













ABOUT COMPANY



The primary task of Teknomatik is to solve technical and process-related problems which our customers cope with. We use our rich experience and knowledge to design machines and automation systems for the industry. We build machines and equipment customised to meet the client's needs. With our highly qualified staff, we ensure high quality and optimised costs of our services.

Since we permanently collaborate with other companies, our products and services are customised to meet your unique needs. We provide our Clients with reliable, fast and complex services. We offer inhouse transport systems and complete production lines. Transporters and assembly sites are basic units of equipment in most industrial process lines.

COMPANY BUSINESS PROFILE

Design and Production of Machines

- Mixers:
- Machines made to the Client's individual needs;
- Assembly stations;
- Inter-operation transport systems, conveyors-transporters;
- Automatic assembly systems;
- Measurement stations:
- Special holders (welding; machining);
- Process tooling;
- Robotised Stations.

Industrial Automation

- Programming of PLC SIEMENS, SCHNEIDER
 ELECTRIC;
- Programming of industrial robots
 KUKA, STAUBLI, EPSON;
- Prefabrication of power supply and control cabinets;
- Configuration and software for control and surveillance systems;
- Functional test runs and start-ups;
- Service and maintenance;
- Equipment and devices necessary to make the production line complete.

CE Certification - Machine conformity assessment*

- We adapt machines to the minimum requirements according to Tool Directive 2009/104/EC;
- We carry out a procedure to assess the conformity of machines to the basic requirements of Machine Directive 2006/42/EC;
- We carry out the machine risk analysis according to standard PN EN ISO 12100;
- We carry out a Machine Safety Audit during which we check whether the protection employed are correct, check the documentation and assess whether the machines conform to the harmonized standards;
- We certify any machine, new or retrofitted;
- We carry out CE certification of machines imported from outside the EU;
- We prepare the documentation required for machines;
- We issue a certificate of conformity as a basis for the machine manufacturer to issue the EC Declaration of Conformity.



IBC MIXERS

The IBC tank mixers are a perfect solution for products where liquids must be mixed before use to obtain a homogeneous consistency, especially in case of liquids which tend to become stratified.

APPLICATION

- Mixers intended for 1000L containers with a DN150 or larger hole;
- Used for mixing, homogenising and solving;
- ◆ ATEX explosion-proof variant for zone 1.

ADVANTAGES

- Stirrer made of stainless steel grade 316Ti certified for contact with food;
- It has seats which enable it to be handled by means of a forklift truck;
- Electric or pneumatic power system versions are available;
- Mixers with an electric motor can be equipped with an inverter-based infinitely variable speed control.

DEVICE DESIGN

- Stirrer drive the standard type includes an angle (screw) transmission with an electric motor;
- The body (structure) made of St3 steel, powder painted; stainless or acid-proof steel version is available;
- ◆ The stirrer body is equipped with handles to enable the mixer to be manually pulled out from the tank;
- The mixer also has special handles which enable a forklift truck to be used to pull it out. It is also possible to provide a bracket for suspending the stirrer on a hoist;
- Electric control enables the equipment to operate safely in accordance with the current mandatory standards. Upon the client's request, we can deliver a mixer with an inverter-based infinitely variable rotation control;
- ◆ Foldable stirrer adapted to holes in tanks. The minimum hole size is DN150. The stirrer blades automatically get unfolded under the impact of the centrifugal force and the liquid resistance. The stirrer is made of stainless steel.



Compatible with an inverter



Stirrer made of stainless steel



Limit switch confirming whether an IBC tank is present



a stainless steel body

MKE-2000







MKE-2000

Parameter	Value
Max. viscosity of mixed liquid	2000 mPa*s
Stirrer drive	230 or 400V electric motor
Engine power	0,75 kW
Stirrer rated revolutions	200 rpm
	(available speeds: 150/200/280 rpm)
Mixer rotor	Ø 350 mm
	Unfoldable, made of steel grade 316Ti
ATEX	NO
Body made of stainless steel	ॐ Winch holders

Non-standard stirrers

Hopper for mixers



Infinitely variable speed control





IBC MIXERS

MKE-5000, MKE-10000, MKP-5000, MKE-500

MKE-5000

MKE-5000	40 300	0 .
Parameter	Value	
Max. viscosity of mixed liquid	5000 mPa*s	#
Stirrer drive	Electric motor, 400V	#
Engine power	1,1 kW	#
Stirrer rated revolutions	200 rpm	
	(available speeds: 140/200/280 rpm)	
Mixer rotor	Ø 350 mm	
	Unfoldable, made of steel grade 315Ti	
ATEX	NO	
Body made of stainless steel	Winch holders	
infinitely variable speed control	Non-standard stirrers	
Hopper for mixers	E-mixer functions	

M/F_10000

MKE-10000	
Parameter	Value
Max. viscosity of mixed liquid	10000 mPa*s
Stirrer drive	Electric motor, 400V
Engine power	1,5 kW
Stirrer rated revolutions	200 rpm
	(available speeds: 140/200/280 rpm)
Mixer rotor	Ø 350 mm
	Unfoldable, made of steel grade 316Ti
ATEX	NO
Body made of stainless steel Infinitely variable speed control	Winch holders Non-standard stirrers
Hopper for mixers	E-mixer functions

MKP-5000

Parameter	Value	
Max. viscosity of mixed liquid	5000 mPa*s	
Stirrer drive	Pneumatic motor	
Motor mechanical power	1,1 kW	
Air pressure	0,6 MPa	
Max. air demand	1900 I /min	
Stirrer revolutions	Adjustable within the range of 100-300 rpm	
Mixer rotor	Ø 350 mm, unfoldable, made of steel grade 316Ti	
ATEX	NO	
Body made of stainless steel	Winch holders	
Hopper for mixers	Non-standard stirrers	

MKE-500

Parameter	Value	
Max. viscosity of mixed liquid	500 mPa*s	
Stirrer drive	Electric motor, 230V	
Engine power	0,75 kW	
Stirrer rated revolutions	900 rpm	
ATEX	NO	
Body made of stainless steel	Winch holders	
🔅 Infinitely variable speed control	🌼 Non-standard stirrers	
🔅 Hopper for mixers	E-mixer functions	







NEW PRODUCT

BASIC FUNCTIONS

- Adjustable start time and end timer of the mixer operation;
- Adjustable mixing sequence settings (e.g. operation 10min., standstill 60min.);
- Remotely configurable mixing parameters, e.g. a change of revolutions of the mixer, start time and end time through the in-house LAN network;
- Possibility to integrate the mixer with master visualisation and control systems (SCADA);
- Setting the operating parameters by means of a smartphone (Android i iOS); tablet or PC;
- The mixer is equipped with a minicomputer which enables
 e.g. office applications, an Internet browser etc. to be installed.



ADDITIONAL FUNCTIONS

- Possibility to visualise and archive process data (stirrer revolutions, time of work, optionally agent temperature, pH etc.);
- Possibility to expand the mixer by additional input units (e.g. temperature sensor) and output units (e.g. mixed agent inlet and outlet valves);
- Logging into settings reserved for process maintenance services, process engineer, team leader;
- Wide adjustability of the mixer functions to the customer needs;
- A detailed range of functions to be agreed during the order placement stage.



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E-MIXER

Parameter	Value	
Max. viscosity of mixed liquid	10000 mPa*s	
Stirrer drive	Electric motor, 400V	
Engine power	1,5 kW	4
Stirrer rated revolutions	200 rpm	*
	(available speeds: 140/200/28	30 rpm)
Mixer rotor	Ø 350 mm	
	Unfoldable, made of steel grad	de 316Ti

NO

- Body made of stainless steel
- infinitely variable speed control
- Hopper for mixers

ATEX



Non-standard stirrers







IBC MIXERS

MKE-10000 Ex, MKE-10000 Ex FULL ATEX, MKP-5000 Ex

MKE-10000 EX

Parameter	Value	
Max. viscosity of mixed liquid	10000 mPa*s	
Stirrer drive	Electric motor, 400V Ex 2G	(x3)
Engine power	1,5 kW	
Stirrer rated revolutions	200 rpm	
	(available speeds: 140/200/280	rpm)
Mixer rotor	Ø 350 mm	
	Unfoldable, made of steel grade	316Ti
ATEX	Ex 2G T3	
	The device holds an ATEX Certific cabinet which should be installed (at a min. distance of 1.5 m from	beyond the zone
Body made of stainless steel	Winch holders	

Non-standard stirrers

MKE-10000 EX FULL ATEX

Hopper for mixers

Parameter	Value
Max. viscosity of mixed liquid	10000 mPa*s
Stirrer drive	Electric motor, 400V Ex 2G
Stirrer rated revolutions	200 rpm
	(available speeds: 140/200/280 rpm)
Mixer rotor	Ø 350 mm
	Unfoldable, made of steel grade 316Ti
ATEX	Ex 2G T3
	The entire unit holds the ATEX Certificate
Body made of stainless steel Hopper for mixers	Winch holdersNon-standard stirrers

MKP-5000 EX

Parameter	Value	
Max. viscosity of mixed liquid	5000 mPa*s	
Stirrer drive	Pneumatic motor	(Ex
Motor mechanical power	1,1 kW	
Air pressure	0,6 MPa	
Max. air demand	1900 I / min	*1
Stirrer revolutions	Adjustable within a range of 10	00-300 rpm
Mixer rotor	Ø 350 mm	
	Unfoldable, made of steel grad	e 316Ti

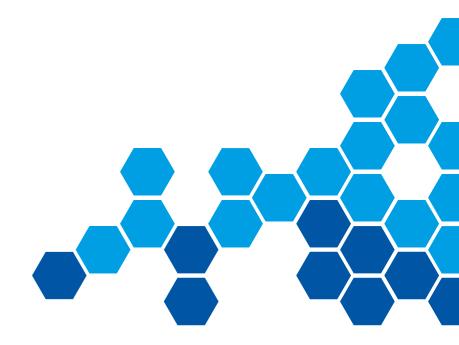


ATEX

Winch holders

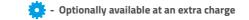
Ex 2G T3







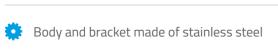




VERTICAL MIXERS

MKZE-500

Parameter	Value
Intended use	For IBC tanks with nut 0150 or 0225 (install - screw down replacing the nut)
Max. viscosity of mixed liquid	500 mPa*s
Stirrer drive	Electric motor, 400V
Engine power 0,75 kW	
Stirrer rated revolutions	900 rpm
Mixer rotor	Turbine, dual





MKZP-1000

Parameter	Value
Intended use For IBC tanks with nut 01 (install - screw down repla	
Max. viscosity of mixed liquid	1000 mPa*s
Stirrer drive	Pneumatic motor
Motor mechanical power	1,1 kW
Air pressure	0,6 MPa
Max. air demand	1900 l/min
Stirrer revolutions	Adj. within a range of 100-300
Mixer rotor	Turbine, dual
284	

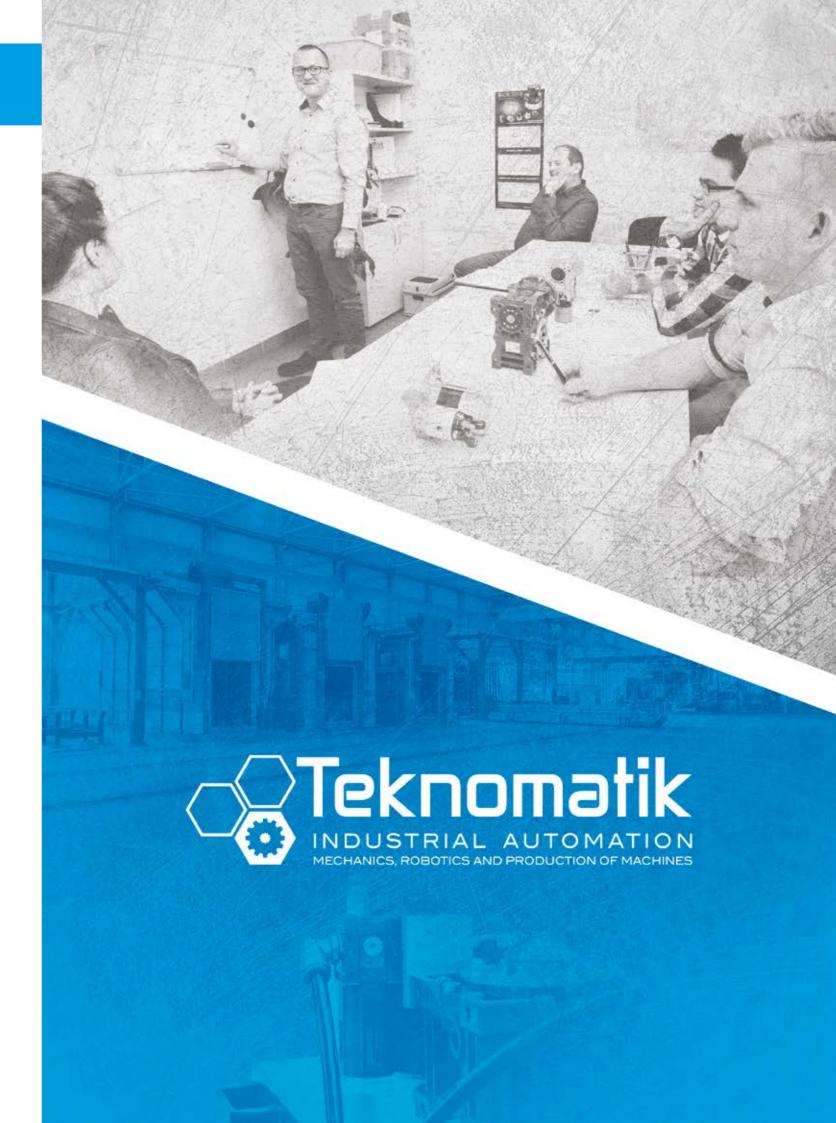








Body and bracket made of stainless steel



BARREL MIXER

The barrel mixers are a perfect solution for products where liquids must be mixed before use to obtain a homogeneous consistency, especially in case of liquids which tend to get stratified.

APPLICATION

- Mixers designed for 200L barrels;
- Used for mixing, homogenising and solving.

ADVANTAGES

- ◆ Stirrer made of stainless steel grade 316Ti certified for contact with food;
- It has handles for manual grabbing and handling;
- Mixers with an electric motor can be equipped with a manual inverter speed control.

DEVICE DESIGN

- Stirrer drive the standard version includes an electric motor. The motor specifications, i.e. the torque, power and rotational speed are adjusted on an individual basis, depending on the kind of liquids used;
- Mounting made of St3 steel, powder painted. Versions made of stainless steel and acid-proof steel are available. The stirrer body is equipped with handles to enable the stirrer to be manually pulled out
- Electric control enables the equipment to operate safely in accordance with the current mandatory standards. Upon the client's request, we can deliver a mixer with an inverter-based infinitely variable
- Turbine dual stirrer the stirrer blades are situated at the end and approximately in the middle of the stirrer shaft. The stirrer is made of the 316Ti acid-proof steel.

MBEO-1000





Turbine stirrer



MBEO-1000

Parameter	Value
Max. viscosity of mixed liquid	1000 mPa*s
Stirrer drive	Electric motor, 230/400V
Engine power	0,75 kW
Stirrer rated revolutions	1000 rpm
Mixer rotor	Turbine, dual



Non-standard stirrers







BARREL MIXER

MBEP-500, MBPP-1000, MBEP-5000, MBEO-5000

MBEP-500

Parameter	Value
Intended use	Open 200 L plastic barrel with a clamp ring
Max. viscosity of mixed liquid	500 mPa*s
Stirrer drive	Electric motor, 400V
Engine power	0,75 kW
Stirrer rated revolutions	900 rpm
Mixer rotor	Turbine, dual



inverter-based infinitely variable control of revolutions

MBPP-1000

Parameter	Value
Intended use	Open 200 L plastic barrel with a clamp ring
Max. viscosity of mixed liquid	1000 mPa*s
Stirrer drive	Pneumatic motor
Engine power	1,1 kW
Air pressure	0,6 MPa
Max. air demand	1900 l/min
Stirrer revolutions	Adj. within a range of 100-300
Mixer rotor	Turbine, dual





MBEP-5000

Parameter	Value
Intended use	Open 200 L plastic barrel with a clamp ring
Max. viscosity of mixed liquid	5000 mPa*s
Stirrer drive	Electric motor, 400V
Engine power	0,75 kW
Stirrer rated revolutions	186 rpm
Mixer rotor	Blade type, dual



- inverter-based infinitely variable control of revolutions
- Non standard stirrers

MBEO-5000

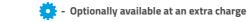
Parameter	Value
Intended use	Open 200 L metal barrel
Max. viscosity of mixed liquid	5000 mPa*s
Stirrer drive	Electric motor, 400V
Engine power	0,75 kW
Stirrer rated revolutions	140 rpm
Mixer rotor	Blade type, dual
Body made of stainless steel	Non-standard stirrers

Inverter-based infinitely variable control of revolutions









PLASTIC TANK WITH STIRRER

HOYER TANK STIRRER

MZPE-10000

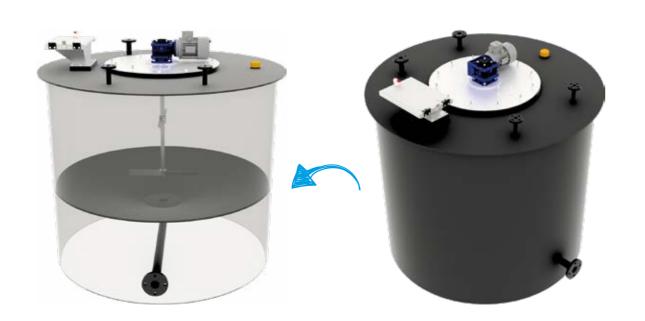
Parameter	Value
Tank	Capacity 1500L, material PEHD, process connection PN
Max. viscosity of mixed liquid	10000 mPa*s
Stirrer drive	Electric motor, 230/400V
Engine power	1,5 kW
Stirrer rated revolutions	200 rpm
Mixer rotor	Blade type
Tank capacity	1.5 m³ (subject to individual adjustment)
Tank material	PEHD





Oper. level sensor - cont. measurement

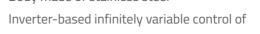
Level (alarm) sensors



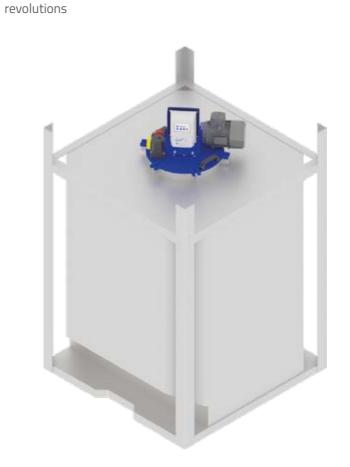
MZME-10000

Parameter	Value
Intended use	Hoyer tank
Max. viscosity of mixed liquid	10000 mPa*s
Stirrer drive	Electric motor, 400V
Engine power	1,5 kW
Stirrer rated revolutions	200 rpm
Mixer rotor	Blade type, dual

Body made of stainless steel











ECO STATIONARY MIXER

The stationary mixer is a perfect solution for products where liquids must be mixed before use to obtain a homogeneous consistency, especially in case of liquids which tend to become stratified.



STIRRER

- Device for mixing liquids with viscosity up to 10000 mPa*s;
- The system consists of a foldable stirrer and a vertical transmission shaft set in the worm transmission sleeve;
- Rotor with an external diameter of blades of approx. 0.350 mm and a shaft made of acid-proof steel grade 316Ti;
- Rotor equipped with a set of blades inclined approx.
 at an angle of 45° which ensure axial and radial flow of liquids inside the tank;
- Automatically unfoldable.

LOAD-BEARING FRAME + LIFTING SYSTEM

- ◆ The load bearing frame of the machine made of the St3 structural steel, powder painted in a RAL colour selected by the customer;
- Device equipped with a manual system for lifting of an arm linked to the stirrer;
- Lifting mechanism employing the use of pulleys and a manual winch with a brake;
 without the stirrer being able to fall down freely;
- Clutchless system with a limit of the maximum upper and lower position of the stirrer.

DRIVE

- Device equipped with a tripus electric switch;
- Functional buttons: START, STOP;
- Electric motor, 1.5 kW 400V;
- ◆ Stirrer rated revolutions: 200 rpm (available speeds: 140/200/280 rpm).



STATIONARY MIXER

The stationary mixer is a perfect solution for products where liquids must be mixed before use to obtain a homogeneous consistency, especially in case of liquids which tend to become stratified.



STIRRER

- Device for mixing liquids with viscosity up to 10000 mPa*s;
- The system consists of an unfolded stirrer and a vertical transmission shaft set in the worm transmission sleeve;
- Rotor with an external diameter of the blades of approx. 0.350 mm and a shaft made of acid-proof steel grade 316Ti;
- Rotor equipped with a set of blades inclined approx. at an angle of 45° and ensuring axial and radial flow of liquids inside the tank;
- Automatically unfoldable;
- Compatible with rotors with other designs.

LOAD-BEARING FRAME + LIFTING SYSTEM

- ◆ The load bearing frame of the machine made of the St3 structural steel, powder painted in a RAL colour selected by the customer;
- Device equipped with a mechanical system for the lifting of an arm linked to the stirrer;
- Lifting mechanism based on system including a trapezoidal bolt and a set of linear guides;
- ◆ A three-phase gear motor P54 will be used for the system drive;
- Clutchless system with a limit of the maximum upper and lower position of the stirrer.

AUTOMATION

- System equipped with a control cabinet designed to control the system; start, stop and reset buttons, safety switch;
- Up/Down stirrer lifting system control;
- Potentiometer provided for infinitely variable control of the stirrer rotational speed;
- Speed adjustable within a range of 140 280 rpm;
- Digital time relay for programming the stirrer deactivation time;
- ◆ Power supply: 400 VAC.
- Electric cabinet installed beyond the zone
- Foldable rotor, installed in the middle of the shaft
- Stirrer suitable for contact with food
 - (+ oil in the stirrer transmission)

🚺 - Optionally available at an extra charge







STIRRERS



BLADE STIRRER

◆ Stirrer installed in mixers

MKE (2000, 5000, 10000) and MKP (5000).

◆ Stirrer blades unfold to a diameter of 350mm (expandable to 500mm).

TURBINE STIRRER

- Stirrer installed in MKE (500) mixers.
- ◆ The stirrer blade diameter is 140mm.

POLYPROPYLENE STIRRER

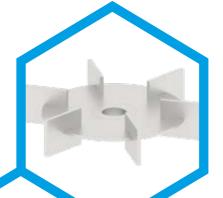
- ◆ Stirrer installed in MKE (2000,5000) and MKP (5000) mixers.
- Non-unfoldable blades, used for strong acids and bases.

BUCKET STIRRER

- ◆ Stirrer installed in MKE (2000,5000) and MKP (5000) mixers.
- ◆ Stirrer blades unfold to a diameter of 350mm (expandable to 500mm).



- ◆ Stirrer installed in mixers MKE (2000, 5000, 10000) and MKP (5000).
- ◆ Stirrer blades unfold to a diameter of 350mm (expandable to 500mm).



STRAIGHT DISC TURBINE STIRRER

The stirrer is intended for metal tanks or open barrels.

The liquid is moved radially against the tank.

Recommended when high stirring power is required.

The number of blades can be increased up to 12.

Possible diameters: 200-r500 mm.



INCLINED DISC TURBINE STIRRER

The stirrer is intended for metal tanks or open barrels. The liquid is moved radially against the tank. Recommended when high stirring power is required. The number of blades can be increased up to 12.

Possible diameters: 200-r500 mm.



SHAFT EXTENSION

The shaft extension is an excellent solution for products which tend to settle on the tank bottom. The whirlpool formed as a result of using the standard shaft with blades may not be sufficient to mix up liquids with high viscosity values. Using this solution enables you to avoid the problem.



Teknomatik



IBC INCLINED RAMP

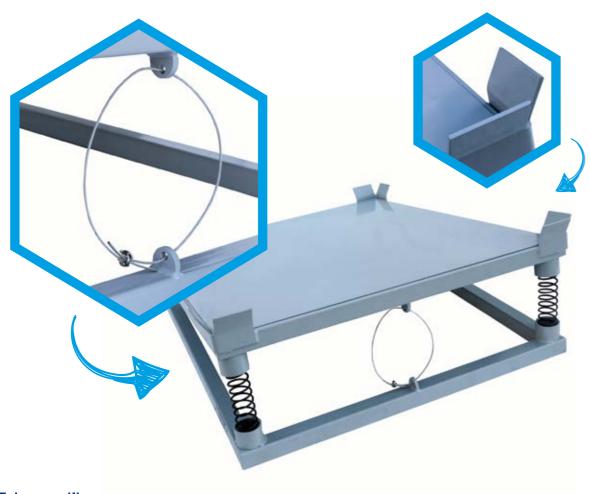
When the containers are used in a regular mode, on average 10 litres of liquids are left on the bottom of a container. Using the inclined ramp makes it possible to empty them entirely.

APPLICATION

- Wherever bulk containers are used;
- Available for installation on a drip tub.

DEVICE DESIGN

- A container is put away on the inclined ramp. While the containers are being put away, the inclined ramp goes down under the weight and the containers are laid horizontally;
- During the emptying process, when the tank contains less than 50 L of liquid, the springs raise the tank on one side to enable it to get totally emptied;
- The spring pitch is adjusted so as not to affect the forklift truck operation.



DRIP CARRIAGE

When mixers are operated, the substances being mixed may drip and thus cause contamination and hazard while a mixer is being taken out of the container.

APPLICATION

- Wherever mixers for IBC containers are used;
- ◆ Convenient and easy transportability of the mixer.









DRIP TUBS

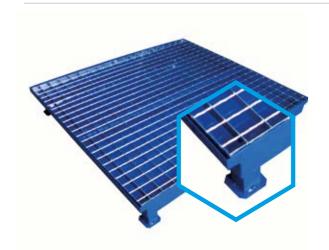
We also offer...

Safety at workplace is a priority. Drip and spillage containment tubs equipped with a grating and a liquid container will provide effective protection against leakage of harmful substances. Solutions of this type are a perfect way to ensure economic and clean operation and to protect employees from the impact of aggressive substances.

APPLICATION

Barrels with various types of solutions can be put on the drip and spillage containment tub. When the container gets damaged, the liquid flows freely through the grating into a specially prepared platform. In this way you may not only effectively secure the substance but also reuse it - in case of a leakage into the platform, it does not get contaminated and can be reused. The solutions employed also let you keep the workplace clean.





The spillage containment and drip tubs which weofferaredesignedforstoringcontainerswithacids, oils and other highly flammable substances. They are made of durable and resistant plastic composites. They are particularly useful in warehouses and industrial plants.



COMPACT STATIONS FOR PALLET TANKS

- Stations to be used for IBC tanks. They are equipped with pumps, filters and automatic valves. The main job is to pump the liquid to the plant system. The pumping can be activated automatically or manually.
- The user can take decisions related to the type of equipment (type of pumps, filters, valves, connection to the ventilation system etc.) and the efficiency of the device. The station can be equipped with a simple or advanced control system.
- The drip tub offers spillage containment capacity as required by OSH regulations and helps keep the industrial plant clean. Compatibility with ventilation system improves safety conditions for hazardous substances.







We also offer...

We also offer...

The system is designed for the production of chemical consisting of various types of components (the system presented can dose 17 components). The device is equipped with a main tank and a tank for dosing small amounts. Both tanks are equipped with weighing systems. The main tank has a stirrer. Dosing is performed automatically as per a pre-set recipe. Components can be pumped from IBC tanks, barrels or external systems.



The device is intended for storing chemicals and pumping to the on-site industrial systems. It is equipped with fixed storage tanks. The capacity of the tanks, the number of the tanks and the type of the device equipment can be agreed on an individual basis. The tanks can be equipped with stirrers and heaters. Tanks are refilled through an external connection (e.g. a tanker) or IBC tanks.



SYSTEMS FOR PRODUCTION OF MULTI-INGREDIENT CHEMICALS





SYSTEMS FOR STORING AND PUMPING CHEMICALS





ASSEMBLY STATIONS

Teknomatik offers several assembly stations and lines. The stations can be equipped with SCARA or 6-axis industrial robots, vibratory feeders, revolving tables or automatic drivers. The final product can be controlled by means of vision systems or sensors from such renowned vendors as Keyence, Cognex or Sick.













Machining stations equipped with an USG ultrasound part screening system.

CE Certification -Machine Conformity Assessment

Since the today's manufacturing industry more and more relies on an efficient but potentially dangerous equipment, personnel safety has become a key issue for everyone involved in the manufacturing processes. To protect personnel from machine-related hazards, machines must be properly protected. The protection applies to the design requirements as well as methods and solutions introduced to protect the operators or people having contact with potential hazards.

Teknomatik, an experienced machine manufacturer, wants to share its expertise in the field of machine safety with manufacturers, importers and users of machines. We make it possible for you to market the product in the European market without problems by delivering a complex service which includes an analysis of both the technical and the legal requirements.

Key Requirements for Brand New Machines

The technical advisory services in relation to the key requirements for manufacturers and importers of machines

- selection of directives covering the product;
- selection of standards harmonised with the directives for the specific product;
- risk analysis according to standard PN-EN ISO 12100;
- control system analysis including the definition of the connection category (KAT) and efficiency levels (PL);
- operation manual analysis;
- preparation of the declaration of conformity;
- preparing a report with a list of recommendations and proposed solutions;
- designing a specimen of a rating plate containing the CE marking;
- issuing a certificate confirming our company's participation in the key requirement compliance validation process;

Minimum Requirements for Old Machines and Other Machines

- preparing a report with a list of recommendations and proposed solutions;
- issuing a certificate confirming our company's participation in the minimum requirement compliance validation process;
- participating in the preliminary takeover of new machines.

Stop Time Measurement

The stop time test is a measurement which allows you to determine the stop time for the machine's hazardous motion which has been secured by the safety system elements. After the time is measured, it is possible to determine whether the securing element is situated at a proper distance from the hazardous element and, consequently, the operator is properly protected. The measurements are done in accordance with standard PN-EN ISO 13855:2010 and the elements to be checked are:

- light curtains and barriers;
- two-hand control;
- safety scanners;
- shield limit switches;
- pressure mats.





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AUTHORISED RESELLER

