



°CRYOSOLUTIONS



**Deep freeze technology –
reliable and safe.**

**Benefit from the customised solutions
of Swiss specialists on storage and transport
at ultra-low temperatures.**

From consulting to the service contract – all from a single source

CryoSolutions is your full-service provider for temporary storage, transport and long-term storage of medicinal and biochemical samples and materials.

Safety, service and customer orientation are our highest priority. As the trading partner of leading manufacturers, we always provide you with the latest technology on the market. Benefit from our individual counselling and excellent service before, during and after the purchase of new infrastructure. We provide you with best quality and utmost reliability of products – tailored to suit you perfectly.

Our company was founded in the summer of 2020, emerging from Labtec Services AG. Our customers benefit from the seamless continuation of business via an internal succession plan.



Tobias Küttel, proprietor and managing director of CryoSolutions AG and former «Cryotechnology & Biomedical» division head at Labtec Services AG.

All about storage at ultra-low temperatures

We provide the perfect product for every field of ultra-low temperature storage.

Stirling Ultracold's ultra-low temperature freezers cover a temperature range of -20°C to -86°C . The cryostorage containers from Custom BioGenic Systems (CBS) guarantee long-term storage at stable temperatures of up to -196°C .

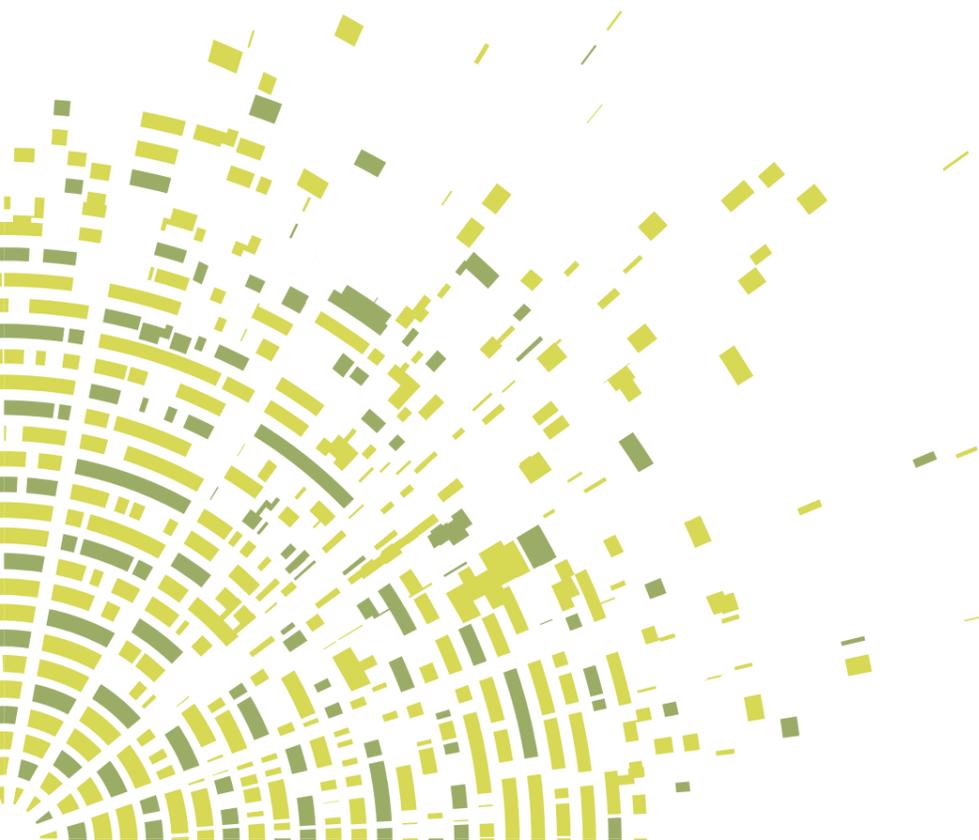
However, we not only provide storage facilities, but also transport equipment like the classic Dewars or the innovative ultra-low temperature Stirling engine-powered freezers, whose stable temperature ranges from -20°C to -86°C . They can provide cooling performance in vehicles via the 12-volt connection, or as long as an electricity supply is guaranteed. In addition to storage and transport, we also offer equipment for the controlled freezing and thawing of vials and blood bags. In this way, we achieve better and more reproducible quality of valuable samples and materials.

We are also your competent contact concerning operation and work safety when handling ultra-low temperatures. We additionally provide various storage systems for vials, straws and blood bags. We're also the right partner for customised solutions.

Supply containers for the storage of liquid nitrogen in various volumes as well as the Cryo-Lift, which facilitates storage and retrieval without great effort, round off our range of products.

We provide an all-encompassing range of services. We are happy to give you advice on choice of products, backup concepts and cost-saving use of energy and liquid nitrogen. Furthermore, we carry out on-site commissioning of equipment and train operators to use the latter.

After commissioning, preventive maintenance and a competent fault repair service provides for the durability of the chosen product.



Ultra-low temperature freezers – 20° C to – 86° C

The innovative Stirling Ultracold ultra-low temperature freezers belong in every laboratory.

Conventional ultra-low temperature freezers are based on a compressor system which is highly vulnerable in terms of wear and life span. The Stirling technology has for the first time enabled the manu-

facture of a portable ultra-low temperature freezer for temperatures of up to – 86° C for the transport of samples, which can even stay cool using your vehicle's 12-volt connection.

Advantages over conventional compressor-based ultra-low temperature freezers:

- low-maintenance free-piston Stirling engine with a seven-year warranty
- unparalleled temperature stability, hence utmost sample safety
- freely selectable temperature range of – 20° C to – 86° C
- lowest energy consumption, hence very low loss of heat
- largest storage capacity per square metre
- 100% natural refrigerant and no use of oil
- very quiet and efficient cooling even with surrounding temperatures of up to + 35° C



Storage with nitrogen, liquid at – 196° C or dry at – 180° C

The conventional storage of samples and materials began with liquid storage in nitrogen, but today's technology allows more applications than ever before.

We offer both options and consequently the best of both worlds. The isothermal LN2 dry storage freezer from Custom BioGenic Systems (CBS) can maintain biological samples at – 180° C, without samples or operators coming directly in contact with liquid nitrogen.

The isothermal LN2 dry storage freezers are the ideal solution for IVF applications. For this temperature sensitive procedure, CBS provides a rotatable IVF

system for storage as well as open-lid processing in a temperature range of up to – 180° C.

The isothermal cryostorage systems from CBS are ISO-certified (ISO 13485) and conform with European Medical Device Directive 93 / 42 / EEC Class IIa concerning the storage of blood, body fluids or tissues for possible later infusion into the human body.

Advantages over conventional gas phase or liquid nitrogen storage:

- no cross-contamination (mycoplasma)
- fast, easy and safe operation without liquid nitrogen contact
- 100% utilisation of storage capacity in dry phase of up to 46,000 vials
- unparalleled temperature stability (– 180° C in the upper device zone)
- automatic filling and monitoring system
- dry storage system with patented liquid nitrogen coating



Our service expertise at a glance

After your purchase of new infrastructure, we continue to support you for safe and reliable devices.

The services of CryoSolutions AG provide you with the safety you desire. This includes our counselling when purchasing new infrastructure, expert commissioning, preventive maintenance and quick reaction to malfunctions. You are safe with us – always!

Commissioning and qualification

We commission the equipment for you. Be it a new purchase, a removal or revision of devices: we make sure your operation is trouble-free. In order to skilfully record a successful start-up, for example according to regulations such as GMP, we offer installation and operational qualification for our equipment (IQ/OQ).

Maintenance and calibration service

With regular maintenance we help you to minimise equipment downtime. At the same time, we increase its life span and retain its value. Since maintenance is scheduled and registered on time, we can guarantee trouble-free, reliable service.

Our calibration service tests deviations in your sensors and measured values are rectified. The sensors are inspected using reference instruments which safeguard metrological traceability via accredited external calibration laboratories.

Fault repair and overhaul of devices

Your valuable stored goods ought to be given the best of protection at all times. Our fault repair service guarantees this. We provide a fast response time, specialised service technicians and original spare parts which conform with the device class of the respective medical application. In emergencies, we also provide a backup service, and can rapidly supply backup equipment.

Tailor-made service contracts

A service contract guarantees long-term safety for your valuable stored goods – with no hassle for you.

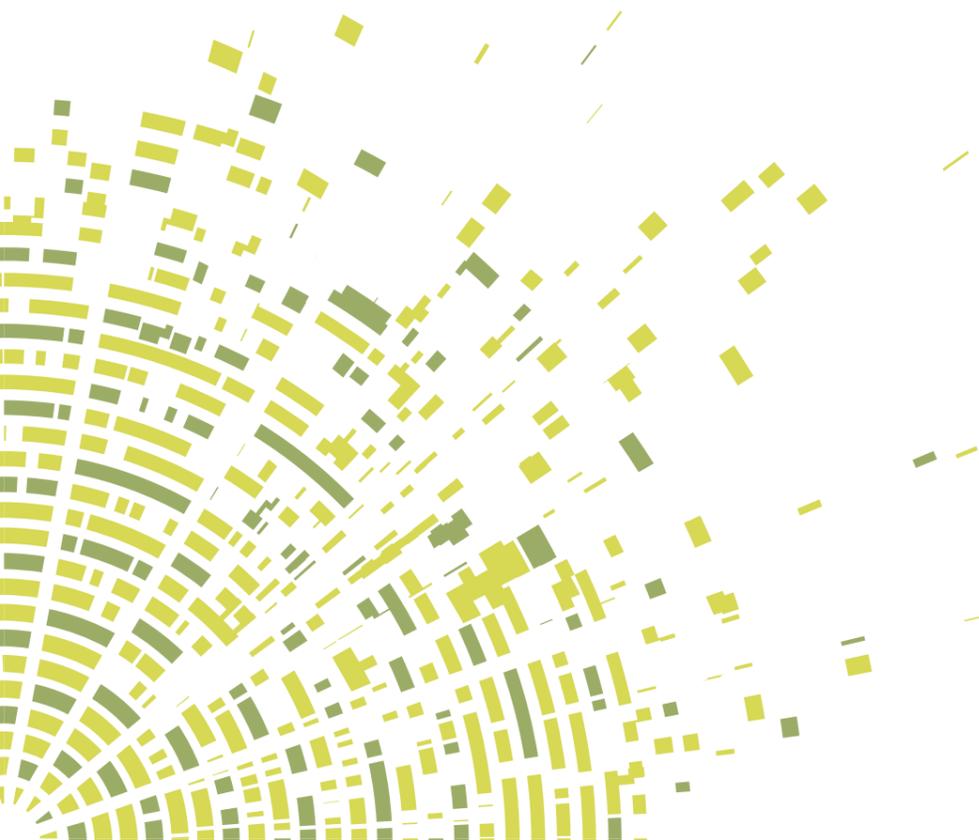
Just remember: downtimes not only lead to annoying follow-up costs, but also unpleasant situations like switching to emergency operation involving daily effort, the need for rental equipment, transfer of stored goods, etc., and wasting precious time and resources.

Service contract

The safest and easiest way to maximise equipment reliability is to choose a service contract that is exactly suited to your needs.

Advantages of a service contract with CryoSolutions:

- regular training and counselling of operators
- predictable fixed costs
- calibration and adjustment of your sensors
- recording of device status
- original spare parts conforming with the device class of the respective medical application
- reduction of running costs by optimising equipment parameters
- specialised service technicians for highest quality and efficiency
- maximum safety for your stored goods due to high reliability of equipment
- longer lifespan and safeguarding of value of equipment due to skilled maintenance



Work safety for you, too

When dealing with nitrogen gas, the security of your staff work has the utmost priority.

Whereas in the last few years, the turnover of ultra-low temperature liquid nitrogen has increased by a factor of 30, awareness for adequate work protection has hardly changed. Yet it is easy to underestimate the hazard of cold burns and oxygen deficiency. We are happy to answer your queries concerning safety aspects.

Our protective equipment guarantees safe and easy work:

- Cryo Gloves® for laboratory applications, in water-resistant or standard versions, available in wrist, forearm, elbow and shoulder lengths
- Cryo Industrial Gloves® are sturdy, water- and cold-resistant gloves for cryogenic industrial workplaces, available in wrist, forearm, and elbow lengths
- Cryo Apron and Cryo Industrial Apron protective aprons
- face protection with headband bracket and visor
- disposable oxygen detector with two-year continuous protection against oxygen deficiency, completely free of maintenance costs, two-year warranty for a daily operating time of 24 hours



Specialists in cryotechnology

As the trading partner of leading manufacturers in the field of ultra-low cooling technology and cryotechnology, we always provide you with the latest technology on the market.



BioLife Solutions

BioLife Solutions is the leading developer, manufacturer and supplier of proprietary clinical grade cell and tissue hypothermic storage and cryopreservation freeze media for cells and tissues, based in the USA. The range also includes the ThawStar and BioT transporter products. In 2019, BioLife Solutions took over Custom BioGenic Systems.

CryoSolutions AG is the official representative of BioLife Solutions in Switzerland.

www.biolifesolutions.com



Custom BioGenic Systems

Custom BioGenic Systems, or CBS for short, was founded in 1987, and specialises in cryostorage equipment and accessories made in the USA. Since 2003, the cryostorage equipment, in particular the patented isothermal dry storage system, has been in high demand on the Swiss market.

CryoSolutions AG is the official representative of CBS in Switzerland.

www.custombiogenics.com



Global Cooling / Stirling Ultracold

Global Cooling, Inc., founded in 1995, manufactures and sells Stirling Ultracold freezers in the USA, a new generation of environmentally friendly ultra-low temperature freezers which operate at between -20°C and -86°C . These freezers do not use compressor-based or cascade refrigeration systems. They use patented free-piston Stirling engine technology which was originally developed for energy, aerospace and industrial applications before successful commercial application in ultra-low temperature cooling systems.

CryoSolutions AG is the official representative of Stirling Ultracold in Switzerland.

www.stirlingultracold.com

Patient Lifting Solutions

Patient Lifting Solutions (PLS) develops and manufactures ceiling hoist solutions for the hospital, nursing home and domestic environment. PLS developed the Cryo-Lift, which specifically caters for the requirements of straightforward, fast and safe cryostorage.

www.patientliftingsolutions.com



Westfalen Gas Schweiz GmbH

Westfalen Gas Schweiz GmbH is represented by sales partners throughout Switzerland and in the Principality of Liechtenstein. The Westfalen Group produces and markets around 300 gases and standardised gas mixtures for practically every trade and industry application, food production, laboratories, pharmaceuticals and medicinal purposes. These include in particular the air gases nitrogen, oxygen and argon. Furthermore, Westfalen Gas Schweiz GmbH is able to plan your vacuum insulated cryopipes and install these on site. Together with the liquid nitrogen supply service and supply containers of Auguste Cryogenics, it is an important partner for the supply of cryostorage equipment.

www.westfalen.ch



