

Press release



ChemCon GmbH, Freiburg, October 22, 2024

New sustainable cooling system in operation at ChemCon!

In recent years, ChemCon GmbH has invested more than **10 million euros** in the development and modernization of its production and analytical laboratories and clean rooms. Reactors and dryers to the latest technical standards have also been purchased and installed. Software for optimized documentation and automation of business processes was purchased and established.

The considerable expansion of production and laboratory capacities and the corresponding expansion of the equipment pool meant that the two cooling systems installed in 2016, each with a cooling capacity of 270 kW, reached their capacity limits and were expanded. The company's own cooling systems enable a stable production process with redundant cooling and are used for temperature control and dehumidification in the laboratories and clean rooms, as a constant temperature and humidity are crucial for production quality. In addition, the refrigeration systems are used to cool the chemical equipment with water, replacing the city water previously used for cooling.

“Sustainability was very important to us when selecting the new system. The new system has a cooling capacity of **300 kW** and uses propane as a refrigerant, which completely eliminates the use of ozone-damaging perfluorinated and polyfluorinated alkyl substances (PFAS) in the new system. By circulating the cooling water via heat exchangers, over 1000 m³ of city water could already be saved each month with the two old refrigeration systems. Following the expansion and installation of the new system, this saving will increase to at least 1500 m³ per month” - said **Dr. Peter Gockel**, Head of Technology & Facility. - “In addition, the new system and the existing three cooling circuits have provided us with the necessary redundancy in the event of a system failure.”

Further advantages of using propane in refrigeration systems are the very low global warming potential (GWP) compared to conventional refrigerants and the up to 40% lower energy consumption, which leads to considerable savings in operating costs. In summary, systems using propane as a refrigerant are more environmentally friendly and energy-efficient and therefore significantly more sustainable.

The disadvantage of propane cooling systems is the significantly higher purchase costs. To make this economically attractive, the purchase was subsidized by the Federal Office of Economics and Export Control. ChemCon's total investment nevertheless amounted to more than **300,000.00 euros**.

From September 2024, the new system will be in operation together with one of the older systems. The second old system is available for redundancy purposes or for very high cooling requirements in summer. This ensures an uninterrupted production process even if one system fails.

Press release



ChemCon's expansion is a direct response to the increasing demand for polymers, in particular polyethylenimines (PEI) and polyoxazolines (POx). These are becoming increasingly indispensable in the pharmaceutical sector, e.g. as transfection agents. With over 15 years of experience in the production of PEI and POx under Good Manufacturing Practice (GMP) conditions, we are proud to be one of the few global contract development and manufacturing organizations (CDMOs) equipped for this task. We have the highest GMP quality standards and can offer GMP production in very small quantities but also on a multi-kg scale. Our aim is to provide a consistent and high-quality supply of GMP compliant polymers, inorganic trace elements and pharmaceutical small molecules.

About us:

ChemCon is an owner-managed, medium-sized chemical service provider based in Freiburg i.Br., at the foot of the Black Forest. The 140-employee company is a contract manufacturer and analytical service provider for active pharmaceutical ingredients and fine chemicals. Comprehensive investments in modern technologies and safety, even beyond legal requirements, are an integral part of the corporate strategy.

ChemCon's laboratories and cleanrooms are specially designed to produce active pharmaceutical ingredients for clinical trials and substances for special applications. Examples include active ingredients for rare diseases, emergency or post-operative medicine, ophthalmology, oncology as well as intravenous excipients, diagnostics or dietary supplements.

Presse Downloads:

[Link](#)

For further information please contact:

Dr. Michael Woydt (Head of Marketing)

Tel.: +49-761-5597-0

E-Mail: Michael.Woydt@ChemCon.com