



A LOOK BEHIND THE SCENES

The largest home market order to date

The N6 aluminium slag reprocessing plant is the largest construction site in Austria for BTW Plant Solutions to date, and the rapidly approaching completion provided a unique opportunity for staff in the purchasing department to get a close-up view of the achievement, quality and not least the sheer size of this impressive plant. With an export ratio of more than 95 %, employees of BTW Plant Solutions are rarely able to make a local site visit that is just one hour's drive away from the factory. As a result, there wasn't a single second of hesitation amongst any of the plant purchasing staff in joining in the visit to this key construction site. Following development of a new, more cost-effective method of reprocessing, the client, ARGE N6, was awarded the main contract and commissioned BTW Plant Solutions as the general contractor for the process, materials handling and storage technology. In just under four months, a total of no less than 23 large silos were installed, along with five screening machines, mixers, a virtually endless number of conveyor belts and last but not least an elaborate exhaust gas purification system, including filters and scrubbers. The complex electrical and control systems for the plant have been supplied by the BT-Anlagenbau subsidiary.

Over the next five to six years, this plant will recycle a landfill site, created in the 1970s and 80s, in an environmentally friendly manner. An estimated one million tonnes of waste material are contained in the aluminium slag dump in Wiener Neustadt, of which around 700,000 tonnes are aluminium dross. In the years 1974 to 1991, the Wiener Neustadt aluminium slag dump was filled with waste from timber and textile industries as well as aluminium dross. Since 1991, it has been classified as a dangerous contaminated site. The decades of deposits have resulted in the deterioration of groundwater and the production of hydrogen, methane and ammonia.

However, modern state-of-the-art processes can be used to recover valuable raw materials from the landfill, in particular primary aluminium. Using a novel technology, the metallic aluminium still contained in the waste is separated and fed into a melting process for the recycling of Al alloys. In comparison to the initial plan for redevelopment of the site, this process will result in an enormous reduction in emissions, in particular around 800,000 tonnes of CO₂ that is relevant for the climate. ARGE Sanierung Altlast N6 will re-

utilise about 80 percent of the waste deposits as raw materials. The rest will be treated so that it is no longer a hazardous waste and can be disposed of in an environmentally sound manner. The total value of the project amounts to some € 210 million.

The sheer scale of the project, the tight schedule and the intensive on-site support required, represented a significant challenge for even the most experienced and optimistic experts. This made the visit to the plant, just before start-up, even more gratifying. One of our commissioning engineers on-site, recently enrolled with the company, told us that, when he initially visited the site in the summer, he thought the planned 100 tonne trial in December was wishful thinking on our part, and doubted that it would happen based on his previous experience. As he explained:

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In my previous company, we were unable to execute a project within this tight schedule as we just didn't work so well together across different departments, as at BTW Plant Solutions.

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His comment underscores yet again the strength of BTW Plant Solutions, through its cohesion during the most critical phases, of making the impossible possible.

After some two hours following the material flow through the plant, the purchasing team left the construction site with a last proud look and inspired by their visit. Normally, in the purchasing department, they only get to see the quotations, orders and invoices, so actually seeing all the parts of the puzzle that were delivered on time and assembled into such an impressive plant was quite an experience. The only thing that could be said to fall short with such a large plant, is the comparatively short planned service life of just six years. Within this short period of time, the plant will have fully served its purpose and this newly erected monument, visible from far and wide, will be demolished by 2024 at the latest.