

Press release

## **From +5 to -86 degrees: Liebherr appliances ensure safe storage of vaccines, pharmaceuticals and research materials**

**Our hopes rest on a number of new vaccines to carry us through the corona pandemic. To ensure safe storage of the sensitive vaccines, pharmaceuticals and research materials high-performance fridges and freezers are essential. Liebherr-Appliances offers the full product range for refrigeration. Pharmacy fridges provide refrigeration at +5 degrees, laboratory refrigerators at -20 degrees and ultra low-temperature freezers at down to -86 degrees Celsius.**

Ochsenhausen (Germany), 22 January 2021 – For many years Liebherr-Appliances has also been developing and producing appliances for the Scientific & Health Care sector. The specific challenge in this case is the proper and long-term storage of temperature-sensitive materials. Vaccines in particular rapidly become unusable if not stored under the perfect conditions. Vaccine storage requires a reduction in cell activity and this, in turn, requires certain temperatures. All Liebherr appliances are able to fully document that the temperatures required for each vaccine have been reliably maintained. Features including integrated safety systems such as optical and audible alarms and extensive interfaces for forwarding alarms also ensure the safety of the valuable goods being stored.

Liebherr-Appliances has now added the new ultra-low temperature freezers (ULTs) to this product range – these currently represent a highly important product segment. The refrigeration specialist therefore now offers a full spectrum for optimum storage of a wide variety of application groups from +5 degrees Celsius to -86 degrees Celsius. This ensures the quality of the goods stored over months or even years.

### **Pharmacy fridges: as versatile as they are precise**

The product range includes pharmacy fridges. In pharmacies, doctors' surgeries and hospitals, these appliances offer the professional solution for the safe storage of temperature-sensitive pharmaceuticals needing refrigeration at temperatures between +2 degrees Celsius and +8 degrees Celsius. Liebherr has been producing pharmacy fridges for more than ten years, with extensive experience in this sector. A wide variety of specimens,

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samples and sensitive pharmaceuticals can be stored in the refrigerators. Precision electronic controllers combined with highly effective insulation, the optimised dynamic cooling system and the careful processing ensures that safety is maintained. The appliances comply with the DIN standard 58345 for the storage of pharmacy products.

The product range offers the right solution for every requirement. The pharmacy fridges are available in four basic models - each with a solid door or glass door. The glass door provides a particular advantage. It gives you an overview before you even open it, which means the door only needs to be opened for a short time. This ensures that precise regulation with an extremely flat temperature curve is not interrupted.

### **Laboratory refrigerators: maximum safety for highly sensitive substances**

Laboratories are also dependent on the reliable storage of sensitive substances. For twelve years now Liebherr has been offering specialised laboratory refrigerators allowing highly sensitive or even flammable substances to be stored safely. Innovative cooling technologies and smart functions ensure optimum storage conditions at constant temperatures. The targeted airflow in the appliance distributes the cold air evenly and maintains a constant temperature. In the event of deviations, a visual and acoustic warning system alerts the user in good time so that no damage can occur. The optionally expandable SmartMonitoring provides even more precise control and therefore maximum safety during storage. The laboratory refrigerators can also be integrated into existing monitoring solutions, thus helping to maintain the cold chain.

The range of laboratory refrigerators includes models for every purpose. The large-volume appliances with stainless steel interior containers are particularly suitable for the long-term storage of large amounts of sensitive substances. The compact appliances with plastic interior containers are ideal where space is limited. The models with ATEX-compliant interiors offer reliable safety for highly flammable and explosive substances.

### **Ultra low-temperature freezers: the new specialists - sustainable and efficient**

Liebherr's new ultra-low temperature freezers are specifically designed for extreme storage temperatures from -40 to -86 degrees Celsius. They are used in particular for short and long-term, ultra-low temperature storage of sensitive samples such as DNA, viruses or proteins and vaccines including some of the new mRNA vaccines.

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In order to achieve temperatures as low as -86 degrees Celsius, a special cooling system is needed which differs from that in normal refrigerators. In its ultra-low temperature refrigerators, Liebherr uses currently the most energy-efficient cooling system. This is cascade cooling with two refrigeration circuits and environmentally friendly hydrocarbon refrigerants. The appliances are therefore highly energy efficient and sustainable.

For more information: <https://home.liebherr.com/en/gbr/products/commercial-appliances/research-and-laboratories/cooling-of-vaccines/cooling-of-vaccines.html>

#### **About Liebherr Appliance Division**

Liebherr-Hausgeräte GmbH is one of eleven divisional controlling companies of the Liebherr Group. The domestic appliances division employs more than 6,200 staff and develops and produces a wide range of high-quality fridges and freezers for the household and commercial sectors at its headquarters in Ochsenhausen (Germany) and in Lienz (Austria), Marica (Bulgaria), Kluang (Malaysia) and Aurangabad (India).

#### **About the Liebherr Group**

The Liebherr Group is a family-owned technology company with a broad and diverse range of products. The company is one of the biggest manufacturers of construction equipment in the world, but also offers high-quality, user-oriented products and services in many other areas. Today, the corporate group comprises over 140 companies on all continents and employs more than 48,000 staff members, and in 2019 generated consolidated total sales of over €11.7 billion. Since it was established in 1949 in Kirchdorf an der Iller in southern Germany, Liebherr's goal has been to win over its customers with sophisticated solutions and contributing to technological progress.

#### **Images**



liebherr-medication-refrigerators.jpg

High-quality specimens and sensitive medications are stored safely at all times in Liebherr pharmacy fridges. A visual and acoustic warning system alerts the user in case of temperature deviations.



liebherr-laboratory-refrigerator.jpg

The US company Moderna has announced that its vaccine mRNA-1273 can be stored long-term at -20 degrees Celsius. Liebherr's laboratory freezers are designed for this purpose and can be adapted to individual temperature and safety requirements.



liebherr-ultralow-freezer.jpg

Some new mRNA vaccines are more sensitive to heat than others. Liebherr's ultra-low temperature freezers allow ultra-low temperatures ranging from -40 to -86 degrees Celsius.

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