CONSTRUCTION DETAILS

BEHIND THE CONSTRUCTION FENCE

TECHNOLOGY

New MAM Competence Center

10.11.2022 / Österreich / Michael Windisch



Factbox

Client: MAM Health & Innovation GmbH, Siegendorf

Contractor: PORR Bau GmbH NL NÖ, Wr. Neustadt

Architect: Innocad Architektur ZT GmbH, Graz

Contract Type:Generalunternehmerin

Project Type: Building construction, Offices

Scope: Construction of a research and development centre

Contract Volume: EUR

11.5 m

Construction Start: April

2020

Construction End: November 2021

Location: Großhöflein

PORR has built a new R&D centre for baby products manufacturer MAM in Großhöflein. The project put special emphasis on sustainability and flexibility of use.

As a global leader in the development and production of baby products, <u>MAM</u> takes the utmost care to combine functionality, attractive designs and high product safety standards. <u>High quality</u> is always MAM's number one priority – there are no compromises in this regard.

A strong and enduring interest in sustainable baby products and responsible practices is part of the Austrian family-owned company's DNA. The company, which has been committed to the well-being of the next generation since 1976 and now operates worldwide, has built a new research and development centre in Großhöflein near Eisenstadt to develop new products. Following a two-stage planning competition, PORR was awarded the contract to implement the project, which places great emphasis on sustainability, flexibility and high-quality fittings. The order volume was 11.5 million euros.

Sophisticated architecture and logistics



The floor plans of the three buildings are formed by intersecting circles. Spacious atriums are located at the respective centres of the circles. (c) PORR

The building is made up of three interlocking cylindrical structures of different heights, the lower floors of which are cut into the natural slope. Construction began in April 2020, just as the coronavirus pandemic was beginning to spread throughout the country. Materials were scarce, and the approval process took longer than usual. Even the excavation work was a considerable logistical challenge, as the location of the structure in the upper part of the property meant that there was only one access route. The spoil also contained many large boulders, which meant that it could no longer be used as backfill material as planned. The entire structure was erected using the frame method, and slabs were used for the foundation. The loadbearing components are reinforced concrete columns, reinforced concrete walls and reinforced concrete floors. Creating the circular formwork, laying the radial and star-shaped reinforcement sections and laying the concrete core activation hoses in the ceiling put the team's skills to the test. An access level was created around the structure in November 2020 to allow geothermal drilling to commence. Once the roof was watertight and the building shell was complete, the building was provisionally covered with tarpaulins and work began immediately on fitting out the interior. The floor-to-ceiling, panoramic wood and aluminium windows were installed during the winter months, the drywalls were produced, the rails for suspending acoustic baffles from the ceiling were mounted, and the ceiling was sprayed.

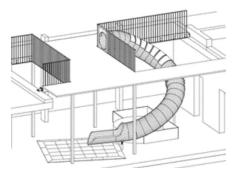
Drilling deep

The screed was installed in the bathroom units in spring 2021. The laboratory and the office facilities were fitted with false floors with air ducts. After constructing the glass roofs and a slide, the 120m-deep boreholes for the 24 geothermal probes, which are used to heat the buildings in winter and cool them in summer, were completed. The distinctive

sun protection louvres were then installed on the outside, while the glass walls were fitted on the inside. The baffle ceilings in the circular buildings are arranged in a star shape radiating from the centre of each circle. Suspended wooden ceilings were also installed and most of the exterior columns and drywall were clad in timber.

The slide





Complex technical facilities

High-quality technical facilities were very important to the client. In terms of technical building services, this included cooling ceilings, floor convectors, and false floors and shafts with air ducts. The installation of a KNX bus system for building automation, electronic access controls, audio

systems in the meeting rooms, strip lighting in the offices and spot lighting in the traffic areas meant that the project also presented a considerable challenge in terms of electrical engineering. Grassy lawns planted with greenery, and ornamental gravel complement the circular company building.



The circular formwork, laying the radial and star-shaped reinforcement sections and laying the concrete core activation hoses in the ceiling put the team's skills to the test.

Michael Windisch

Conclusion

PORR was tasked with reconciling the architects' vision with what was technically feasible. The construction scheme was handed over in November 2021 to the complete satisfaction of all the parties involved. Due to the pandemic, the grand opening took place more than half a year later, in June 2022.

Today, the Competence Centre in Großhöflein houses 75 workstations in the laboratories and offices, plus an underground car park, a product warehouse, engineering rooms, a reception area, a lounge, a kitchen, a gym, a roof terrace and an atrium with a slide.



Galerie

























Technische Daten

Gross floor area	3.688 m²
Land area	5.759 m²
Excavation	12.800 m³
Used concrete	3.400 m³
Used concrete reinforcing steel	335 t
Solid glass walls	720 m²
Sun protection louvres	1.430 m²
Suspended acoustic baffles	5.500 m
Concrete core activation	2.620 m ²
Geothermal probes	24 Stk. a 120 m