

## Media Release, 20 February 2024

# Hitachi Zosen Inova Steinmüller Chosen to Build a New Grate and Boiler System in Darmstadt

Hitachi Zosen Inova Steinmüller has been awarded a contract to build a new grate and boiler system at the Darmstadt waste-to-energy plant owned by Zweckverband Abfallverwertung Südhessen in Germany.

Hitachi Zosen Inova Steinmüller GmbH, a part of Hitachi Zosen Inova AG, Switzerland, a global leader in waste-to-energy and renewable gas technologies, has received an order to construct a new and highly efficient grate and boiler system within an established waste-to-energy facility in the city of Darmstadt.

**Darmstadt, Germany.** Hitachi Zosen Inova Steinmüller (HZI-STM), Gummersbach, has signed a construction contract with its long-term customer Zweckverband Abfallverwertung Südhessen (ZAS) for a new incineration/boiler system at ZAS's Darmstadt waste-to-energy (WtE) plant. The new unit will replace one of the three existing lines and boiler systems at the facility which has come to the end of its operational life.

HZI, formerly Von Roll, has previously installed boiler and flue gas treatment technologies at the ZAS-owned plant, which were started up in 1990, 1991 and 1998. The three existing lines at the plant process 220,000 tonnes of non-recyclable waste each year, ensuring safe waste treatment services for around 1 million citizens in the regions of Darmstadt, Darmstadt-Dieburg, Odenwald, Groß-Gerau and in the district of Bergstraße.

ZAS will first dismantle and clear the existing second waste incineration line with a waste capacity of 55,000 tonnes per year, enabling HZI-STM to replace it with a highly efficient and larger incineration/boiler system. This new system will be capable of processing 135,000 tonnes of non-recyclable municipal solid waste each year, with a thermal capacity of 48 MW in continuous operation. In addition, the 63 tonnes per hour of steam produced will be used to generate electricity and supply heat to the local electricity and district heating network. This will maintain an established circular economy system in Darmstadt, which works to reduce the carbon footprint of waste produced in and around the city.

HZI-STM will begin construction works on the new line in January 2025, and this will become fully operational in summer 2026. However, the special feature of this project is the future interconnection of the HZI-STM unit with a new, and separate, rotary kiln line which will be able to treat sewage sludge.

From 2028, the two WtE lines will be interconnected to maximise heat re-use and power generation efficiencies. This will firstly see the hot gases from HZI-STM's waste boiler reused to dry sewage sludge at temperatures of between 900 and 1000°C. Once the sludge is sufficiently dried, it will create a waste source which can then be used to generate even more electrical power. In addition, the gases produced by the rotary kiln process, alongside the dried sewage sludge, will be returned to the HZI-STM boiler for treatment and provide additional power generation. With the two new lines working in combination, ZAS will be able to operate its facility at optimum efficiency.

"HZI Steinmüller is delighted to have been selected by Zweckverband Abfallverwertung Südhessen to build a new grate and boiler system at Darmstadt and continue a working relationship that stretches back to the 1990s," said Thomas Feilenreiter, Executive Vice President HZI Steinmüller GmbH. "This is a very important project for HZI Steinmüller, as it demonstrates that our waste-to-energy technologies are continuing to be sourced and selected by existing and new clients around the world."



## **Note to Editors**

### About Hitachi Zosen Inova:

Zurich-based green-tech company Hitachi Zosen Inova (HZI) is a global leader in solutions for energy transition and circular economy including Waste to Energy and Renewable Gas (RG), operating as part of the Hitachi Zosen Corporation Group. HZI acts as a project developer, technology supplier and engineering, procurement and construction (EPC) contractor delivering complete turnkey plants and system solutions for thermal and biological waste recovery. Its solutions are based on efficient and environmentally sound technologies, are thoroughly tested, and can be flexibly adapted to customer requirements. HZI's Service Solutions Group combines its own research and development with comprehensive manufacturing and erection capabilities to provide support throughout a plant's entire plant cycle. HZI works for customers ranging from established waste management companies to up-and-coming partners in new markets. Its innovative and reliable solutions have been part of more than 1,600 reference projects worldwide. Hitachi Zosen Inova Steinmüller GmbH, based in Gummersbach, is a subsidiary of Hitachi Zosen Inova and is universally famous for superior technology in thermal waste treatment and flue gas treatment.

To find out more about HZI, please visit www.hz-inova.com.

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