Bekaplast Aqua-Lining 400 – Permanent protection for potable water tanks

Requirements
Permanent leak-tightness, mechanical strength and chemical resistance. Specially developed to meet the requirements specifically associated with handling potable water. Aqua-Lining 400 satisfies the broad range of needs. No matter what the tank geometry, the flexible sheets are suitable both for new construction and for the renovation of existing potable water tanks.

Material
STEULER-KCH has been using polyethylene in piping systems, tanks, pits and drainage channels for decades. Wherever the resistance of concrete and steel reaches its limits, linings made of polyethylene provide enduring security.

That experience has been applied and further developed to create Aqua-Lining 400, our system for lining potable water tanks.

Manufacturer
STEULER-KCH has been developing tailor-made solutions for the surface protection of buildings, plants and equipment for more than 100 years. Those solutions focus both on surface water protection and on maintaining the value of assets.

Service
The product range of STEULER-KCH has included thermoplastic linings for more than half a century. We plan, produce, deliver, and can also install Aqua-Lining 400 – exactly according to your wishes. You will receive our full support during the preparation and implementation of your project, no matter whether it involves the manufacture of prefabricated sheets, special solutions such as brackets, penetrations and connections, or supporting your construction supervisors and providing quality assurance during installation.

General
- Deliverable in rolls or sheets
- Prefabrication possible
- Colour: blue, similar to RAL 5012
- Easy-to-clean surface
- The material meets the requirements of Technical Standard W 270 of the DVGW (German Technical and Scientific Association for Gas and Water)

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Bekaplast Aqua-Lining 400 for the construction of new potable water tanks

New construction
In the construction of new potable water tanks, the Aqua-Lining 400 sheets are attached to the wall formwork and joined together with sections. The walls are subsequently concreted. The flooring is laid in the screed after removal of the forms. The anchor studs ensure a positive bond in both the concrete and in the screed substrate. Subsequently the joints between sheets are sealed by welding in accordance with DVS guidelines.

Advantages in new construction:
- Easy handling, easy operation
- Positive bond between concrete and Aqua-Lining 400 liner (approx. 400 anchor studs per m²)
- Bridging of cracks in the substrate
- Can also be used in ceiling applications
- High chemical resistance
- High mechanical strength
- Leak detection by means of spark coil possible
- Smooth and anti-adhesive surface
- Physiologically safe
Retrofit installation in existing tanks

When renovating potable water tanks with Aqua-Lining 400, the fastener system plays a decisive role. The insertion rails included in the system are attached to the substrate by means of dowels. These rails hold the Aqua-Lining 400 sheets securely while permitting a variable installation pattern. The joints between the sheets are also firmly secured to a dowel-mounted HDPE strip and sealed by welding. This special fastening technology makes it possible to renovate existing potable water tanks easily and rapidly. Additional time and cost savings result from the fact that old linings which are defective (e.g. mineral, epoxy resin or chlorinated rubber coatings) usually need not be removed. Applicable technical standards and the procedures of the trade associations must be observed.

Advantages in renovation:
- Easy handling, easy operation
- Reliable bond between concrete and Aqua-Lining 400 liner
- Bridging of cracks in the substrate
- Can be installed over existing linings
- Can also be used in ceiling applications
- High chemical resistance
- High mechanical strength
- Leak detection by means of spark coil possible
- Smooth and antiadhesive surface
- Physiologically safe
- Suitable for temperature fluctuations of up to 20°C
- Leakage monitoring possible

Above: Aqua-Lining 400 in the renovation of potable water tanks, retrofit installation on any substrate, such as concrete, tiles or coatings.
Together with its international subsidiaries and representatives, STEULER-KCH offers its customers a worldwide network which develops and implements comprehensive system solutions.