

## Case Study

# Maximum protection thanks to legally compliant double containment systems made of plastic

Safe transport of various chemicals during the production process



# Protecting employees, the environment, and the company

As part of the ams-Osram Group, ams-OSRAM International GmbH Regensburg is a company specializing in optical semiconductors and LED technology whose products are used in the fields of lighting, visualization, and sensor technology. To produce its various products, the company was looking to expand its facilities and needed a reliable double containment piping system to ensure the safety of workers as well as the environment. As a result, OSRAM turned to GF Piping Systems and the CONTAIN-IT Plus system.

## Project background

Producing semiconductors and LED technologies requires the supply and treatment of ultra-pure water and specialized chemicals. To ensure their safe and reliable transport and to comply with strict guidelines, ams-OSRAM International GmbH uses double containment piping systems. After planning a production expansion, the company searched for a modern double containment system made of plastic that is suitable for a wide range of substances. In addition, ams-OSRAM International GmbH wanted to connect two buildings that feature different control systems. Bilfinger Life Science, a specialist for plant design and piping construction, was tasked with the project.

## Selected technical solution

CONTAIN-IT Plus by GF Piping Systems, a lightweight double containment solution made of plastic, is selected during the planning process. The Swiss flow solutions provider offers a diverse product portfolio (including pipes, fittings, valves, mechanical separation, solutions for leak detection, as well as machines and tools for jointing technologies) that can be adapted to the specific needs of a project. CONTAIN-IT Plus was developed according to the leading DVS 2210-2 guideline for double containment piping systems and can be connected via butt welding, electrofusion, and infrared fusion or cementing. Transparent sections of the outer protective pipe enable a quick and easy visual confirmation during routine inspections.

## Achieved improvement

Despite a strict schedule and tight installation spaces, the compact and lightweight components could be quickly installed without unnecessarily impacting production. Due to the material properties of the selected plastics, such as Polyethylene (PE100) for the outer pipe, the new double containment system is long-lasting and reliable while requiring minimal maintenance. Furthermore, the inner pipe could be checked for tightness before

the outer pipe was connected, adding another layer of safety. Throughout the project, GF Piping Systems offered planning support, supplied additional equipment for the installation, and was able to carry out trainings.



ams-OSRAM International GmbH required a modern double containment system that combines high quality standards with a fast installation time.



Featuring plastics that are adapted to the media characteristics in the production facility, CONTAIN-IT Plus is corrosion-free and requires little maintenance.

## Benefits

- **CONTAIN-IT Plus offers flexible risk minimization for the transport of hazardous media and can be adapted to meet the specific needs of the customer**
- **Thanks to the DVS-compliant jointing process, the connection of the inner pipe can be verified before closing the outer pipe**
- **Corrosion-free plastics, adapted to the media characteristics, ensure a long-lasting and cost-effective operation**

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