



# Tank systems





# Tank systems from Heidelberg Materials

Long service life, maintenance-free operation, and functionality are the guiding principles for our tank systems. With more than 50 years of experience in building and developing prefabricated tank systems, we can offer robust and reliable designs for most applications.

Our extensive experience with many types of construction solutions, efficient production in a controlled factory environment, and rapid assembly ensure the shortest possible construction time for your projects, guaranteeing a good overall return on investment.





## Flexible systems

With our functional systems, we create tanks with volumes ranging from approximately 3 m<sup>3</sup> to over 35,000 m<sup>3</sup> for most applications. We offer both round and rectangular solutions, with each object designed and manufactured according to the customer's specific needs. The tanks can be placed above ground, partially or fully buried, and even on slopes. Pipe penetrations, plates, screw fasteners, and more can be cast into the elements during production.

## Proven solutions

We start with our proven solutions and can, if necessary, customize them in close collaboration with the customer. In this way, the customer's needs and the best technical and economic design are achieved. Our concrete elements are always manufactured with high-quality concrete in a controlled factory environment. Quality is always in focus, and we are certified according to both ISO 9001 and ISO 14001.

## Examples of applications

- Drinking water reservoirs
- Desalination plants
- Digesters (anaerobic digestion tanks)
- Sedimentation and aeration basins
- Sprinkler tanks
- Balancing tanks for storm and wastewater
- Containment basins around tanks with hazardous materials
- Silos for bulk storage of materials such as wood chips, coal, sand and salt
- Basins for aggressive liquids
- Biobeds (biofilters)



# Properties and functionality

The base plates for our tanks are cast on-site, while the wall sections are manufactured in a controlled factory environment.

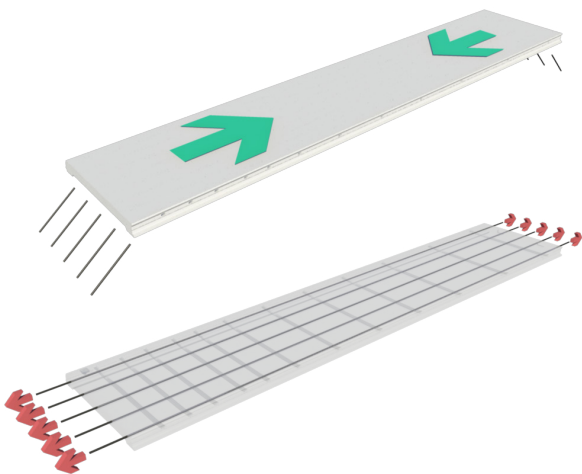
For the C14 tank system, the vertical joints are injected with a specially developed grout. The grout is also pressed out to completely fill both the vertical joints and the link channels in which the horizontal tensioning reinforcement lines run, to provide them with the best possible protection.

The C8 tank system has a rubber profile in the vertical joint instead of grouting for sealing. For both C8 and C14 systems, the connection between the wall element and the base plate is cast on-site in a watertight system.

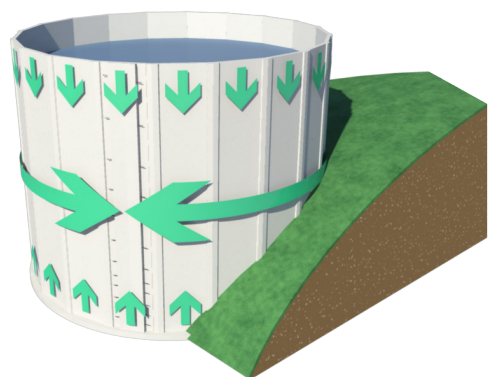
## Double or triple protected tensioning lines

Both tank types are post-tensioned with horizontal tensioning reinforcement lines to keep the vertical joints under constant pressure.

We offer the safest post-tensioning on the market. In the C8 system, all post-tensioning lines are well protected inside the element by greasing and plastic coating. In the C14 system, the lines are also protected with surrounding injection concrete. These multiple corrosion protection systems ensure that the tensioning lines are maintenance-free and protect the tank structure throughout its lifespan.



Schematic illustration of prestressed concrete tank.



The tank sections are prestressed vertically and post-tensioned horizontally for an essentially crack-free structure.

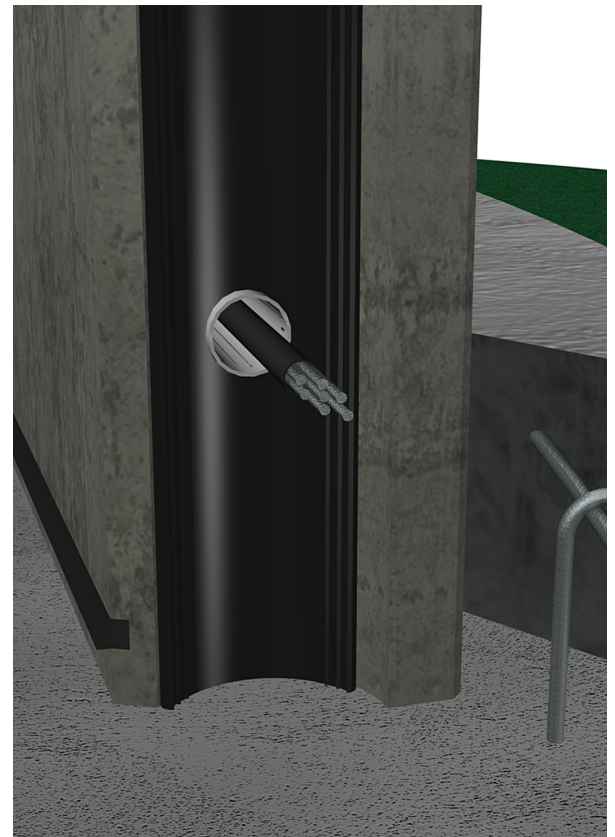




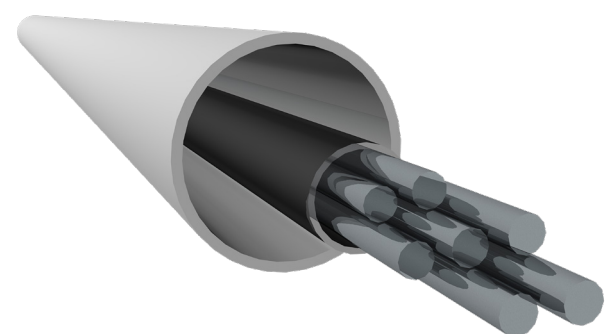
Tensioning elements on the C14 tank system.

## Advantages of our tank system

- Short construction times
- Heights up to 14 meters and volumes up to approximately 35,000 m<sup>3</sup>
- Industrial manufacturing
- Sustainable solutions for longterm use
- Reliable tank systems
- Many applications
- Concrete roof solutions



Joint with rubber seal on the C8 tank system.



The triple or quadruple protection of the horizontal tensioning reinforcement lines is maintenance-free for the entire lifespan of the tank.





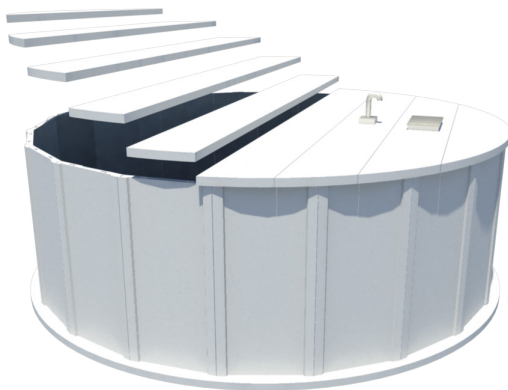


# Accessory products – sustainable and optimized solutions



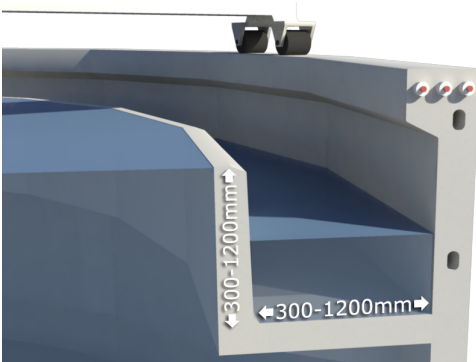
## Roof systems

We offer complete systems for precast roofs for our tanks.



## Self supporting roofs

Our semi-insulated prestressed concrete slabs are ideal for digester tanks.



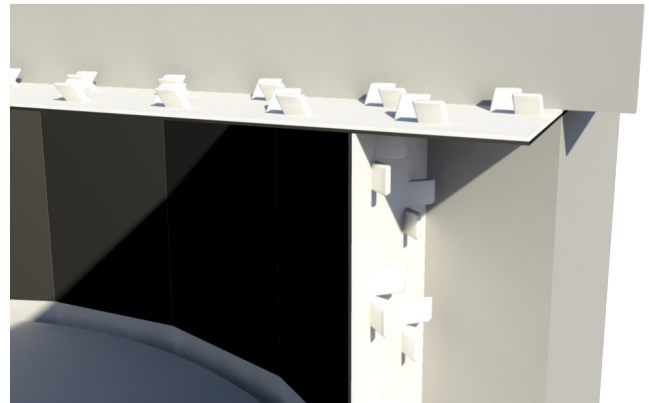
## Factory-cast walkways and internal channels

For sedimentation tanks, channels and walkways are made of durable concrete for increased service life.



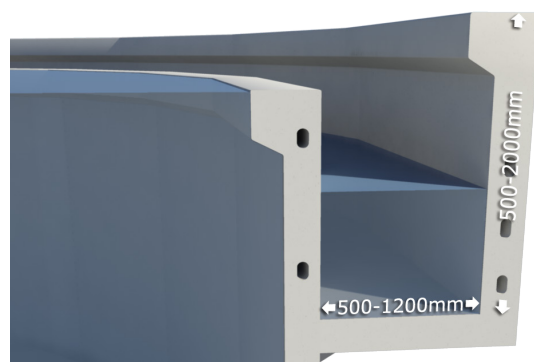
## Manhole covers

The tanks are typically designed with extra openings, pipe connections, steel plates, or with various types of manhole covers.



## Lining systems

The tanks can be equipped with linings for various applications, such as gas insulation and acid resistance.



## Factory-cast walkways and external channels

We deliver factory-cast solutions according to your specifications.

# Concrete — The safe choice

We are a reliable supplier of structural solutions for tank systems. Our extensive experience, combined with well-proven designs, helps you achieve a good overall economy for your investment. With manufacturing in our own factories, we can ensure high quality and a more secure end result.

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