filled. At low level (10% used), the station prepares a new solution until the volume is at the high fill mark. This dilutes the 10% new solution in the 90% mature solution. The upper and lower fill levels represent 10% of the station's fill volume. The control unit houses all the supply systems (agitators, dosing device, solenoid, control, safety device).

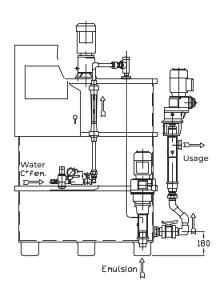
- Specific voltages
- Atex motor
- Variator
- Final pumps
- Electromagnetic flow meters
- Secondary dilution
- Powder and emulsion system
- Emulsion storage tank
- Overflow and additional tappings
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

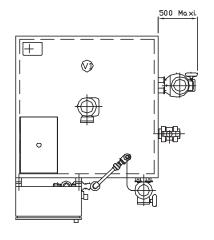
| Type  | Volume | 1      | Tank dimensions |                |  |  |  |  |
|-------|--------|--------|-----------------|----------------|--|--|--|--|
| Туре  | (L)    | Leigth | Width           | Overall height |  |  |  |  |
| 8706E | 600    | 1420   | 1100            | 1275           |  |  |  |  |
| 8710E | 1000   | 1420   | 1100            | 1785           |  |  |  |  |
| 8715E | 1500   | 1420   | 1100            | 1785           |  |  |  |  |
| 8725E | 2500   | 1690   | 1370            | 1930           |  |  |  |  |
| 8730E | 3000   | 1690   | 1610            | 1980           |  |  |  |  |
| 8760E | 6000   | 2500   | 2180            | 2130           |  |  |  |  |











## **AUTOFLOC 87P**

# REAGENT PREPARATION





### **APPLICATION**

The Autofloc 87 is a larger version of the Autofloc 27 for preparing flocculants and any other reagent more intensively and at higher rates, in a single tank. Our AUTOFLOC stations are ready to be hooked up to the water and electricity supplies. They are fully automated and prepare the solution in continuous mode. Some processes are upgradable and the type of polymer used may change.

This is why we have developed stations that can work easily with powder and emulsion polymers. The Autofloc 87 is available in 600- to 6,000-litre versions.

#### **Benefits**

- A larger preparation station, but still with a single tank
- Easy to operate and maintain
- Quick preparation times in a fully automated system: little operator input and monitoring.

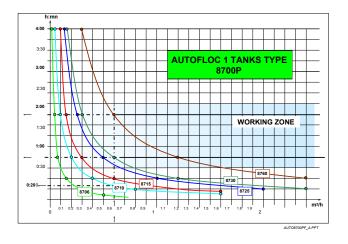
**Powders:** the flocculant is stored in a hopper that feeds a variable-rate metering device.

A station consists of a main tank with a low-speed agitator. A flow meter indicates the through-flow rate and a minimum flow switch triggers a low-water alarm and cuts out the powder metering device.

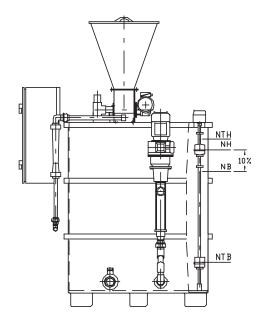
The dilution ratio is obtained by adjusting the water inlet and the flocculant flow. The flocculant solution is ready for use in the process once the tank has been filled. At low level (10% used), the station prepares a new solution until the volume is at the high fill mark. This dilutes the 10% new solution in the 90% mature solution. The upper and lower fill levels represent 10% of the station's fill volume. The control unit houses all the supply systems (agitators, dosing device, solenoid, control, safety device).

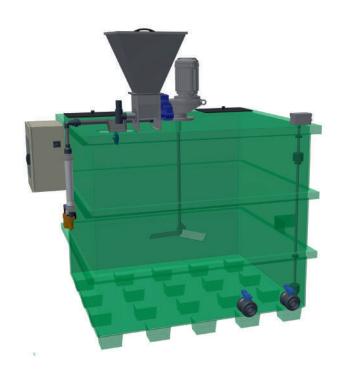
- Specific voltages
- Atex motor
- Variator
- Final pumps
- Electromagnetic flow meters
- Secondary dilution
- Powder and emulsion system
- Overflow and additional tappings
- Autolift powder storage system
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

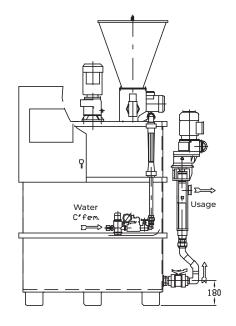
| Type  | Volume | ٦      | Tank dime | ensions        |
|-------|--------|--------|-----------|----------------|
| туре  | (L)    | Leight | Widht     | Overall height |
| 8706P | 600    | 1420   | 1100      | 1495           |
| 8710P | 1000   | 1420   | 1100      | 2005           |
| 8715P | 1500   | 1420   | 1100      | 2005           |
| 8725P | 2500   | 1690   | 1370      | 2150           |
| 8730P | 3000   | 1690   | 1610      | 2150           |
| 8760P | 6000   | 2500   | 2180      | 2300           |

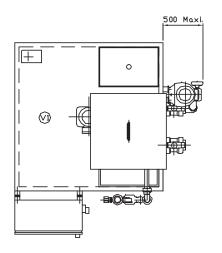


> Drawing for illustration purposes









## **AUTOFLOC 89E**

# REAGENT PREPARATION





### **APPLICATION**

With the Autofloc 89, flocculants and any other reagent can be prepared more intensively and at higher rates in the two agitated preparation and maturation compartments, which are connected by an overflow inside the main tank. Our AUTOFLOC stations are ready to be hooked up to the water and electricity supplies. They are fully automated and prepare the solution in continuous mode. Some processes are upgradable and the type of polymer used may change. This is why we have developed stations that can work easily with powder and emulsion polymers. The Autofloc 89 is available in 1,000- to 12,000-litre versions.

#### **Benefits**

- Twin-tank station (preparation and maturation)
- 2 agitators
- Accommodates customised processes
- Quick preparation times in a fully automated system: little operator input and monitoring.

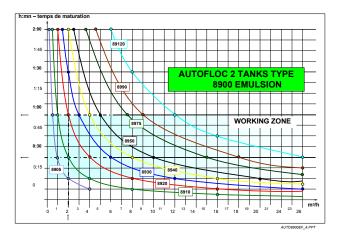
**Emulsions:** the flocculant stored in a tank is fed into a variable-rate metering pump. A station consists of a main tank split into two compartments that are connected by an overflow. Maturation takes place in the two compartments, with sufficient residence time for the flocculant molecular chains to swell. The final compartment is fitted with a level probe and is used to feed the final pumps.

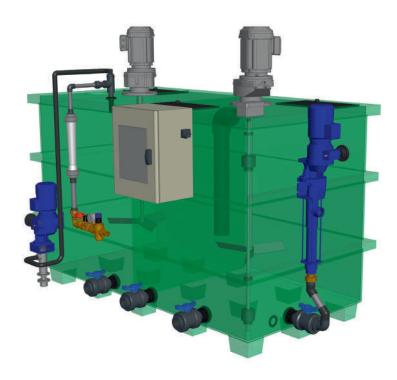
- > Very high level: ALARM (safety)
- > High level: timed water stoppage + powder stoppage
- > Low level: timed water intake + powder intake
- > Very low level: metering pump off (safety)

The compartments are agitated at low speed. The control unit houses all the supply systems (agitators, dosing device, solenoid, control, safety device).

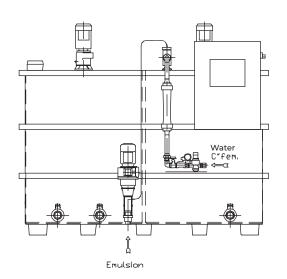
- Specific voltages
- Atex motor
- Variator
- Final pumps
- Electromagnetic flow meters
- Secondary dilution
- Powder and emulsion system
- Emulsion storage tank
- Overflow and additional tappings
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

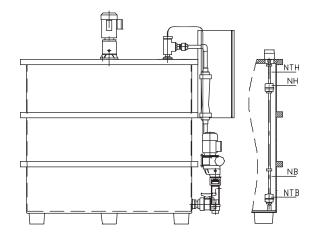
| Type   | Volume | Tank dimensions |       |                |
|--------|--------|-----------------|-------|----------------|
| Туре   | (L)    | Length          | Width | Overall height |
| 8910E  | 1000   | 1100            | 1420  | 1760           |
| 8920E  | 2000   | 2220            | 1460  | 1760           |
| 8930E  | 3000   | 2610            | 1460  | 1760           |
| 8940E  | 4000   | 2180            | 1940  | 1910           |
| 8950E  | 5000   | 2680            | 1930  | 1944           |
| 8975E  | 7500   | 3140            | 2120  | 2094           |
| 8990E  | 9000   | 3070            | 2500  | 2094           |
| 89120E | 12000  | 4240            | 2220  | 2344           |

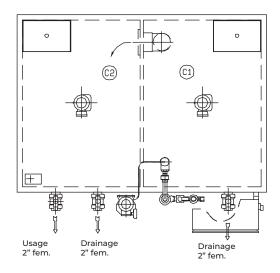




> Drawing for illustration purposes







# REAGENT PREPARATION

## **AUTOFLOC 89P**





### **APPLICATION**

With the Autofloc 89, flocculants and any other reagent can be prepared more intensively and at higher rates in the two agitated preparation and maturation compartments that are connected by an overflow inside the main tank. Our AUTOFLOC stations are ready to be hooked up to the water and electricity supplies. They are fully automated and prepare the solution in continuous mode. Some processes are upgradable and the type of polymer used may change. This is why we have developed stations that can work easily with powder and emulsion polymers. The Autofloc 89 is available in 1,000- to 12,000-litre versions.

#### **Benefits**

- Twin-tank station (preparation and maturation)
- 2 agitators
- Accommodates customised processes Quick preparation times in a fully automated system: little operator input and monitoring.

**Powders:** the flocculant is stored in a hopper that feeds a variable-rate metering device. A station consists of a main tank split into two compartments that are connected by an overflow. Maturation takes place in the two compartments, with sufficient residence time for the flocculant molecular chains to swell. The final compartment is fitted with a level probe and is used to feed the final pumps.

> Very high level: ALARM (safety)

> High level: timed water stoppage + powder stoppage

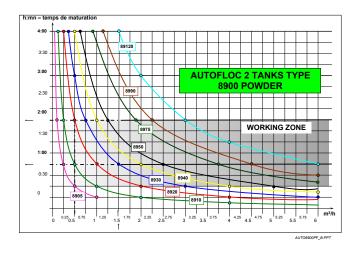
> Low level: timed water intake + powder intake

> Very low level: metering pump off (safety)

The compartments are agitated at low speed. The control unit houses all the supply systems (agitators, dosing device, solenoid, control, safety device).

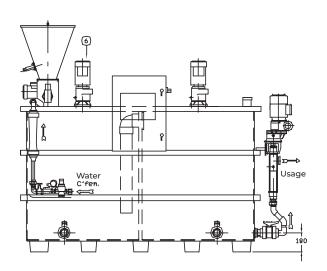
- Specific voltages
- Atex motor
- Variator
- Final pumps
- Electromagnetic flow meters
- Secondary dilution
- Autolift powder storage system
- Powder and emulsion system
- Overflow and additional tappings
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

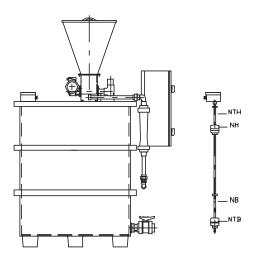
| Type   | Volume | Dimensions |       |                |
|--------|--------|------------|-------|----------------|
| Туре   | (L)    | Length     | Width | Overall height |
| 8910P  | 1000   | 1100       | 1420  | 2005           |
| 8920P  | 2000   | 2220       | 1460  | 2005           |
| 8930P  | 3000   | 2610       | 1460  | 2005           |
| 8940P  | 4000   | 2180       | 1940  | 2155           |
| 8950P  | 5000   | 2680       | 1930  | 2150           |
| 8975P  | 7500   | 3140       | 2120  | 2300           |
| 8990P  | 9000   | 3070       | 2500  | 2300           |
| 89120P | 12000  | 4240       | 2220  | 2550           |

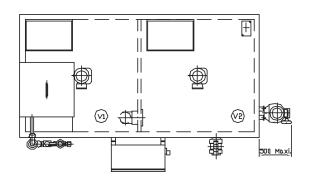




> Drawing for illustration purposes







# REAGENT PREPARATION

### **AUTOFLOC 88E**





#### **APPLICATION**

With the Autofloc 88, flocculants and any other reagent can be prepared more intensively and at higher rates in the two agitated preparation and maturation compartments inside the main tank. Transfer is by pump. Our AUTOFLOC stations are ready to be hooked up to the water and electricity supplies. They are fully automated and prepare the solution in continuous mode. Some processes are upgradable and the type of polymer used may change. This is why we have developed stations that can work easily with powder and emulsion polymers. The Autofloc 88 is available in 1,000- to 12.000-litre versions.

#### **Benefits**

- Twin-tank station (preparation and maturation)
- 2 agitators
- Solutions are maturated
- Quick preparation times in a fully automated system: little operator input and monitoring.

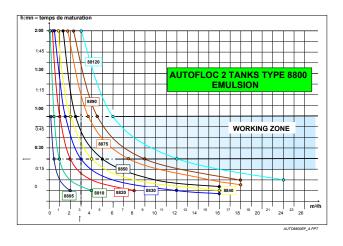
Emulsions: the flocculant stored in a tank is fed into a variable-rate metering pump. A station consists of a compartmentalised main tank split into two sections for Preparation/maturation and storage. The water and reagent go into the first compartment. The residence time in this compartment is necessary for the flocculant molecular chains to swell. The preparation is sent to the second (storage) compartment via a transfer pump. This compartment is used to supply a metering pump. The dilution ratio is obtained by adjusting the amount of reagent added during the preparation stage. The control unit houses all the supply systems (agitators, dosing device, solenoid, control, safety device). Both compartments are fitted with a level probe.

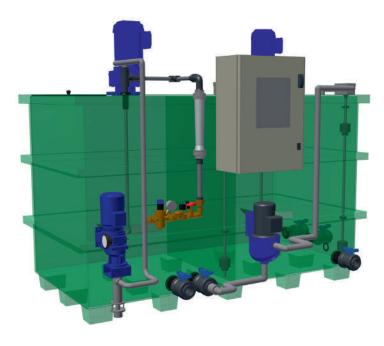
The compartments are agitated at low speed. The control unit houses all the supply systems (agitators, dosing device, solenoid, control, safety device).

#### **OPTIONS**

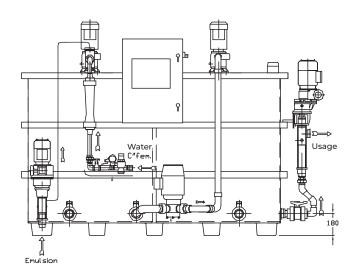
- Specific voltages
- Atex motor
- Variator
- Final pumps
- Electromagnetic flow meters
- Secondary dilution
- Powder and emulsion system
- Emulsion storage tank
- Overflow and additional tappings
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

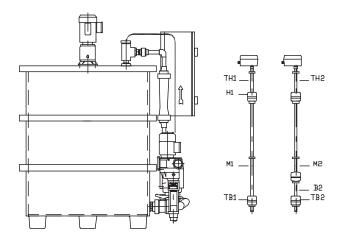
| Type   | Volume | Ta     | nk dimer | sions          |
|--------|--------|--------|----------|----------------|
| Туре   | (L)    | Length | Width    | Overall height |
| 8810E  | 1000   | 1100   | 1420     | 1760           |
| 8820E  | 2000   | 2220   | 1460     | 1760           |
| 8830E  | 3000   | 2610   | 1460     | 1760           |
| 8840E  | 4000   | 2180   | 1940     | 1910           |
| 8850E  | 5000   | 2680   | 1930     | 1944           |
| 8875E  | 7500   | 3140   | 2120     | 2094           |
| 8890E  | 9000   | 3070   | 2500     | 2094           |
| 88120E | 12000  | 4240   | 2220     | 2394           |

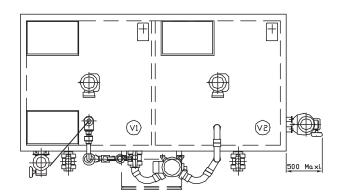




> Drawing for illustration purposes







# REAGENT PREPARATION

### **AUTOFLOC 88P**





#### **APPLICATION**

With the Autofloc 88, flocculants and any other reagent can be prepared more intensively and at higher rates in the two agitated preparation and maturation compartments inside the main tank. Transfer is by pump. Our AUTOFLOC stations are ready to be hooked up to the water and electricity supplies. They are fully automated and prepare the solution in continuous mode. Some processes are upgradable and the type of polymer used may change. This is why we have developed stations that can work easily with powder and emulsion polymers. The Autofloc 88 is available in 1,000- to 12,000-litre versions.

#### **Benefits**

- Twin-tank station (preparation and maturation)
- 2 agitators
- Solutions are maturated
- Quick preparation times in a fully automated system: little operator input and monitoring.

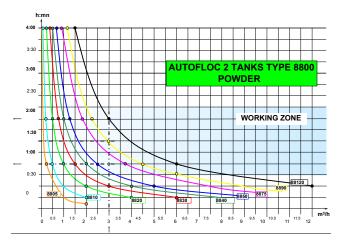
Powders: the flocculant is stored in a tank that feeds into a variable-rate metering device. A station consists of a compartmentalised main tank split into two sections for Preparation/maturation and storage. The water and reagent go into the first compartment. The residence time in this compartment is necessary for the flocculant molecular chains to swell. The preparation is sent to the second (storage) compartment via a transfer pump. This compartment is used to supply a metering pump. The dilution ratio is obtained by adjusting the amount of reagent added during the preparation stage. The control unit houses all the supply systems (agitators, dosing device, solenoid, control, safety device). Both compartments are fitted with a level probe.

The compartments are agitated at low speed. The control unit houses all the supply systems (agitators, dosing device, solenoid, control, safety device).

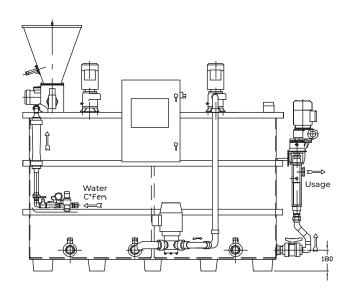
#### **OPTIONS**

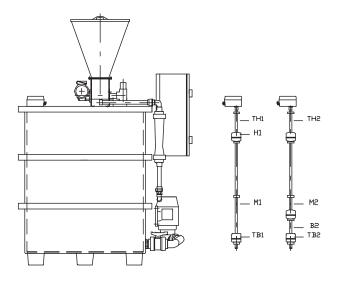
- Specific voltages
- Atex motor
- Variator
- Final pumps
- Electromagnetic flow meters
- Secondary dilution
- Powder and emulsion system
- Autolift powder storage system
- Overflow and additional tappings
- High specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

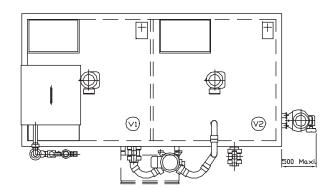
| Type   | Volume | 7      | ank dime | ensions        |
|--------|--------|--------|----------|----------------|
| Type   | (L)    | Length | Width    | Overall height |
| 8810P  | 1000   | 1100   | 1420     | 2005           |
| 8820P  | 2000   | 2220   | 1460     | 2005           |
| 8830P  | 3000   | 2610   | 1460     | 2005           |
| 8840P  | 4000   | 2180   | 1940     | 2155           |
| 8850P  | 5000   | 2680   | 1930     | 2155           |
| 8875P  | 7500   | 3140   | 2120     | 2300           |
| 8890P  | 9000   | 3070   | 2500     | 2300           |
| 88120P | 12000  | 4240   | 2220     | 2550           |



> Drawing for illustration purposes







# REAGENT PREPARATION

### **AUTOFLOC 85E**





#### **APPLICATION**

With the Autofloc 85, flocculants and any other reagent can be prepared more intensively and at higher rates in the three agitated compartments inside the main tank: the first two compartments are used for maturation, with a residence time necessary for the flocculant molecular chains to swell; the third compartment is fitted with a control system to operate the station automatically. Our AUTOFLOC stations are ready to be hooked up to the water and electricity supplies. They are fully automated and prepare the solution in continuous mode. Some processes are upgradable and the type of polymer used may change. This is why we have developed stations that can work easily with powder and emulsion polymers. The Autofloc 85 is available in 500- to 12,000-litre versions.

#### **Benefits**

- Three-tank station (preparation and maturation)
- 2 to 3 agitators
- Accommodates customised processes
- Full, highly optimised preparation

**Emulsions:** the flocculant is stored in a tank that feeds a variable-rate metering device. A station consists of a main tank split into three compartments that are connected by an overflow. Maturation takes place in two compartments, with a residence time necessary for the flocculant molecular chains to swell. The final compartment is fitted with a level probe and is used to feed the final pumps.

> Very high level : ALARM (safety)

> High level : timed water stoppage + powder stoppage

> Low level : timed water intake + powder intake

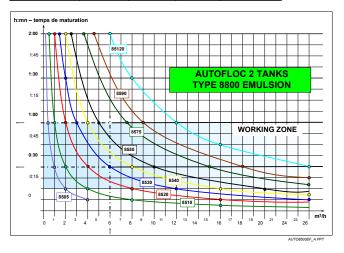
> Very low level : metering pump off (safety)

The compartments are agitated at low speed. The control unit houses all the supply systems (agitators, dosing device, solenoid, control, safety device).

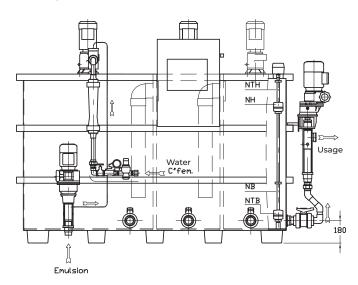
#### **OPTIONS**

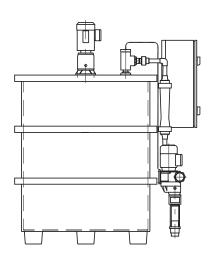
- Specific voltages
- Atex motor
- Variator
- Final pumps
- Electromagnetic flow meters
- Secondary dilution
- Powder and emulsion system
- Emulsion storage tank
- Overflow and additional tappings
- High specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

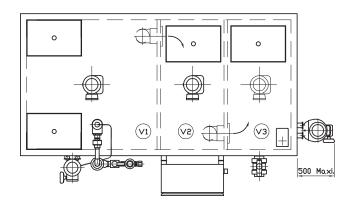
| Туре   | Volume | Tar    | k dimens | sions          |
|--------|--------|--------|----------|----------------|
| Туре   | (L)    | Length | Width    | Overall height |
| 8505E  | 500    | 1451   | 1210     | 1119           |
| 8510E  | 1000   | 2220   | 1460     | 1275           |
| 8520E  | 2000   | 2220   | 1460     | 1785           |
| 8530E  | 3000   | 2220   | 1640     | 1785           |
| 8540E  | 4000   | 2220   | 1930     | 1930           |
| 8550E  | 5000   | 2630   | 1930     | 1980           |
| 8575E  | 7500   | 3180   | 2120     | 2130           |
| 8590E  | 9000   | 3180   | 2500     | 2130           |
| 85120E | 12000  | 4300   | 2500     | 2176           |











# REAGENT PREPARATION

### **AUTOFLOC 85P**







#### **APPLICATION**

With the Autofloc 85, flocculants and any other reagent can be prepared more intensively and at higher rates in the three agitated compartments inside the main tank: the first two compartments are used for maturation, with a residence time necessary for the flocculant molecular chains to swell; the third compartment is fitted with a control system to operate the station automatically. Our AUTOFLOC stations are ready to be hooked up to the water and electricity supplies. They are fully automated and prepare the solution in continuous mode. Some processes are upgradable and the type of polymer used may change. This is why we have developed stations that can work easily with powder and emulsion polymers. The Autofloc 85 is available in 500- to 12,000-litre versions.

#### **Benefits**

- Three-tank (preparation and maturation) station
- 2 to 3 agitators
- Accommodates customised processes
- Full, highly optimised preparation

**Powders:** the flocculant is stored in a hopper that feeds a variable-rate metering device. A station consists of a main tank split into three compartments that are connected by an overflow. Maturation takes place in two compartments, with a residence time necessary for the flocculant molecular chains to swell. The final compartment is fitted with a level probe and is used to feed the final pumps.

> Very high level : ALARM (safety)

> High level : timed water stoppage + powder stoppage

> Low level : timed water intake + powder intake

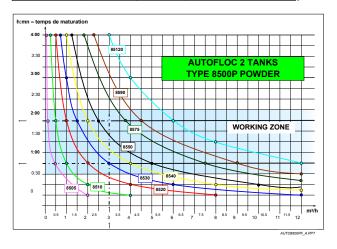
> Very low level : metering pump off (safety)

The compartments are agitated at low speed. The control unit houses all the supply systems (agitators, dosing device, solenoid, control, safety device).

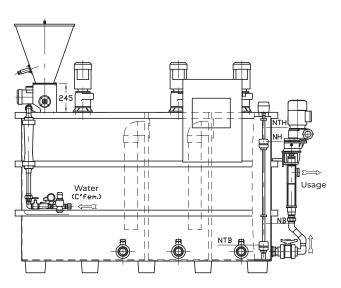
#### **OPTIONS**

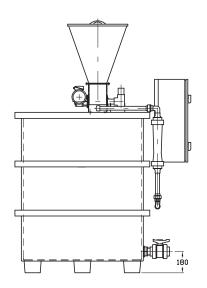
- Specific voltages
- Atex motor
- Variator
- Final pumps
- Electromagnetic flow meters
- Secondary dilution
- Powder and emulsion system
- Autolift powder storage system
- Emulsion storage tank
- Overflow and additional tappings
- High-specification materials (Uranus 52N, Uranus B6, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

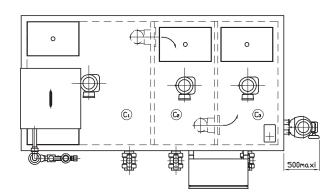
| Type   | Volume | Dimensions |       |                |
|--------|--------|------------|-------|----------------|
| Туре   | (L)    | Length     | Width | Overall height |
| 8505P  | 500    | 1589       | 1210  | 1565           |
| 8510P  | 1000   | 2220       | 1460  | 1495           |
| 8520P  | 2000   | 2220       | 1460  | 2005           |
| 8530P  | 3000   | 2220       | 1640  | 2005           |
| 8540P  | 4000   | 2220       | 1930  | 2150           |
| 8550P  | 5000   | 2630       | 1930  | 2150           |
| 8575P  | 7500   | 3180       | 2120  | 2300           |
| 8590P  | 9000   | 3180       | 2500  | 2300           |
| 85120P | 12000  | 4300       | 2500  | 2300           |











# REAGENT PREPARATION

### LIQUIFLOC 97W



#### **APPLICATION**

This very compact unit is designed for the continuous preparation of emulsion flocculants. The system consists of:

- 1 water inlet with a pressure regulating valve, a solenoid valve, a control valve and a flow meter.
- 1 flocculant inlet with a variable-rate metering pump.
- 1 watertight tank mechanically sealed to 3 bars, agitated by a high-speed agitator
- 1 electrical cabinet that houses the controls and automates system operation.

**Operation :** first, feed water into the tank at the required rate and pressure (pressure gauge, control valve). Next, switch on the agitator and feed the concentrated flocculant into the tank at the required rate. Collect the emulsion at the tank outlet (1 to 5 g/litre). You can also use our DILUFLOC to redilute the product in-line at the tank outlet.

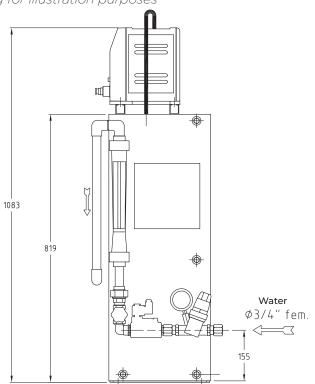
#### **OPTIONS**

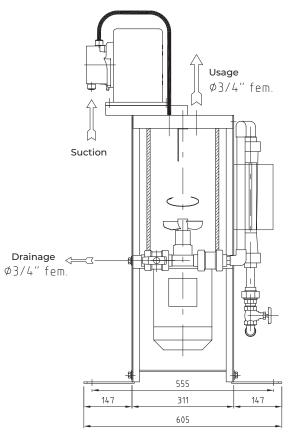
- Specific voltages
- Atex motor
- Final operating pumps
- Pure emulsion storage
- Post-process dilution
- Other options are available according to requirements. Contact us for information.

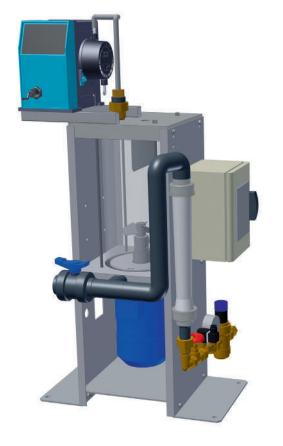
#### SUMMARY

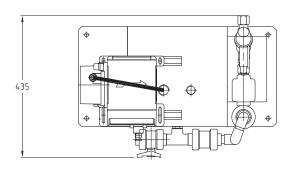
- In-line polymer preparation
- Highly compact machine
- Small bowl with fast agitation, mechanical seal
- Control cabinet
- Numerous options

| Туре  | Type Flow (I/h) |        | Dimensions |                |        |  |
|-------|-----------------|--------|------------|----------------|--------|--|
| Туре  | Flow (I/II)     | Length | Width      | Overall height | Weight |  |
| A9713 | 1000            | 625    | 536        | 1079           | 75     |  |
| A9714 | 2500            | 625    | 536        | 1079           | 75     |  |
| A9723 | 5000            | 645    | 590        | 1071           | 76     |  |
| A9743 | 11000           | 650    | 655        | 1071           | 77     |  |









# REAGENT PREPARATION

### LIQUIFLOC 96





#### **APPLICATION**

This very compact unit is designed to prepare emulsion flocculants in continuous mode. The system consists of:

- 1 water inlet with a pressure regulating valve, a solenoid valve, a control valve and a flow meter.
- 1 flocculant inlet with a variable-rate metering pump.
- 1 watertight tank mechanically sealed to 3 bars, agitated at high speed
- 1 electrical cabinet that houses the controls and automates system operation.

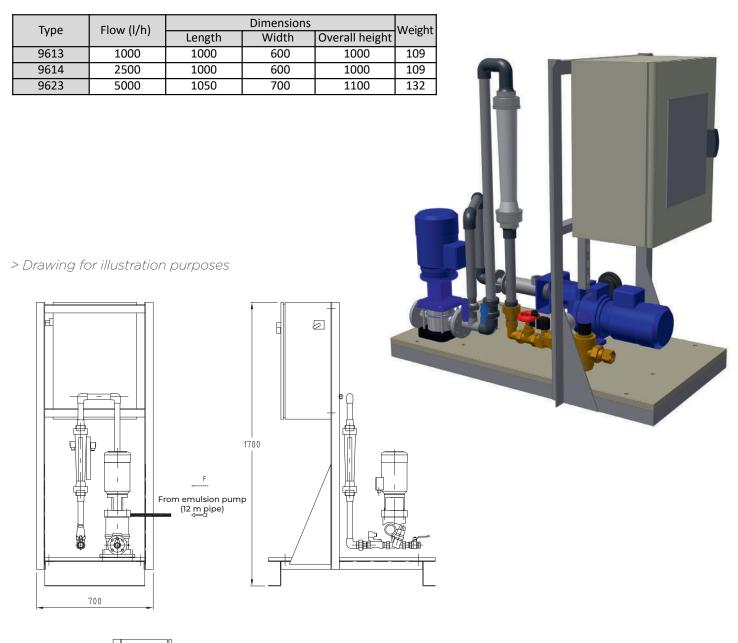
Operation: first, feed water into the tank at the required rate and pressure (pressure gauge, control valve). Next, switch on the agitator and feed the concentrated flocculant into the tank at the required rate. Collect the emulsion at the tank outlet (1 to 5 g/litre). You can also use our DILUFLOC to redilute the product in-line at the tank outlet.

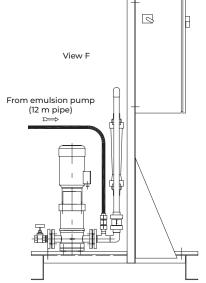
#### **OPTIONS**

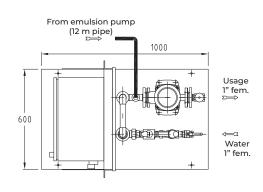
- Specific voltages
- Atex motor
- Pure emulsion storage
- Post-process dilution
- Other options are available according to requirements. Contact us for information.

#### SUMMARY

- In-line polymer preparation
- Highly compact machine
- One pump for the pure polymer and one pump for the water/emulsion mixture
- Control cabinet
- Numerous options







### REAGENT PREPARATION

### **PREPAFLOC**







#### **APPLICATION**

The PREPAFLOC 8500 system is designed for the continuous production of powder or granules diluted in a liquid. The flow rate of the wetting liquid can be adjusted using a control valve and a flow controller.

- The liquid is dispersed in a special funnel to prevent dry spots.
- The powder for dosing is brought to the funnel by a screw conveyor and a variable-speed drive.
- The powder falls onto the stream of water and is wetted without forming lumps.
- The liquid/powder solution is drawn up into a disperser that has an open turbine to break up or eradicate any lumps that are undesirable in certain solution applications.
- The lifting capacity of the disperser can raise the solution to a height of 10 metres.
- The dry-product storage hopper is vibrated to prevent arching.

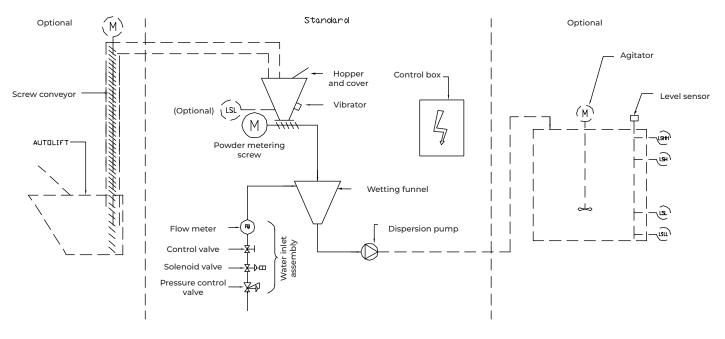
This station consists of: a water inlet with a pressure regulating valve, a solenoid valve, a control valve, a flow meter, a wetting dispersal funnel.

This is followed by a flocculant inlet with a powder dosing unit, and finally an electrical cabinet housing the controls.

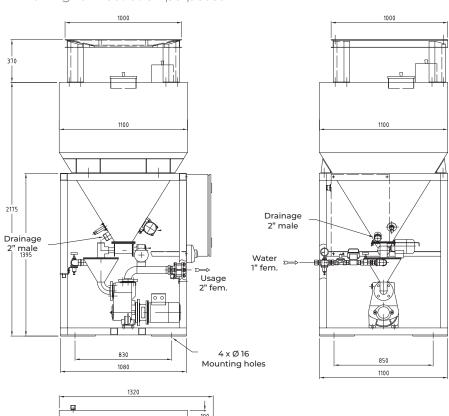
#### **OPTIONS**

- Specific voltages
- Atex motor
- Hopper volume matched to customer requirements
- Post-process dilution
- Frame made-to-measure or in a specific size
- Other options are available according to requirements. Contact us for information.

#### > Drawing for illustration purposes



#### > Drawing for illustration purposes



-(18)

| Туре | Final<br>flow rate<br>(I/h) | Powder<br>flow rate<br>(kg/h) |
|------|-----------------------------|-------------------------------|
| 9801 | 4000                        | 27                            |
| 9802 | 6300                        | 40                            |
| 9803 | 15000                       | 126                           |

# REAGENT PREPARATION

### CONTIFLOC







#### **APPLICATION**

This is a premium upgrade of the PREPAFLOC that operates on the same basic hydraulic principles. The differences lie in the command and control system that uses instrumentation and industrial data processing.

- Powder is metered by weight drop measured in the hopper.
- Water volume is measured by a meter or an electromagnetic flow meter.
- The resulting solution is mixed and transferred to the maturation tank(s) via a dispersing pump.
- PLC cycle control.

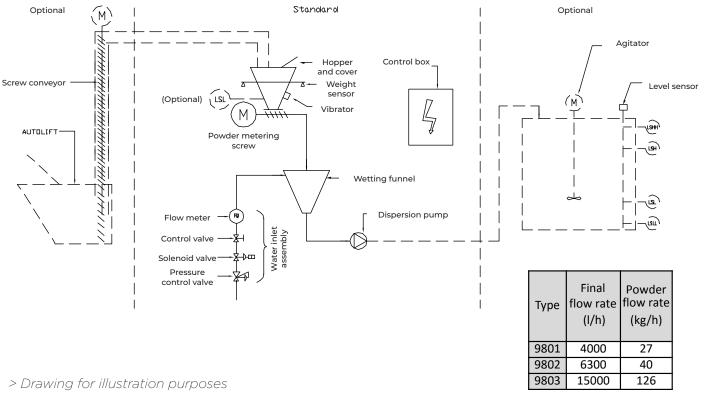
Contifloc is a compact system (the tank(s) can be positioned remotely) with high production capacity (up to 20 m³/h with the standard model). It operates in batch mode and delivers highly accurate concentrations, with no mix between mature solutions and freshly prepared products. Product and water consumption is relatively simple to manage. Data can be transferred over a LAN for monitoring.

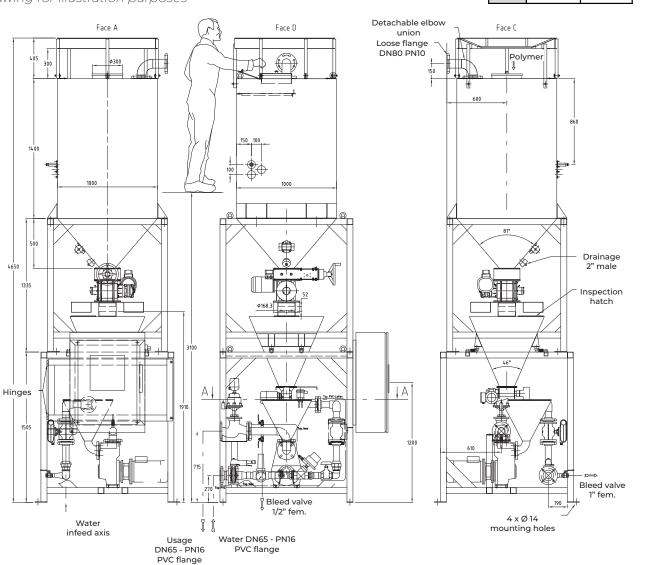
#### **OPTIONS**

- Specific voltages
- Atex motor
- Hopper volume matched to customer requirements
- Post-process dilution

Frame made-to-measure or in a specific size

- Other options are available according to requirements. Contact us for information.





### SKID

# REAGENT PREPARATION





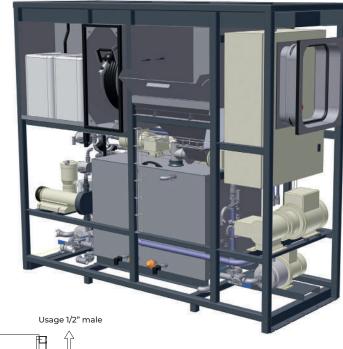


#### **APPLICATION**

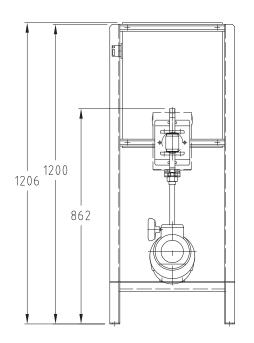
SKIDs are the solution to specific process requirements. For example, they can be used to prepare multi-component polymers (potato starch or powder or liquid polyacrylamide base). The constituents can be dosed by weight measurement to guarantee the required precision and traceability. The skids are often made by assembling and adapting TMI products to perform the required client process.

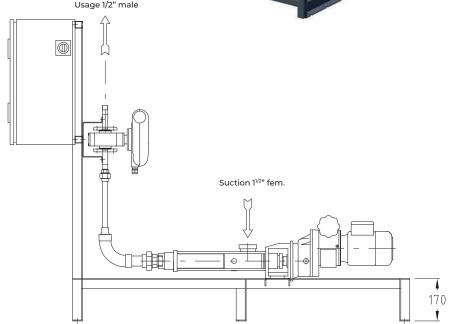
The skid is «made to measure» by definition. It can be different TMI products assembled to the most stringent criteria. It may consist of 3 tanks with CONTIFLOC and a post-dilution system, even an heating system; or it might consist of a holding tank, or even a dozen automated in-line pumps.

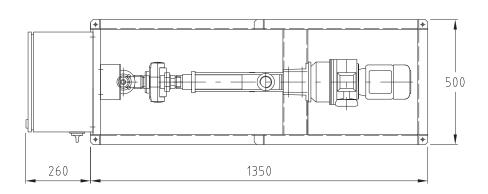




> Drawing for illustration purposes







# 04 | EQUIPMENT



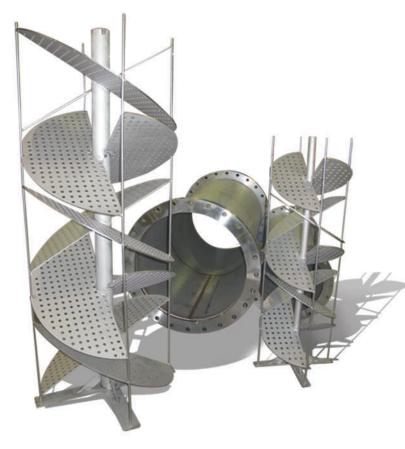












### **APPLICATION**

We also offer an extensive choice of equipment that can be used with our standard range. These products often provide advanced automated or work-safety systems. We also have a machine-hire service.

In our electrical workshop, we build all types of made-to-measure machines with advanced automated systems, and all sizes of container-based full dewatering stations.

### **CONTENTS**

4-01 Autolift

4-02 Flocodose

4-03 Disperfloc

4-04 Stockemul

4-05 Dilufloc

4-06 Static mixer

4-07 Autoneutral acid base

4-08 Autoneutral CO2

4-09 Brush

4-10 Agitated tank - coagulation

4-11 Agitated tank - flocculation Hire

4-12 Hire

4-13 Wrench







# 04 | EQUIPMENT

### Read about our full product range:



### **AUTOLIFT**



#### DESCRIPTION

Flocculant is stored in the lower (AUTOLIFT) hopper that feeds the screw conveyor to carry the product up.

Once the product is in the screw conveyor, it is carried to an outlet that is angled 45° downwards and connected by a flexible collar to the upper hopper (on the AUTOFLOC).

The level sensor in the upper hopper drives the screw conveyor motor to make sure there is always some product in the AUTO-FLOC metering hopper.

#### **SPECIFICATIONS**

- One 200-litre lower hopper with a cover and a sack grate.
- 1 screw conveyor designed for the height of the AUTOFLOC hopper
- 1 control cabinet containing all the information
- 1 powder level sensor in the upper hopper

#### **BENEFITS**

- No need to build a costly and cumbersome walkway
- Significantly easy to use
- Safer
- Constant filling of the receiving hopper for more precise dosing
- Can be loaded from big-bags
- Straightforward fitting/removal of the screw
- Easier maintenance with a shutoff damper

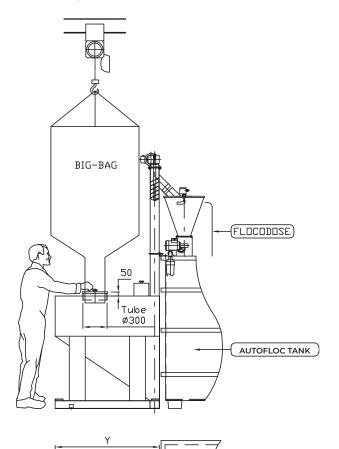
#### **OPTIONAL**

- 500, 1,000, 1,500, 2,000 and 3,000 L hopper
- $\varnothing$  300 mm big-bag filler port
- Low-level sensor on the hopper
- Hopper vibrating system

#### IMPORTANT NOTICE

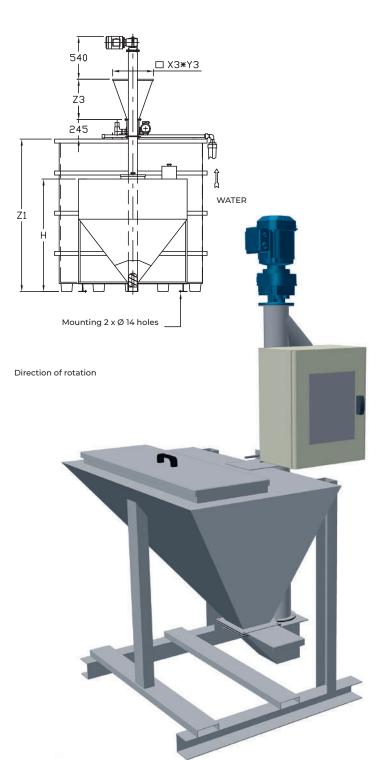
The AUTOLIFT system can very easily be fitted to AUTOFLOC stations currently in service, simply by replacing the upper hopper cover with the model that has the powder level sensor.

#### > Drawing for illustration purposes



| _     | Volume | D      | imensions |                  |
|-------|--------|--------|-----------|------------------|
| Туре  | (L)    | Length | Widt      | Hopper<br>height |
| A200  | 200    | 1200   | 900       | 1032             |
| A500  | 500    | 1400   | 1050      | 1200             |
| A1000 | 1000   | 1400   | 1600      | 1760             |
| A1500 | 1500   | 1400   | 1600      | 2110             |
| A2000 | 2000   | 1400   | 1710      | 2010             |

The height of the powder conveyor is per your requirements



### **FLOCODOSE**







#### **APPLICATION**

The continuous metering of dry or slightly humid products has always been a major concern in the industry, and one that requires a specialised solution. Our powder metering systems include a hopper that is supplied manually or by Autolift (optional), and a variable-drive feed screw beneath the hopper that ensures a precise rate of flow.

TMI can also provide metering solutions for fine powders that tend to stick to the hopper walls or absorb humidity. To overcome this issue, we can supply centre-mounted hopper arch breakers that guide the powders to the metering screw, as well as vibration units.

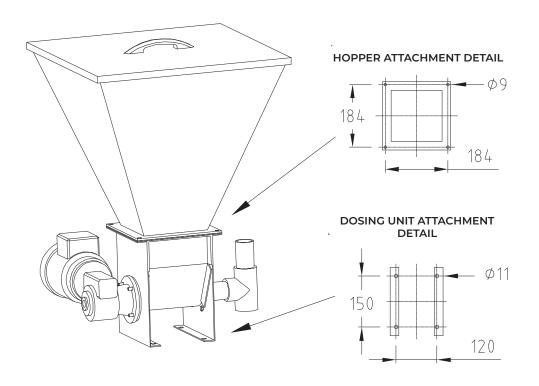
FLOCODOSE is available in a range of volumes from 10 to 209 litres and accommodates all our stations and all your needs.

#### **OPTIONS**

- Specific voltages
- Atex motor
- Heater band
- Heating hopper
- Specific dimensions
- High-specification materials
- Autolift
- Arch breaker
- Vibration unit
- Other options are available according to requirements. Contact us for information.

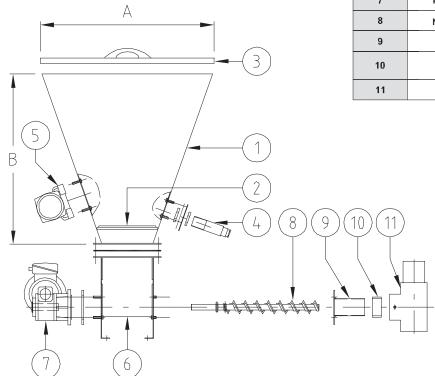
#### **SUMMARY**

- All types of powder
- Precise metering
- Variable frequency drive
- Available in a range of volumes
- Numerous options



| Hopper        | Dimensions |        |  |  |
|---------------|------------|--------|--|--|
| volume<br>(L) | A (mm)     | B (mm) |  |  |
| 10            | 250×250    | 300    |  |  |
| 25            | 450×450    | 300    |  |  |
| 39            | 450x450    | 400    |  |  |
| 57            | 500x500    | 500    |  |  |
| 94            | 600x600    | 600    |  |  |
| 144           | 650×650    | 800    |  |  |
| 209           | 750×750    | 900    |  |  |

| Pos. | Description                    |  |
|------|--------------------------------|--|
| 1    | Hopper                         |  |
| 2    | Grill                          |  |
| 3    | Hopper cover                   |  |
| 4    | Low-level sensor<br>(optional) |  |
| 5    | Vibrator (optional)            |  |
| 6    | Dosing unit body               |  |
| 7    | Reduction gear                 |  |
| 8    | Metering screw                 |  |
| 9    | Outlet pipe                    |  |
| 10   | Heater band<br>(optional)      |  |
| 11   | Dosing Tee                     |  |



### **DISPERFLOC**



#### **APPLICATION**

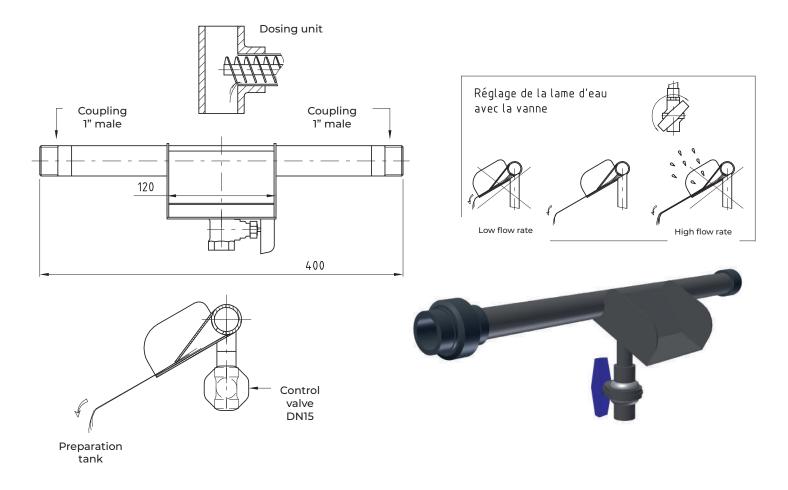
Disperfloc prevents flocculant clumping in powder and emulsion preparations. As its name suggests, Disperfloc disperses flocculants homogenously in the preparation. This is the first step in all our preparation stations. It lets the water mix with the powder or emulsion polymer.

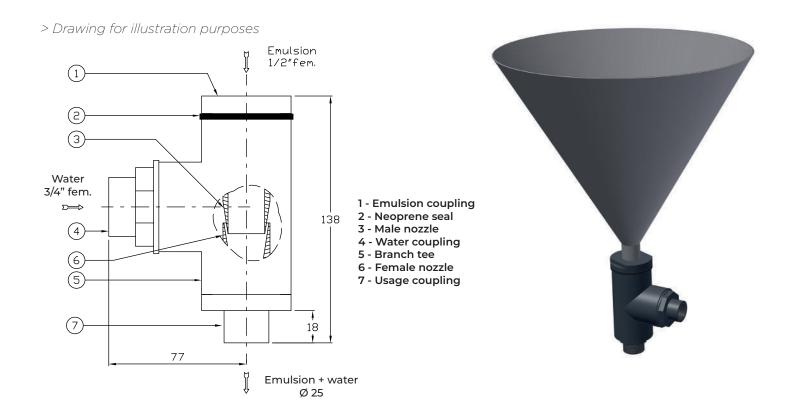
Two types of disperser are available, depending on the amounts of flocculants used. Our type 85 Disperflocs are designed to be operated by hand, while the type 97 Disperflocs are intended for wetting the powder beneath the metering unit.

Water enters through a side nozzle and flows through a calibrated lip. This creates a vacuum that draws in the powder from the funnel and disperses it. Disperfloc works with 3 to 7 bars of water pressure.

#### **OPTIONS**

- High-specification materials
- Specific dimensions
- Other options are available according to requirements. Contact us for information.





### STOCKEMUL





#### **APPLICATION**

Emulsion polymers are viscous fluids that come in various forms of packaging (containers, drums, containers, etc).

It is better to decant them in an agitated tank before use in order to homogenise them and avoid the phase separation that occurs after a few days.

#### **PRINCIPLE**

STOCKEMUL emulsion storage tanks are available in a range of shapes and volumes.

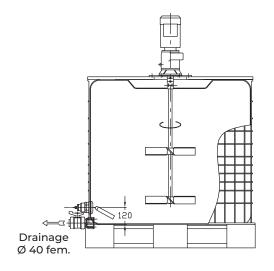
They are made of polyethylene or fibreglass reinforced polyester.

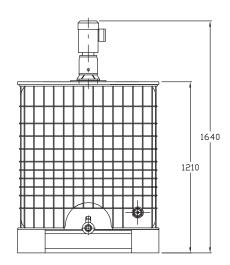
They are also fitted with the appropriate agitators for the product and storage volume.

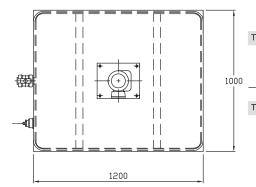
#### **OPTIONS**

A very-low-level sensor can be fitted on request if the metering pump cannot run when dry.

An intermediate level can also be provided to indicate when a barrel or container can be decanted.



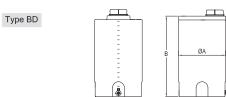






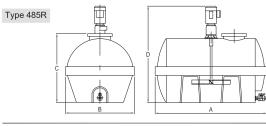
Material : PEHD

| Volume (L) | ØA (mm) | B (mm) |
|------------|---------|--------|
| 30         | 330     | 470    |



| Ma   | teri     | al · | · Þ | EHD |
|------|----------|------|-----|-----|
| IVIC | i ce i i | aı.  |     |     |

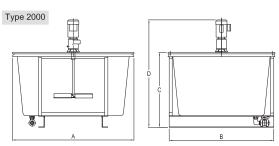
| Volume (L) | ØA (mm) | B (mm) |
|------------|---------|--------|
| 60         | 450     | 540    |
| 100        | 465     | 780    |
| 200        | 560     | 950    |
| 300        | 680     | 950    |
| 500        | 815     | 1080   |



Material : PEHD

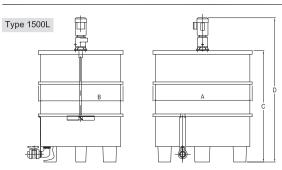
| Volume (L) | A (mm) | B (mm) | C (mm) | D (mm) |
|------------|--------|--------|--------|--------|
| 400        | 1070   | 720    | 800    | 1137   |
| 600        | 1320   | 860    | 925    | 1247   |
| 1000       | 1450   | 1050   | 1030   | 1362   |
| 1500       | 1850   | 1130   | 1120   | 1462   |
| 2000       | 2000   | 1250   | 1260   | 1582   |
| 3000       | 2250   | 1450   | 1450   | 1777   |





Material : fibreglass reinf. polyester

| Volume (L) | A (mm) | B (mm) | C (mm) | D (mm) |
|------------|--------|--------|--------|--------|
| 300        | 1170   | 690    | 660    | 1085   |
| 500        | 1320   | 970    | 760    | 1185   |
| 600        | 1320   | 970    | 940    | 1365   |
| 1000       | 1620   | 1190   | 970    | 1395   |
| 1400       | 1820   | 1390   | 970    | 1395   |
| 2000       | 2108   | 1480   | 1085   | 1510   |



Material : fibreglass reinf. polyester

| Volume (L) | A (mm) | B (mm) | C (mm) | D (mm) |
|------------|--------|--------|--------|--------|
| 1500       | 1290   | 1100   | 1450   | 1875   |

### **DILUFLOC**







#### **APPLICATION**

Automatic and manual flocculant preparation stations make up 2 to 10 g/litre solutions to avoid having more volume than can be stored.

It is often useful to redilute the preparation, which is where DILUFLOC comes in. The Dilufloc range covers a wide range of flow rates between 1 and 20  $\rm m^3/h$  on the water system.

#### PRINCIPLE / BENEFITS

By using a new type of pressure reducer valve that can be fitted vertically, we have been able to «re-design» our DILUFLOC in-line dilution panels. The fitted direction of the inlet/outlet tappings at the top (product to be diluted) and bottom (water and solution) also help make the DILUFLOC panel more compact and easier to connect to the different networks.

The product that will be diluted is injected past a check valve and joins the water circuit at the inlet to the static mixer.

The preparation is then mixed by a system of Pall rings that generates turbulence in the fluid streams, which in turn creates a homogenous solution without the use of external power and with minimum load loss. The solenoid valve operates the unit remotely and makes dilution contingent on the product pump running.

#### **DESIGN**

The DILUFLOC system consists of:

- A pressure reducing valve
- A solenoid valve
- A flow control valve
- A rotameter
- A check valve
- A static mixer
- A support frame

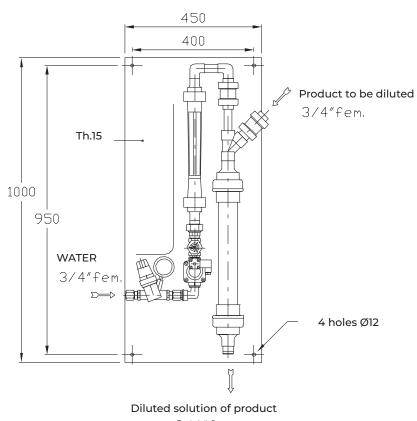
The size of the DILUFLOC is determined by the flow rate requirements. The water line components are made of brass, with the exception of the rotameter and the check valve, which are made of PVC like the other panel components.

#### **OPTIONS**

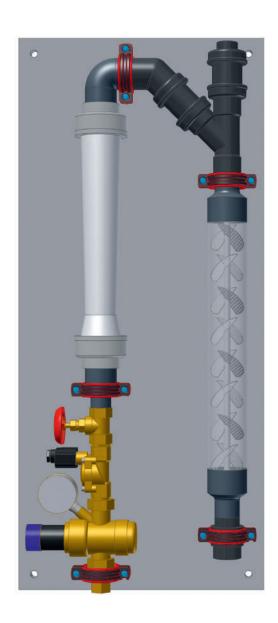
An optional minimum flow sensor can be placed on the rotameter. The static mixer can also be fitted with a one-piece mixing unit in place of the Pall rings.

We can make the DILUFLOC panels from stainless steel components or to custom specifications, on request.

| _    |                 | Dimensions |       |         |                   |         |  |  |
|------|-----------------|------------|-------|---------|-------------------|---------|--|--|
| Туре | Flow rate (L/h) | Length     | Width | Ø water | Ø for<br>dilution | Ø final |  |  |
| 1013 | 100 à 1000      | 900        | 400   | 3/4"    | 1/2"              | 3/4"    |  |  |
| 1014 | 250 à 2500      | 900        | 400   | 3/4"    | 1/2"              | 3/4"    |  |  |
| 1023 | 500 à 5000      | 950        | 420   | 1"      | 1/2"              | 1"      |  |  |
| 1043 | 1000 à 10000    | 1100       | 600   | 1"1/2   | 1"                | 1"1/2   |  |  |
| 1053 | 2500 à 25000    | 1250       | 700   | 2"      | 1"                | 2"      |  |  |



3/4″fem.





#### **APPLICATION**

For homogenising two liquids that transit through the mixer, with no external mechanical force.

#### **PRINCIPLE**

The two liquids are introduced upstream of the static mixer. The fluid streams are separated by the Pall rings in the mixture to produce a homogenous solution.

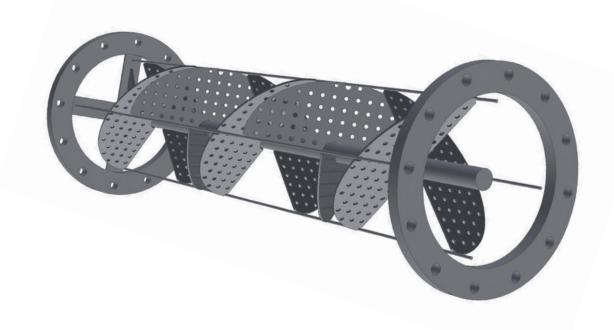
The choice of mixer is determined by the available upstream pressure and the required outlet pressure.

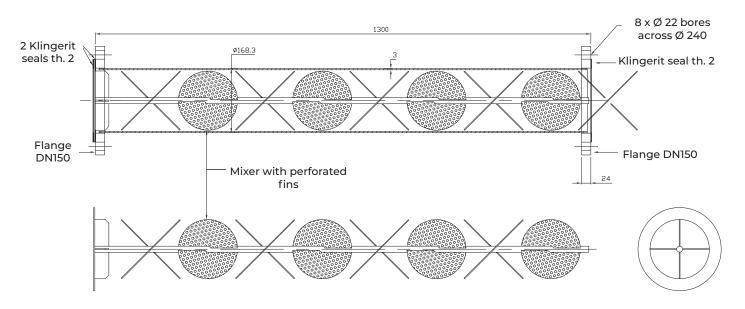
#### **OPTION**

- Stainless steel construction
- Specialised couplings



| _        |             | Dimensions |             |  |  |
|----------|-------------|------------|-------------|--|--|
| Type     | Flow (m3/h) | Length     | Ø couplings |  |  |
| MS 1500  | 0,3 à 1,5   | 680        | 3/4"        |  |  |
| MS 3500  | 1,3 à 3,5   | 760        | 3/4"        |  |  |
| MS 8700  | 2,3 à 8,7   | 850        | 1"          |  |  |
| MS 14200 | 3,8 à 14,2  | 940        | 1"1/4       |  |  |
| MS 24000 | 6,3 à 24    | 1100       | 1"1/2       |  |  |





### AUTONEUTRAL ACID BASE





#### **APPLICATION**

This application uses the customer's own pre-process effluent storage tank. The tank is fitted with a submerged pump to convey the effluents for processing. The pump control system is provided by us. The Autoneutral station is used to neutralise the effluent to bring its pH to an acceptable level.

#### **OPERATION**

The station uses the following items:

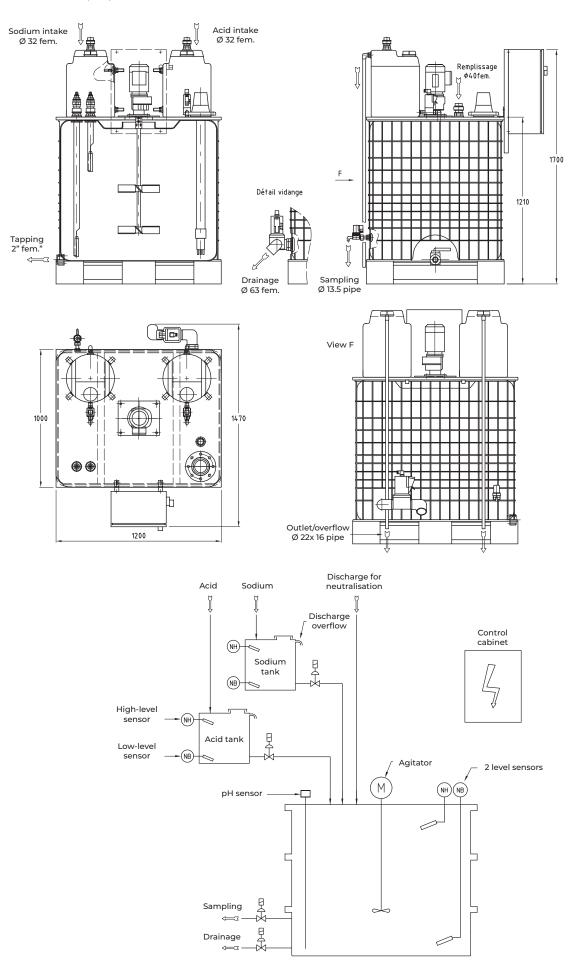
- A solenoid valve to drain the tank automatically once neutralisation is complete
- An automatic solenoid valve for sampling
- A general control cabinet for the automated operation of the processing unit
  - Agitator control
  - Solenoid control
  - pH-meter to manage the NEUTRALISATION
- The station is Skid-mounted and can be relocated by forklift truck.

All parts in contact with the product are made from 316L stainless steel or PVC. The tank is made from polyethylene. It is placed on a plastic pallet.

#### **DESIGN**

A 1,000-litre volume neutralisation tank with:

- An A1 agitator type PP 1000 0.kW 99 rpm
- An NC solenoid for injecting NaOH, piloted by the pH meter output
- An NC solenoid for injecting H2SO4, piloted by the pH meter output
- A pH probe in the neutralisation tank to send signals to the pH meter
- A 4-level probe (VHL HL LL VLL)
- A pH meter with 2 dry contacts for automating the reactant pumps. pH < 6.5 sodium reagent pump activated pH > 8.5 acid reagent pump activated
- A 100-litre NAOH storage tank, with an «out of reagent» level probe
- A 100-litre H2SO4storage tank, with an «out of reagent» level probe



### AUTONEUTRAL co2





#### **APPLICATION**

This application uses the customer's own pre-process effluent storage tank. The tank is fitted with a submerged pump to convey the effluents for processing. The pump control system is provided by us. The Autoneutral station is used to neutralise the effluent to bring its pH to an acceptable level by acidifying it with CO2.

#### PRINCIPE DE FONCTIONNEMENT

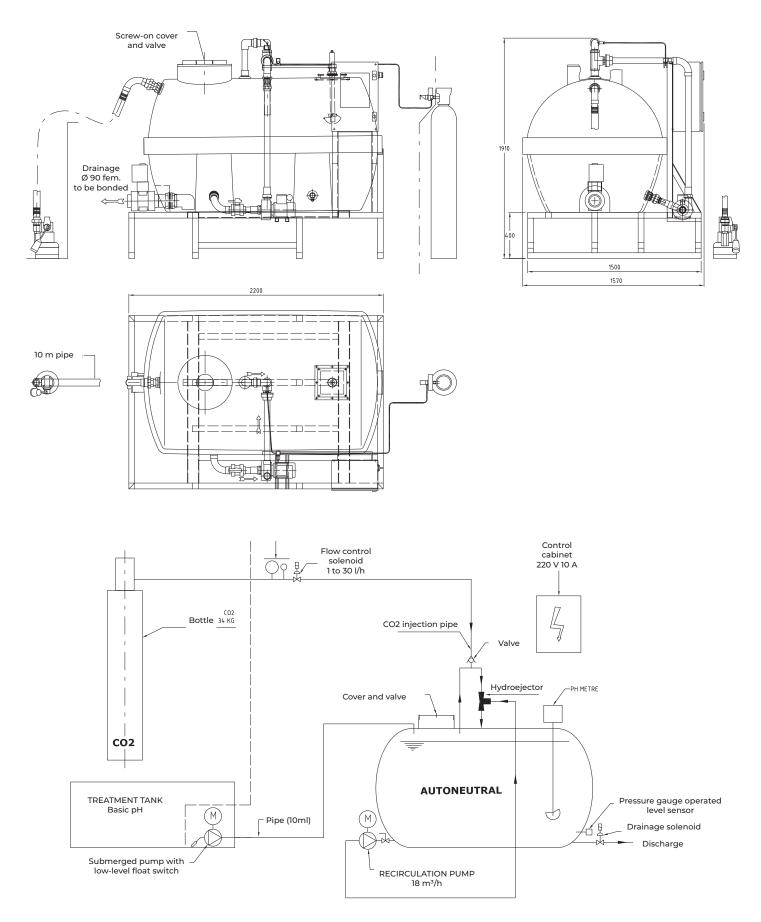
The station uses the following items:

- A solenoid valve to drain the tank automatically once neutralisation is complete
- An automatic solenoid valve for sampling
- A general control cabinet for the automated operation of the processing unit
  - Flow controls
  - Solenoid valve control
  - pH-meter to manage the NEUTRALISATION
- The station is Skid-mounted and can be relocated by forklift truck.
- The CO2, in a pressurised cylinder (supplied by the customer), is introduced into the tank to acidify the base solution

All parts in contact with the product are made from 316L stainless steel or PVC. The tank is made from polyethylene.

#### **DESIGN**

- Single tank (Available in a range of volumes)
- Recirculating pump
- A pH probe in the neutralisation tank to send signals to the pH meter
- A pressure sensor
- Control cabinet
- CO<sup>2</sup> cylinder









#### **APPLICATION**

Conçu spécialement pour le nettoyage des ouvrages de décantation avec surverse.

#### **BENEFITS**

- Significantly cuts the costs of cleaning the catchment channel around the basin perimeter.
- Keeping the channel constantly clean avoids the heavy build-ups of dirt that occur when algae and deposits are cleaned away at intervals.
- These types of cleaning operation also usually require the use of heavy plant (Jet-vac truck, high-pressure systems, etc) and tie up personnel on menial tasks.

#### **DESIGN/OPERATION**

The AUTOBROSSE rotary brush carriage is pulled along the channel by the rotating scraper bridge using an appropriate mechanical system (arm or chain) included with the equipment. The cylindrical rotating brushes are much more effective than the basic wipers that are sometimes used, and are driven by gear motors from a simple 400 V, 2 A three-phase plug.

The pair of low-power (0.18 kW) motors run continuously, but they can be switched on for just a few days a month to get a full clean while using less power. For the rest of the time, deposits can be prevented by letting the bridge pull the brushes around.

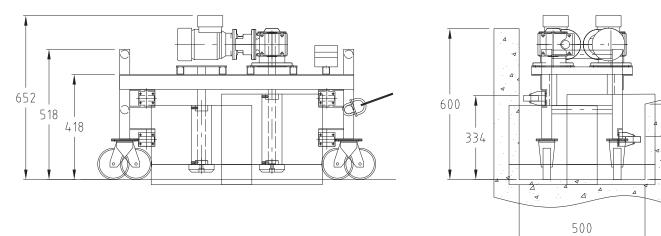
The only wear parts on this system are the brushes, which will need replacing approximately once a year, when the wear take-up system has reached its limit. Replacement is straightforward and only takes a few minutes.

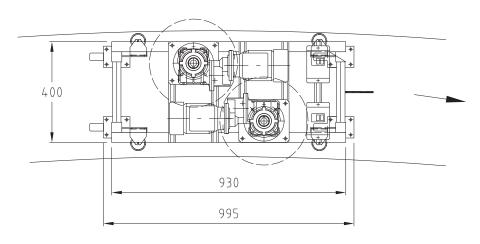
The welded chassis is made of stainless steel, the brushes are plastic, and the fasteners are all stainless steel. All of these items make the equipment highly corrosion resistant. The electric motors are protected by circuit breakers with an On/Off control in the chassis-mounted IP55 plastic housings.



**→** 300

171 ▼





# AGITATED TANK **COAGULATION**



#### **APPLICATION**

The agitated coagulation tank is intended to agitate all types of liquid during coagulation processes, as well as for straightforward mixing and neutralisation. The agitating turbine is one third of the tank diameter. It is welded to the shaft, which is connected to the gear motor by a socket. A mounting plate is fitted over the tank for optimum agitation through the centre of the tank. Anti-vortex paddles are fitted to prevent vortex formation due to the cylindrical shape of the tanks.

The tanks can be tailored to customer requirements, and are available in a variety of sizes and volumes from 500 litres to 10 m³. We can also add tappings at any point on the tank, as well as a range of other options. The advantage of this product is that it allows us to provide a complete mixing process. Furthermore, we guarantee the best tank-agitator combinations.

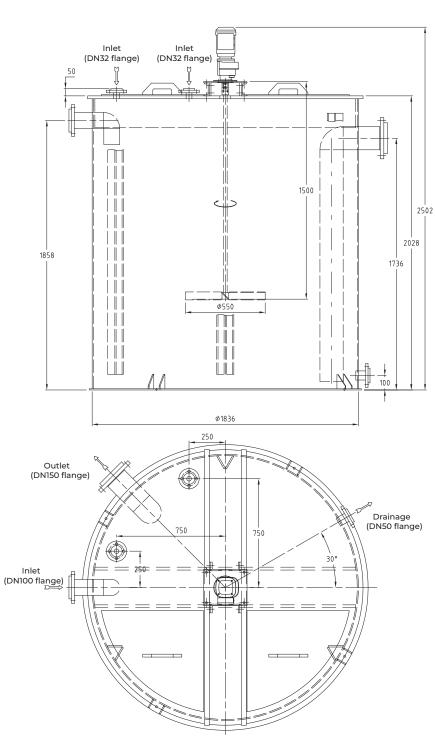
#### **OPTIONS**

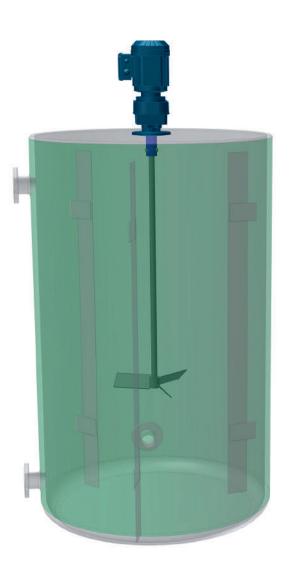
- Specific voltages
- 60 Hz
- Atex motor
- Compressed air motor
- Single-phase motor
- Bevel gear
- Variable frequency drive
- Rain cover
- Double turbine capability
- Power cord and plug assembly
- Control unit with daily timer
- High-specification equipment (Uranus 52N, Uranus B6, PVC, range of coatings, etc)
- Other options are available according to requirements. Contact us for information.

#### **SUMMARY**

- Reagent preparations, homogenisation, polyelectrolyte preparation, coagulation
- 500-litre to 10 m<sup>3</sup> volumes
- Agitation perfectly suited to the tank, guaranteed
- Tank made to specification
- Tappings provided to customer specifications
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Multiple options available

|            | Volume | D    | imensions      | 5              | Agita | ator      |
|------------|--------|------|----------------|----------------|-------|-----------|
| Туре       | (L)    | Ø    | Tank<br>height | Overall height | Power | Ø turbine |
| CTCM 18010 | 1000   | 950  | 1500           | 1876           | 0,55  | 350       |
| CTCM 18020 | 2000   | 1350 | 1500           | 1876           | 0,55  | 350       |
| CTCM 18030 | 3000   | 1420 | 2000           | 2376           | 0,55  | 350       |
| CTCM 18040 | 4000   | 1650 | 2000           | 2376           | 0,55  | 500       |
| CTCM 18050 | 5000   | 1820 | 2000           | 2376           | 0,55  | 550       |
| CTCM 18060 | 6000   | 1900 | 2250           | 2626           | 0,55  | 550       |
| CTCM 18070 | 7000   | 1780 | 3000           | 3476           | 1,1   | 500       |
| CTCM 18080 | 8000   | 1900 | 3000           | 3476           | 1,1   | 600       |
| CTCM 18090 | 9000   | 2000 | 3000           | 3476           | 1,1   | 600       |
| CTCM 18100 | 10000  | 2100 | 3000           | 3476           | 1,1   | 600       |





# AGITATED TANK FLOCULATION





#### **APPLICATION**

The agitated flocculant tank is intended to agitate all types of liquid during flocculation processes. The agitation unit is half the tank diameter. It consists of an impeller welded or attached in three sections to the shaft, which is connected to the gear motor by a socket. A mounting plate is fitted over the tank for optimum agitation through the centre of the tank. Anti-vortex paddles are fitted to prevent vortex formation due to the cylindrical shape of the tanks.

The tanks can be tailored to customer requirements, and are available in a variety of sizes and volumes from 500 litres to 10 m³. We can also add tappings at any point on the tank, as well as a range of other options. The advantage of this product is that it allows us to provide a complete flocculation process, and we also guarantee the best tankagitator combinations.

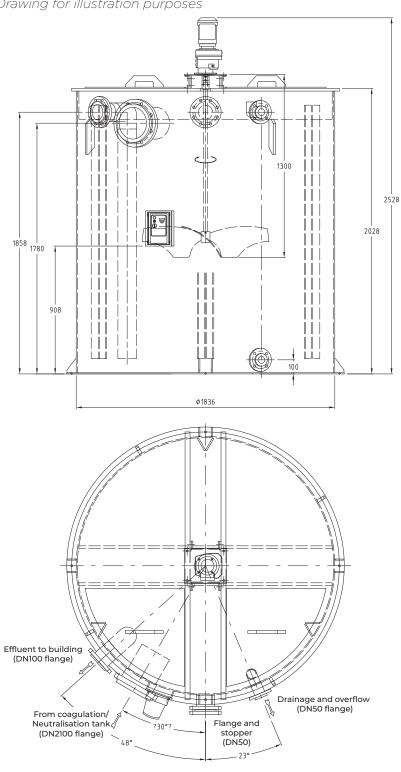
#### **OPTIONS**

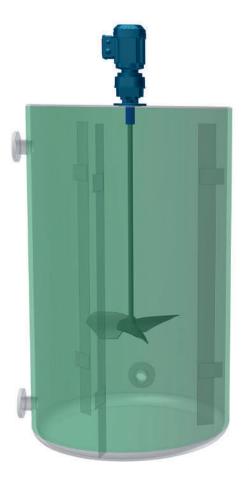
- Specific voltages
- 60 Hz
- Atex motor
- Compressed air motor
- Single-phase motor
- Bevel gear
- Variable frequency drive
- Rain cover
- Double impeller capability
- Power cord and plug assembly
- Control unit with daily timer
- High-specification equipment (Uranus 52N, Uranus B6, PVC, range of coatings, etc)

#### **SUMMARY**

- Flocculation
- 500-litre to 10 m<sup>3</sup> volumes
- Variable frequency drive
- Agitation perfectly suited to the tank, guaranteed
- Tank made to specification
- Tappings provided to customer specifications
- Standard 230/400 V Three-phase 50 Hz Tropicalized
- Multiple options available

|            | Volume | D    | imensions      |                   | Agita | ator      |
|------------|--------|------|----------------|-------------------|-------|-----------|
| Туре       | (L)    | Ø    | Tank<br>height | Overall<br>height | Power | Ø turbine |
| CTCF 18010 | 1000   | 950  | 1500           | 1876              | 0,18  | 500       |
| CTCF 18020 | 2000   | 1350 | 1500           | 1876              | 0,18  | 700       |
| CTCF 18030 | 3000   | 1420 | 2000           | 2376              | 0,18  | 700       |
| CTCF 18040 | 4000   | 1650 | 2000           | 2376              | 0,18  | 800       |
| CTCF 18050 | 5000   | 1820 | 2000           | 2376              | 0,18  | 900       |
| CTCF 18060 | 6000   | 1900 | 2250           | 2626              | 0,18  | 900       |
| CTCF 18070 | 7000   | 1780 | 3000           | 3476              | 0,18  | 900       |
| CTCF 18080 | 8000   | 1900 | 3000           | 3476              | 0,18  | 900       |
| CTCF 18090 | 9000   | 2000 | 3000           | 3476              | 0,18  | 1000      |
| CTCF 18100 | 10000  | 2100 | 3000           | 3476              | 0,18  | 1100      |











#### **APPLICATION**

Whether you're looking for a low- or high-speed surface aerator, a floating mixer, flocculant preparation station, powder, liquid, or both, TMI has the rugged, high-performance equipment you need for monthly hire.

#### **BENEFITS**

- Significant cost savings on plant that will be used for a limited period.
- The product can be tested «live» in a new process.
- Practical solution for mobile facilities.
- Hire-purchase may be available from the start.

| Type Polymer (1) Length Lyright Overall h  |       |
|--|-------|
| (L) Length Width Height Overall h  | eight |
| C2703P powder 300 1200 800 785 1595  | ,     |
| C2705E         emulsion         500         1200         1000         860         1690 | ,     |
| 8510P powder 1000 2220 1460 - 1495   | ,     |

#### **APPLICATION**

TMI also makes adjustable hydrant wrenches for symmetrical half-couplings of any diameter. They are made for fastening and opening symmetrical hydrant type locks and half-couplings, and are available in several different diameters.

Registered trademark of KeyFore®





| CLÉ N° | H (mm) | L (mm) | ØD (mm)   | E1 (mm) | E2 (mm) | Poids (g) |  |
|--------|--------|--------|-----------|---------|---------|-----------|--|
| 1      | 40     | 220    | 30<Ø<45   | 4       | 3,5     | 200       |  |
| 2      | 70     | 260    | 45<Ø<80   | 5       | 5       | 400       |  |
| 3      | 90     | 350    | 80<Ø<120  | 5       | 5       | 750       |  |
| 4      | 130    | 395    | 120<Ø<180 | 10      | 10      | 975       |  |
| H Ø D  |        |        |           |         |         |           |  |

# 05 | GLOSSARY

#### **CONVERSION**

| PRESSURE |        |        |        |       |       |       |
|----------|--------|--------|--------|-------|-------|-------|
| Unit     | kg/cm² | PSI    | Pascal | mm CE | Bar   | mm Hg |
| kg/cm2   | 1      | 14,223 | 98087  | 10000 | 0,981 | 745,2 |

| Nominal<br>diameter<br>DN | External<br>diameter<br>(mm ) | Wall<br>thickness in<br>(mm) | Wall thickness<br>in PN16<br>(mm) | Wall thickness<br>in PN25<br>(mm ) | Thread<br>dimension<br>ISO 228 |
|---------------------------|-------------------------------|------------------------------|-----------------------------------|------------------------------------|--------------------------------|
| 15                        | 20                            |                              | 1.5                               | 2.3                                | 1/2″-14                        |
| 20                        | 25                            |                              | 1.9                               | 2.8                                | 3/4"-14                        |
| 25                        | 32                            |                              | 2.4                               | 3.6                                | 1"-11                          |
| 32                        | 40                            |                              | 3.0                               | 4.5                                | 1"1/4-11                       |
| 40                        | 50                            |                              | 3.7                               | 5.6                                | 1"1/2-11                       |
| 50                        | 63                            | 3                            | 4.7                               | 7.1                                | 2"-11                          |
| 65                        | 75                            | 3.6                          | 5.5                               |                                    | 2"1/2-11                       |
| 80                        | 90                            | 4.3                          | 6.6                               |                                    | 3″-11                          |

#### **DIMENSIONS**

| Len            | gth      | Surface area |                     |  |
|----------------|----------|--------------|---------------------|--|
| 1 inch (pouce) | 25,4 mm  | 1 so.inch    | 6,45 cm²            |  |
| 1 foot (pied)  | 0,3048 m | 1 so.foot    | 929 cm <sup>2</sup> |  |

#### **POWER**

| Unit | kW | ch   | kcal/s | kgm/s  | watt |
|------|----|------|--------|--------|------|
| kW   | 1  | 1,35 | 0,239  | 101,97 | 1000 |

#### **ENERGY**

| Unit | kgW | ch/h      | kw/h      | joule | kcal    |
|------|-----|-----------|-----------|-------|---------|
| kgW  | 1   | 0,37*10^5 | 0,27*10^5 | 9,81  | 0,00235 |

#### **VISCOSITY**

| Product   | Pa.s (à 20°c) | Centipoise    |  |
|-----------|---------------|---------------|--|
| Air       | 18.10-6       | 18.10-3       |  |
| Water     | 1.10-3        | 1             |  |
| Mercury   | 1,5.10-3      | 1,5           |  |
| Milk      | 2.10-3        | 2             |  |
| Blood     | 4.10-3        | 4             |  |
| Olive oil | 84.10-3       | 84            |  |
| Honey     | 6             | 6000          |  |
| Gel       | 1 à 100       | 1000 à 1.10^5 |  |

