



THE CUSTOMER

IMA Life Freeze Drying Solutions, a leader in precision aseptic processing and freeze-drying solutions for the aseptic, biopharmaceutical and pharmaceutical markets.

THE CHALLENGE

Ensure reliable heat transfer from silicone oil to ensure constant, precise, and stable temperature.

THE SOLUTION

SWEP brazed plate heat exchangers, used as evaporators to cool silicone oil to -80°C quickly and effectively, for use in the pharmaceutical freeze-drying cycle.

THE HEAT EXCHANGERS

Each compressor in the system is equipped with two V120T brazed-plate heat exchangers.

THE RESULTS

A compact solution that delivers stable, reliable performance.

Optimizing freeze-drying solutions for the pharma industry

Certain pharmaceuticals must be stored and packed in the form of lyophilized product. This may pose a challenge for freeze-drying equipment, which must maintain precise temperature control during the freeze-drying cycle. Effective heat transfer in the secondary refrigerant, silicone oil, is crucial to this complex process. Fortunately, SWEP brazed plate heat exchangers are capable of delivering precise silicone oil cooling.

The role of SWEP BPHEs

To ensure the reliability and quality of the freeze-drying process, IMA installed two SWEP V120T BPHEs as evaporators for each compressor in the system. The result is a compact solution with a considerably smaller footprint than the previous solution. However, the most significant advantage of the new system is its stable, reliable performance. This reliability is especially important for pharmaceutical producers who hope to achieve sustainable production with minimal downtime, preventing the loss of expensive, highly sensitive pharmaceutical products.



More About IMA LIFE

For more than half a century, IMA Life Freeze Drying Solutions, an industry leader in the fields of aseptic processing and freeze-drying, has been the gold standard supplier of freeze-drying solutions for the pharmaceutical and biotech industries. IMA Life has the capacity and know-how to fulfill any requirement presented by the aseptic, biopharmaceutical, and pharmaceutical markets. Each product represents consolidated technology, acquired not only over the course of 60 years' experience, but also through the company's ongoing partnerships with leading pharmaceutical companies worldwide.



Why choose SWEP?

"It is essential that pharmaceutical products are treated with the utmost respect and care during handling. Take the freeze-drying of powders as an example. No negligence is allowed during the production process, as any deviations in temperature will result in the contamination of the entire batch under processing. SWEP brazed plate heat exchangers deliver stable performance, which is an aspect we pay great importance to. This helps us to provide more reliable equipment to our customers and achieve sustainable pharmaceutical production", says Mr. Wang, Technical Department Manager at IMA Life.



SWEP brazed plate heat exchangers.