

MVA Spittelau, Wien Energie Austria

State-of-the-art control system for
simulation and hardware independence



The plant

The waste-to-energy plant Spittelau in Vienna is located in the heart of the Austrian capital and was designed by the artist Hundertwasser. For more than 50 years now, the waste incineration plant with a total installed capacity of 460 MW has supplied Viennese households with district heating and makes an important contribution to waste disposal and resource utilization.

Wien Energie relies on the latest technologies to ensure continuous operation of the plant.



The task

Wien Energie wanted the Spittelau plant to become a modern and digitized plant, one that is mostly hardware-independent. The control system, which was no longer up to date, needed to be replaced in order to take full advantage of the benefits of digitization and advanced control concepts.

In order to become less reliant on specific components and thus keep maintenance costs as low as possible, the control system needed to be virtualized as well. This task was facilitated by the fact that Wien Energie has its own data center on the site.

The company required an accurate way to simulate plant processes, both to test new engineering functions and for training purposes.

The solution

By upgrading to the Omnivise T3000 control system, the waste-to-energy plant Spittelau was brought up to date with the latest technology and is able to recycle waste in an even more environmentally friendly, efficient way. With the integrated functionalities of **T3000 Virtual and T3000 Simulator**, the control technology is hardware-independent and employees can be trained 1:1 in the real operating environment.

Simulation:

The digital twin of T3000 maps the real behavior of the system 1:1 without making any changes to the “real” system. Employees can be trained directly in Omnivise T3000 and new control concepts can be safely tested.

Virtualization:

By decoupling hardware and software, the control system is able to be run in a virtual environment. This allows the application software to be executed virtually without the need for dedicated hardware.



MVA Spittelau: A gem in the heart of Vienna.

“With the Omnivise T3000 Simulator, we can test malfunctions that rarely occur in real operations, in order to react accordingly in case of an emergency.”

Stefan Huber, Operations Manager Spittelau plant,
Wien Energie GmbH

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