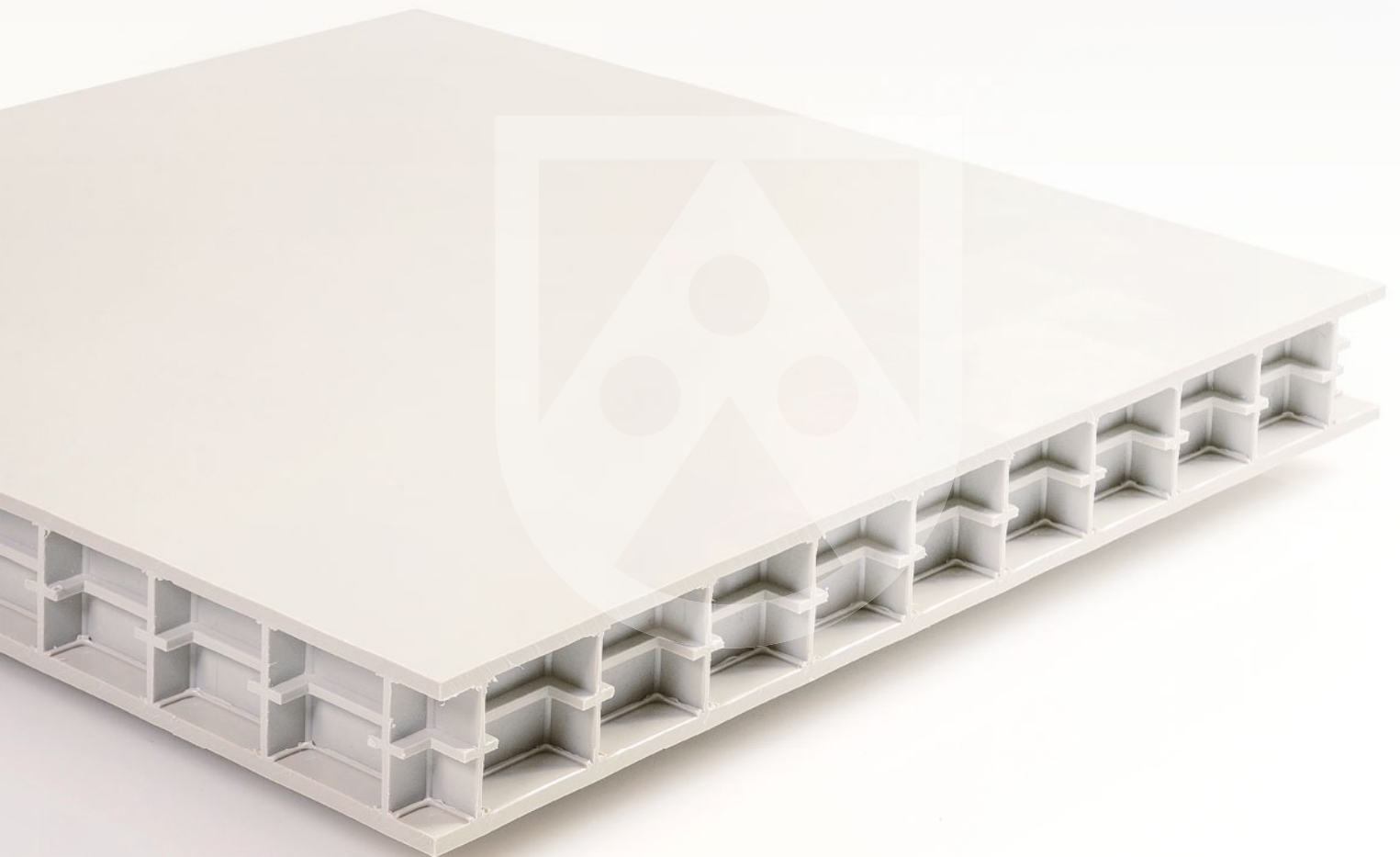


Polystone® CubX®

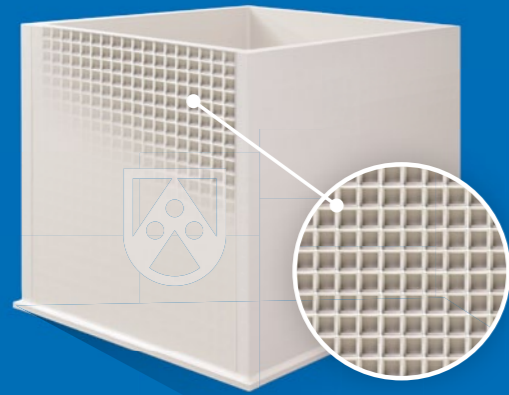
**True strength comes  
from within.**

 Chemical processing industry

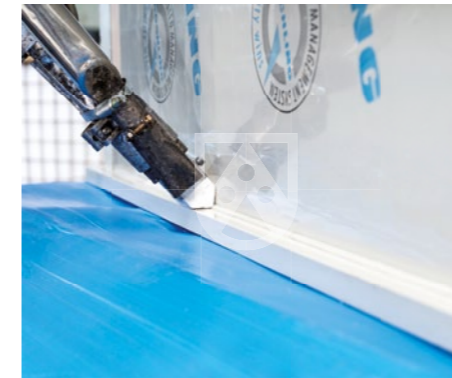


# Finally, some good news for tank builders.

The tank construction sheet Polystone® CubX® featuring a unique inner cube structure for outstanding stiffness properties. Potential steel reinforcement reductions of up to 100%. The time saving in tank construction is enormous.



**Fast production:**  
Rectangular tanks made from Polystone® P CubX®



Polystone® CubX®: can be very easily processed using common welding methods, heating element stump, hot gas drawing and extrusion welding as well as all machining methods



**Standard equipment:**  
Recess for leakage monitoring

## Fast, safe and efficient rectangular tank construction

As an expert in tank construction, you know: even quite small rectangular tanks for storing chemical media normally require elaborate steel reinforcement. Cladding with plastic profiles, which have to be elaborately cut to size and welded, is required to protect the steel reinforcement against corrosion.

With Polystone® CubX®, Röchling has now developed a **completely new tank construction sheet** with an inner cube structure that allows for **quicker and easier rectangular tank** construction.

The special feature is the sheet design, which combines **very high longitudinal and transverse stiffness** in the sheet itself. Polystone® CubX® consists internally of a homogeneous, rectangular (orthogonal) grid pattern, welded to two sheets on its outsides, which form the sheet surface. The result is an innovative construction sheet that combines light weight and ease of handling with very high longitudinal and transverse rigidity.

The sheet, which was specially developed for tank construction, is also suitable for permanent contact with a large number of chemical media thanks to the proven chemical resistance of Röchling materials. The considerable reduction (up to 100%) of steel reinforcements that would otherwise be required for thermoplastic rectangular tanks also results in **significant time savings** in tank manufacturing.

**Developed especially for chemical tank and plant construction:**  
Polystone® CubX®, the innovative sheet with the inner cube structure



# ”

We were able to dispense with steel reinforcement and the associated welding work completely and as a result complete both tanks earlier than originally planned.

Pascal Adam, Production Manager at G&H Kunststofftechnik GmbH & Co. KG, Sprockhövel | Germany.

**Project:** Production of two rinsing water tanks for an anodising plant. Polystone® P CubX® provided the opportunity to produce the tanks faster than rectangular tanks of comparable dimensions made of solid plastic sheets.

## Developed for chemical tank and plant construction

Polystone® CubX® offers several advantages for the construction of your rectangular tank:



### Reduction of steel reinforcements

Depending on the size of the tank, rectangular tanks made of Polystone® CubX® require less or even no plastic-coated steel reinforcements due to the high rigidity of the sheet. This significantly reduces the number of necessary welds and saves time and resources.



### Easy handling

Tests in our in-house material laboratory show: A Polystone® CubX® sheet with a thickness of 57 mm has the same stiffness as a solid plastic sheet made of PP with a thickness of 35 mm, but weighs only half as much. This simplifies the handling of the sheets. Also ideal for tank repairs and retrofits.



### High level of process safety

Polystone® CubX® increases the process reliability of your rectangular tank when compared to solid plastic sheets. If leakage occurs, the leaking fluid accumulates locally and is limited in the interior of the sheet. **The operator thus has more time to take appropriate measures.** For leakage monitoring, Polystone® CubX® sheets are already equipped with a recess as standard, which forms a cavity in the finished tank for interior monitoring, by wire for example. **It can also be used as a collecting channel for external optical monitoring.**



### Thermal insulation

Polystone® CubX® offers good thermal insulation thanks to the air trapped in the hollow chambers. **Elaborate and costly insulation work can be reduced or saved.**



### Flame retardant

The flame retardant version (BI) Polystone® PPs CubX® is especially suitable for sensitive applications with high fire protection requirements.

## Plastics for chemical tank construction

Röchling thermoplastics and composites have been in use for decades in the chemical processing industry as material for plants and tanks. Röchling provides a complete system consisting of sheet material, square tubes, U-Profiles and different welding rods and expert advice in selecting the correct material.

Furthermore, Röchling has a comprehensive database and many years of experience with chemical resistance and the successful use of plastics. The most important areas of use are tanks for the storage of liquids, galvanic plants, steel-pickling plants, watertreatment systems, exhaustair cleaning plants and ventilation plants.

[www.roechling-industrial.com](http://www.roechling-industrial.com)

## Polystone® CubX®

True strength comes from within.  
Developed for chemical tank and plant construction.



### Materials

- **Polystone® P CubX®:** Polystone® P (PP), tried-and-tested for decades worldwide in the construction of rectangular and round tanks
- **Polystone® PPs CubX®:** Polystone® PPs, flame retardant (BI) for sensitive areas of application
- **Polystone® P CubX® PG-UV stabilized white:** UV-resistant for outdoor use
- **Polystone® G CubX®:** Covering sheets made of Polystone® G (PE100 RC) with very good stress cracking resistance and UV resistance for outdoor use



### Product range

- Format: 2,000 x 1,500 mm
- Thickness: 57 mm
- **Polystone® P CubX®:** Colour grey (RAL 7032) standard from stock, other colours are available on request
- **Polystone® PPs CubX®:** Colour grey (RAL 7037)
- **Polystone® P CubX® PG-UV stabilized white:** Colour white (RAL 9010)
- **Polystone® G CubX®:** Colour black (similar to RAL 9005)



### Characteristics

- High longitudinal and transversal stiffness
- High chemical resistance
- Light weight, easy handling
- Good thermal insulation
- Easy to weld by means of heating element butt welding, hot gas welding, extrusion welding

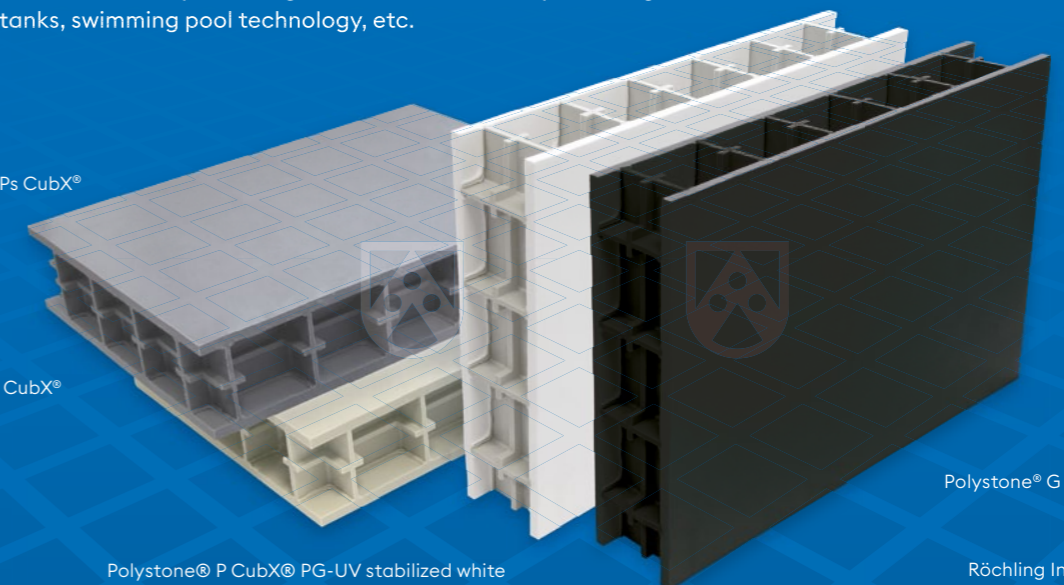


### Application areas

- Rectangular tank, for example, for galvanising plant, steel pickling plant, sewage technology, cleaning systems, purification systems, tank fittings
- Lids and partitions for round tanks
- Enclosures for ventilation systems
- Retrofitting and repair of rectangular tanks
- Additional significant potential in other applications outside the chemical industry including flood retention, fishery breeding tanks, swimming pool technology, etc.

Polystone® PPs CubX®

Polystone® P CubX®



Polystone® G CubX®

Polystone® P CubX® PG-UV stabilized white

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