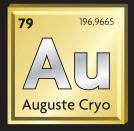
## **Auguste Cryogenics Medical Family**





Auguste Cryogenics



ttps://augustecryogenics.com/products/acmf-freezers

### AC Medical Family - AC BIO | AC IVF Freezers



With the AC BIO and the AC IVF series, Auguste Cryogenics presents the new freezers of the AC Medical Family.

Auguste Cryogenics developed the stainless steel containers in this series from the ground up using state-of-the-art technology. They are specially designed for the safe and economical long-term storage of larger sample quantities and are therefore used in the fields of medicine, pharmaceuticals and research.

The vacuum-insulated products come with Auguste Cryogenics' GOLD-standard vacuum and offer a remarkably high storage capacity in a clear, smooth-running aluminum storage system on one level for the AC BIO series and two levels for the AC IVF series. The containers of both series are characterized by very low nitrogen consumption at a stable storage temperature, which almost reaches the cold level of liquid nitrogen even in the gas phase.

The lid of the container opens easily and wide, allowing easy access to the contents. It is convenient to clean and is equipped with a control switch that, in addition to an "open lid" detection, can also send other control signals, for example for automatic demisting or rapid cooling.

Auguste Cryogenics Medical Family Freezer Series vessels can be supplied with automatic filling and control systems to ensure a regulated supply of cryogenic liquid nitrogen and continuous monitoring.

For both the AC BIO and AC IVF containers the approval according to the European Medical Devices Directive MDR 2017/745 has been applied for.









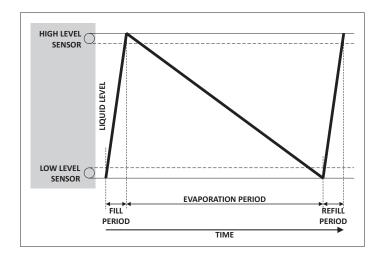
## Technical specifications of AC Medical Family stainless steel freezers from the AC BIO | AC IVF series

	AC BIO 430	AC IVF 430
Diameter [mm]	800	800
Overall height (mm)	1,342	1,342
Usable height [mm]	750	2x 370
Neck opening [mm]	317	317
LN <sub>2</sub> value below the base plate [I]	40	40
LN₂ Capacity (I)	430	430
LN₂ fill height [mm]	135	135
Evaporation rate [I/day]	9	9
Weight empty [kg] (without ICS**)	195	197
Weight full [kg] (without ICS**)		
Number of castors	5	5
Number of storage carousels	1	2
Number of racks	12+12	9+12

Due to our policy of continuous product improvement, we reserve the right to change specifications at any time without prior notice.

#### **Function:**

The cooling effect required for cryogenic sample storage is generated by the continuous evaporation of the liquid nitrogen refrigerant. The necessary heat of vaporization is extracted from the environment by heat transfer.



As a result, the liquid nitrogen level in the deep-freeze storage tanks is constantly falling. Regular, controlled refilling is therefore required (automatically or manually). This results in the liquid level curve shown here.

In order to prevent unnecessary nitrogen losses and icing of the storage containers, liquid nitrogen should be refilled at pressures between 0.7 bar - 1.4 bar only.

The insulating properties of the Auguste Cryogenics Medical Family are essentially based on the presence of a vacuum between the inner and outer container. A vacuum loss inevitably leads to a very high increase in nitrogen consumption and poses a risk for the stored samples if there is no refill with liquid nitrogen.

<sup>\*</sup> The values given are nominal values that were determined without storage system equipment and under precisely defined conditions. Depending on the operating conditions and the storage system equipment used, the actual values can deviate considerably.

<sup>\*\*</sup>ICS = Inventory Control System

# **Auguste Cryogenics**

The stainless steel freezers of the AC BIO | AC IVF series are part of the Auguste Cryogenics product portfolio.

Auguste Cryogenics is an internationally renowned manufacturer of tanks and containers for cryogenic, liquefied gases. We have over 50 years of experience designing and manufacturing these products. With our manufacturing facility in Košice, Slovakia and sales and distribution center in Husum, Germany, Auguste Cryogenics has continuously shaped the European cryogenics industry for decades and continues the tradition of practices and intellectual property with which the company was built. At the same time, we invest in our employees and in innovative solutions for tomorrow.

Auguste Cryogenics products are characterized by their high technical standard and their reliability. Our portfolio includes:

- Vertical and horizontal bulk tanks from 2,000 to 250,000 I capacity for use in industry (LIN, LOX, LAR, LCO<sub>2</sub>, LN<sub>2</sub>O) and in the energy sector (LNG, LH<sub>2</sub>).
- Stationary and transportable microBulk tanks from 750 to 5,000 l capacity.
- Liquid cylinders from 70 to 240 I capacity for different pressure levels.
- Aluminum Dewars from 2 to 175L capacity for storage and safe transport of sample material in liquid nitrogen.

We will provide you with the individual solution for your needs - please do not hesitate to contact the specialists in our sales teams.







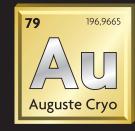






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