Lining the interior of food silos with SIMONA® PP-H AlphaPlus®

SIMONA® PP-H AlphaPlus® sheets are food compliant in accordance with EU Regulation No. 10/2011 and allow long-term hygienic storage of foodstuffs and ingredients.

TATE & LYLE plc is an international British company in the food industry and it specialises in the production of sweeteners, starch and food supplements. The company’s Dutch subsidiary commissioned Roos & Co. Kunststoff- und Metallverarbeitungs GmbH to rehabilitate food silos. The interiors of the six concrete silos were lined with SIMONA® PP-H AlphaPlus® sheets, which proved to be a convincing solution on account of their food compliance, easy processing capability and high chemical resistance.
SIMONA® PP-H AlphaPlus® – resistant, easy to process and safe in contact with foodstuffs

Initial situation
The hygiene demands made of modern food production are high. To continue being able to ensure hygienic long-term storage of food ingredients the company TATE & LYLE Netherlands BV decided to have a total of six concrete silos rehabilitated. Each of the nine-metre-high silos has a total volume of about 175 m³.

Task
Roos & Co. Kunststoff- und Metallverarbeitungs GmbH was awarded a contract to submit a rehabilitation proposal for the storage silos. The new material for the interior lining of the silos had to be easy to process and it was absolutely imperative to have approval for contact with food in accordance with EU Regulation No. 10/2011. In addition, it had to make a permanent connection with the external concrete of the silos.

Since the new interior lining or coating system had to be a long-term solution, the client attached special importance to the quality, strength and resistance of the material.

Solution
For this task Roos & Co. decided in favour of rehabilitation using SIMONA® PP-H AlphaPlus® sheets. Apart from smooth sheets, in certain areas of the silos BEKAPLAST™, a mechanically reinforced thermoplastic interior lining system from STEULER-KCH GmbH, was also used. BEKAPLAST™ sheets have fixing studs on one side which can dig into a sealing compound.

For the interior lining of the silos the sheets were fastened to the inside of the silos with a slight gap. The next step was to fill the cavity between the concrete wall and the sheets. After the curing process and the welding of the sheets the result was a perfectly sealed interior lining made of SIMONA® PP-H AlphaPlus®.

The smooth surface of the sheets will prevent the foodstuffs from clinging to them in future, which is absolutely crucial for hygienic storage.