NeutraSab safety collecting tank



Installation and assembly instructions

The information and instructions for installation are non-binding and must be checked on site by the persons responsible for the construction work and implemented in accordance with the local conditions.

The installation, final assembly, leak test, commissioning of the safety collecting tank and operator briefing may only be carried out by specialist companies in accordance with the German Water Resources Act (WHG) with their specialist staff. In addition, the specialist staff must be trained by the Mall company.

The safety collecting tank must be installed in such a way that it is protected against overflow, backwater and frost. The applicable building regulations and water legislation regulations must be adhered to. All work must be performed in a professional manner in accordance with the currently valid accident prevention regulations, applicable standards, codes of practice and other guidelines and regulations. Further provisions and notes on installation are available in the general type approval Z-74.3-191.

Substructure

The existing subsoil must have a permissible soil pressure according to DIN 1054.

It is usually sufficient to place a levelling layer of sand or fine gravel, with a minimum thickness of 10 cm, on the subsoil to act as a subgrade. The bed height shall be determined on site according to the local conditions.

Delivery and unloading

The delivery must be checked on site. Any complaints must be confirmed on the delivery note by the carrier and the recipient and reported immediately.

The safety collecting tank and accessories must be unloaded using appropriate lifting gear. The weights and loads must be taken into consideration. Bights must be screwed into the existing threaded sleeves on the tanks. The crane lifting gear must be sufficiently long (approximately twice the length of the tank's diameter) in order to prevent diagonal pulling and damage to the precast concrete components. Impact loads must be avoided during the crane work. Shaft attachments must be unloaded with suitable transport claws.

Positioning

The reinforced concrete tank must be placed in the correct position on the prepared substructure (do not mix up the supply and return). The correct height and level alignment must be checked. A working space of at least 50 cm should be maintained between other tanks.

Versions with a cover plate have two openings, versions with a shaft neck have one central opening. The cover must be odour-tight and screwed in place. This must be ensured via an on-site inspection! The customer's / installation drawing must be observed when installing the shaft superstructure parts.

DIN 4034, part 1 must be observed when moving the shaft components. Sharp ends and sleeve components must not be damaged or dirty to ensure that the shaft superstructure is leakproof. The correct transfer of earth and roadway loads must be accomplished by load transfer rings according to DIN 4034 part 1. Observe the installation notes provided with the sliding ring seals. The compensating rings and covers belonging to the shaft structure must also be applied so that they are sealed tightly.

Note!!! For 2.00 and 2.50 m tank diameters, round cord seals are used for sealing towards the shaft top piece.

Inlet and outlet lines

The inlet and outlet lines must be connected to the safety collecting tank. The inlet line must meet the requirements of pipes for discharging liquids hazardous to water with backflow according to TRwS 786 section 8.

150 mm pipes with spigot ends protrude on the inlet and outlet sides, which are used for connection or continuation purposes. These are made of plastic (PE or PP) or stainless steel. Nominal DN 100, DN 150 or DN 200 connection diameters are possible.

Note!!! To protect the shut-off flap and ensure it functions properly, the drains for the filling / handling areas or storage facility must be fitted with dirt traps, dirt buckets or equivalent.

NeutraSab safety collecting tank



Only liquids hazardous to water for which the safety collecting tank and its components are designed may be discharged into the tank. This also applies to the period during the construction phase to the commissioning.

Empty pipe and ventilation line

The DN 100 empty pipe for the cable feed-through must be laid and connected from the installation site for the control cabinet to the empty pipe connection (KG 2000) on the safety collecting tank. The ventilation line, with a 63 mm outer pipe diameter and smooth outer pipe wall, e.g. a pressure pipe made of PE, must be connected to the seal provided at the safety collecting tank and led, for example, up to the top of a roof of a building.

Type plate

After completing the shaft structure, the type plate fastened in the tank must be remounted in the upper region of the shaft so that it can be read by removing the fastening chain after removing the shaft cover.

Backfill

The components and piping must not be damaged when backfilling the construction pit.

Note!!! After the installation, connection and backfilling work, it is essential to clean the safety collecting tank to remove any construction debris, mortar, tar residue, etc. Before the leak test and commissioning, the pipeline must be flushed from the yard, area or street drains in order to remove any construction debris or other dirt so that damage to the shut-off flap's seal grommet is prevented. When the safety collecting tank is delivered, the shut-off flap is open and must remain open until commissioning.

Leak-tightness

The leak-tightness of the safety collecting tank, in the collecting trough area, must be checked in accordance with DIN 1999-100, Appendix A.

Declaration of conformity

The company conducting the installation must confirm the conformity of the design with the provisions of the general type approval by means of a declaration of conformity. Information on this can be found in the general type approval.

Commissioning

A commissioning test must be carried out by a technical expert before commissioning. Information on this can be found in the general type approval.

