

SIMONA® PE 100 pipes, fittings and PP-H AlphaPlus® sheets for Europa-Park in Rust



Left: About 12 km of SIMONA® PE 100 pipelines ensure trouble-free supply to the water park.
Right: SIMONA's system range consists of highly versatile pipes, fittings, joining methods, sheets and custom-made components.

The project at a glance	
Client	Europa-Park GmbH & Co Mack KG, Rust
Contractor	aquila wasseraufbereitungstechnik gmbh, Wertheim
Technical support	Planning of building equipment systems: Planungsgruppe VA GmbH, Hannover
Products used	<ul style="list-style-type: none"> ■ Main dimensions of PE 100 pipes: d 50 mm–500 mm, SDR 17 and SDR 26 ■ PE 100 tees with reduced outlet, SDR 17 ■ PE 100 stub flanges, SDR 17 as for pipe dimensions ■ PP-H AlphaPlus® sheets for Captura® filtration technology
Duration of project	2 years

In an extension area of Europa-Park in Rust, covering about 450,000 square metres, a spectacular, Scandinavian-style water world was realised after a construction period of only two years. The bathing water treatment plant of the large-scale “Rulantica” project was built by SIMONA AG’s long-term partner, aquila wasseraufbereitungstechnik gmbh. For that purpose, SIMONA AG supplied a total of more than 100 tonnes of PE 100 pipes and fittings with diameters between 50 and 500 mm.



Left: SIMONA® PE 100 pipelines, PE 100 tees with reduced outlet and PE 100 stub flanges were used for the bathing water treatment plant.
 Right: The Captura® filtration systems from aquila were made with SIMONA® PP-H AlphaPlus® sheets.

Initial situation

After an extensive planning phase, the Europa-Park operators decided to build the “Rulantica” water park. It was an important milestone and by far the largest project in Europa-Park company history. 25 attractions in total, including 17 water slides, a huge wave pool and a “Lazy River” of 250 metres length, within an area covering about 32,600 square metres, serve to illustrate the significant demand for pipelines, fittings and sheets required to ensure safe and reliable water treatment at the gigantic indoor park.

Task

For the construction of a new bathing water treatment plant, the products to be used had to meet particularly demanding requirements. Apart from excellent corrosion resistance and minimal incrustations, the piping system also had to have a high pressure-specific load-bearing capacity in the long term.

Solution

PE 100 pipes, fittings and PP-H AlphaPlus® sheets were delivered not only to the production site of aquila wasseraufbereitungstechnik gmbh in Wertheim for the purpose of prefabrication but also directly to the construction site for pipeline assembly. In terms of dimensions, the diameters of the PE 100 pipes ranged from 50 to 500 mm in SDR 17 and SDR 26. Using the appropriate PE 100 tees with reduced outlet, SDR 17 and PE 100 stub flanges, an entire piping system was constructed for bathing water treatment. In addition, the Captura® filtration systems from aquila were made with SIMONA® PP-H AlphaPlus® sheets. After a construction period of 2 years, a total capital investment of around 180 million euros and pipelines laid over a distance of 12 km, the new water world of Europa-Park’s “Rulantica” was opened. The water world can be used by 3,500 guests at any one time.

SIMONA® PE 100

Properties

- notch resistance
- long service life
- strong, integral and permanently watertight welded joints
- no incrustation
- excellent hydraulic properties due to minimal wall roughness
- high abrasion resistance
- high corrosion resistance
- high flexibility
- good chemical resistance
- good storage properties due to insensitivity to frost and ultraviolet radiation

Further information

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