

Case Study: Thermal Insulation Project at Arany Kapu Chemical Plant

Client: Arany Kapu Borászati Melléktermék Feldolgozó Zrt. Location: Kunfehértó, Hungary
Product Used: Thermie-S liquid insulation

Project Overview: Arany Kapu, a chemical plant specializing in processing wine industry by-products, required thermal insulation for various equipment and piping systems to improve energy efficiency and safety. The company chose to use Thermie-S, an innovative liquid insulation product, for this project.

Challenge: The plant had a complex network of pipes, tanks, and vessels with irregular shapes and sizes, making traditional insulation methods difficult and time-consuming to apply. Additionally, the chemical processing environment demanded a durable, corrosion-resistant insulation solution.

Solution: Thermie-S liquid insulation was selected for its ability to conform to irregular surfaces and provide excellent thermal protection. The product's ease of application and resistance to chemicals made it ideal for the challenging industrial environment.

Implementation: The insulation project involved several phases:

1. **Surface Preparation:** Equipment and pipes were cleaned and prepared for insulation application.
2. **Application:** Thermie-S was applied using spray equipment, allowing for even coverage on complex geometries.
3. **Multiple Coats:** To achieve the desired insulation thickness, multiple layers were applied.
4. **Exterior Piping:** The product was also used on outdoor piping systems.

Results: The use of Thermie-S liquid insulation provided several benefits:

1. **Improved thermal efficiency:** The insulation significantly reduced heat loss from equipment and piping.
2. **Enhanced safety:** By lowering surface temperatures, the risk of burns and injuries to workers was minimized.
3. **Corrosion protection:** The seamless coating provided an additional barrier against corrosive elements in the chemical plant environment.
4. **Time and labor savings:** The liquid application method proved faster and easier than traditional insulation techniques, especially for complex shapes.
5. **Durability:** The insulation is expected to perform well over time, even in the harsh industrial setting.

Conclusion: The Thermie-S liquid insulation project at Arany Kapu Borászati Melléktermék Feldolgozó Zrt. demonstrated the product's effectiveness in addressing the unique challenges of insulating a chemical processing facility. The successful implementation has led to improved energy efficiency, safety, and overall plant performance.

