

## Case Study: Thermie-S Liquid Insulation Application at Budapest Waste-to-Energy Plant



**Project Overview:** Fővárosi Hulladékhasznosító Mű (FKF Zrt.), Hungary's only municipal waste-to-energy plant, implemented an insulation upgrade project to enhance energy efficiency and safety. Built as a national project in 1982, the facility has undergone continuous updates and modernization. This project, utilizing Thermie-S liquid insulation coating to insulate large cylindrical tanks and associated piping systems, was part of these ongoing improvement efforts.

**Background:** FKF Zrt. is a critical infrastructure facility for Hungary, processing municipal waste to generate energy. As the country's sole plant of its kind, maintaining its efficiency and extending its operational life through regular upgrades is of national importance.

**Challenges:**

- Applying insulation while maintaining plant operations
- Ensuring uniform coverage on curved surfaces
- Achieving effective insulation with minimal thickness
- Withstanding high temperatures and harsh industrial conditions

**Solution:** The project team selected Thermie-S liquid insulation coating for its unique properties and ease of application. This advanced material allows for thin yet highly effective insulation layers, ideal for the complex geometries found in industrial settings.

**Implementation:** Thermie-S was applied in multiple thin layers to build up the desired insulation thickness. The liquid nature of the product allowed for seamless coverage of curved surfaces and complex pipe configurations. The team carefully masked areas not requiring

insulation and paid special attention to ensuring complete coverage around valves and pipe junctions.

Results: The Thermie-S insulation system is expected to provide:

- Significant reduction in heat loss from process vessels and piping
- Improved overall plant energy efficiency
- Enhanced corrosion protection for equipment
- Increased worker safety by reducing surface temperatures
- Minimal added weight and thickness compared to traditional insulation methods

Advantages of Thermie-S:

- Thin application allows for space savings and easier inspection of underlying surfaces
- Liquid form enables insulation of complex shapes without custom fabrication
- High durability and resistance to industrial environments
- Easy to repair or reapply as needed

This case study demonstrates the successful application of Thermie-S liquid insulation coating in a challenging industrial environment. The project showcases the product's ability to provide effective insulation while accommodating the unique needs of a waste-to-energy facility. By choosing Thermie-S for this modernization effort, FKF Zrt. continues its commitment to maintaining and improving this critical national infrastructure.



