

References

Metsä Group's new bio-product factory in Äänekoski

Uponor involvement



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In addition to pulp, the Äänekoski factory produces bio-products such as pine oil, turpentine and biogas. Metsä Group has invested 1.2 billion euros in the new factory, which is the largest investment in the history of Finland's forestry industry. Uponor Infra delivered most of the project's municipal infrastructure – the water, sewage and storm water pipes, the wells, and their parts. The deliveries also included an over one-kilometre-long Weholite outfall pipe for cooling water.

Project Facts:

Location	Completion
Äänekoski, Finland	2017
Building Type	Product systems
Industrial	Tailor made constructions
Project Type	
New building	

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The construction schedule for the new bio-product factory left no room for delays. Occasional traffic jams almost formed on the worksite, which included many sites under construction at the same time. The old pulp plant, which is now closed and ready for demolition, was fully operational during the entire construction period.

“Towards the end of the project, the pipes almost laid themselves compared to the early phases, because we managed to

leave the busiest plant construction area. At the same time, daily negotiation with other contractors was markedly reduced. We also began performing installations in shallow trenches, which did not require separate support structures,” says Project Foreman Arto Korhonen of Graniittirakennus Kallio Oy.

Graniittirakennus Kallio, which was responsible for the bio-product factory’s under-ground pipe work, was also involved in other projects. This company was the one managing most project contracts with construction companies during the project. Korhonen comments that, with around 20 years of experience, he is an old hand in the business but is still amazed that such a sizeable project was kept on schedule.

For the project to remain on time, the pipes had to be laid flexibly in line with other construction, despite the occasional surprise created by difficult ground conditions. He affirms that change is the only permanent aspect of industrial construction. Flexibility on site ensured completion on time. “I have only praise for Uponor. Despite the changes in the plans, we were provided with excellent support from both sales and production staff,” Korhonen adds.

Varying installation conditions were challenging

The first pipes had to be installed and built in a sheet piled cofferdam, and the 22-metre long pipes needed to be shortened to 7–8 metre lengths. Korhonen admits that, by then, he doubted their ability to stay on schedule. “We were able to catch up once we’d moved to the embankment section. After that, installation of the pipe elements progressed quickly, compensating for the slow start.” Uponor delivered the materials as the work progressed. Since no storage was available, the lorries brought the pipes directly from the factory to the edge of the worksite.

Planning and support at an early stage

What do projects of this magnitude teach their creators? “In a factory or in any other kind of project, a functioning infrastructure including piping, roads, etc. should be planned at an early stage. Unfortunately, infrastructure plans are often made in the final stage of the design process, leading to challenging timetables. People only tend to notice infrastructure when it is lacking,” comments Korhonen. Uponor Infra’s Area Sales Manager, Tom Karnela, also points out that the Äänekoski project had a tight schedule.

“In large projects, plans are dynamic and become more precise as the project progresses, and this must be taken into account.” Uponor Infra 360° Project Services was closely involved in the Äänekoski project, providing support for planning and tailored solutions at different stages. “In addition, we provided technical support during the entire project, and our welders were involved in the installations.” Karnela points out that the various services within the 360° Project Services concept can also be used in small projects.

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