HIGH VOLUME TANKS AND RESERVOIRS

Filling hoppers and silos
Filling hoppers and silos are frequently an integral part of the storing system. They are used to store bulk substances (lime, cement, feedstuff, granulates ...). From the structural point of view they are designed the most often as:

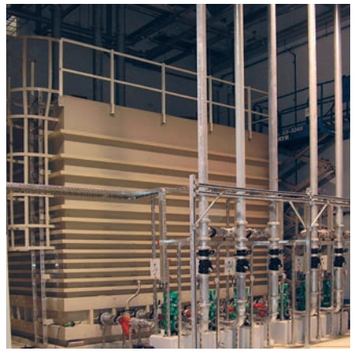
- symmetric cone passing into a cylinder
- non-symmetric cone
- symmetric pyramid passing into a cuboid
- non-symmetric pyramid
- combined

Material versions of reservoirs
The material of the reservoir is chosen in accordance with chemical and physical resistance for the particular fluid. Reservoirs are made from extruded and pressed sheets by means of welding. In view of this fact all the offered materials have to be weldable.
Used materials:

- PP Polypropylene
- PHED Polyethylene
- PVC Polyvinylchloride PVC-U, PVC-C
- PVDF Polyvinylidene fluoride
- ECTF-E Ethylene Chlorotrifluoroethylene

Technology of interlining
In order to execute interlining of existing tanks we recommend to use foils made of PP, PE, PVDF, ECTF-E. Technology of interlining is executed by two methods – anchoring or sticking. Anchoring means mechanical fixing to the base material (the most frequently to concrete or plastic) through mechanical connection by means of a screw, an anchor or a plastic segment. In the case of application of sticking, the backed foil is used as the base for application of the glue and thus establishing the joint with the base material (steel, stainless steel ...). Connected shaped pieces, fittings and the whole piping system are made of the same material than the material of the reservoir.

Services to customers
High variability of shapes and materials allows implementing the storing system containing the preparation and dosing system of the highest quality. Within the framework of services to customers and consulting services we will recommend you the optimum solution in accordance with local conditions of the particular application. Computer-aided modelling with stress analysis by means of the method of final elements in combination with the mastered production technology are qualifications for supplies of technologies meeting the stricter criteria.



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High – volume tanks and reservoirs

In order to store fluids in the chemical and other industries it is suitable to use high – volume plastic reservoirs. High variability of shapes, dimensions and materials allows adapting solutions to particular conditions of use. The main classification of reservoirs from the view of point of their shapes is as follows:

- cylindrical
- rectangular

Cylindrical reservoirs

This group includes reservoirs, the main axis of which is vertical or horizontal. They are to be installed either on a flat base, if they have got the flat bottom, or on supports (legs) in the case of the conical bottom.

Cylindrical vertical reservoir

The field of application, where cylindrical vertical reservoirs are very often used, is the storing system of chemical fluids. It is the most suitable structure from the point of view of stress analysis, characterised with high rigidity and simplicity and meets even the strictest criteria. The special double jacket version replaces also an emergency tank. Fitted with other accessories (stirrers, pumps, dosing devices for powder substrates) they become full-fledged units for preparation of chemical solutions. It is recommended to install a reservoir on a flat base slab.

Cylindrical reservoir with the conical bottom

The conical bottom allows perfect emptying of the reservoir and mainly blowing down solid particles from solutions. This is the main reason why it is used for preparation units (preparation units of lime milk, saturators ...). The possibility for an arbitrary change of the conical part geometry opens opportunities to use those reservoirs as settling units in waste water and water treatment plants, storage tanks of bulk substances ...

Cylindrical horizontal reservoir

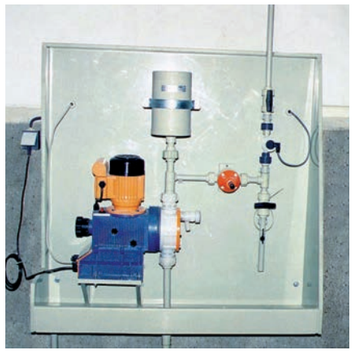
Reservoirs of the horizontal type are suitable for such buildings, where the building height is a limiting factor. This group includes reservoirs, the main axis or the significant part of which is installed horizontally.

Rectangular reservoirs

They effectively utilise the built-up area and this is significant feature especially when installed inside buildings. External stiffeners contribute to high rigidity and stability of the base shell. They are used the most often in the field of emergency assurance, e.g. as a combination of a cylindrical reservoir and a rectangular emergency tank. Another wide application is in the field of surface treatment facilities as electroplating, neutralising, degreasing tanks ...

Equipment of reservoirs

Completeness of reservoirs is achieved only after they are equipped with components included in the meaning "equipment of reservoirs". The main components include – manholes, filling fittings, blowing fittings, safety overflows, water stops, level gauges, service platform, ladders, heating, pumping technology (centrifugal, diaphragm, screw pumps), dosing devices for powder substrates, vibrators, measurement of physical quantities (temperature, pressure, pH, conductivity, flowrate). All components, which come into contact with a fluid, are made of high-quality plastics.



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