

The STRATOS® SL-Series

Transport Containers for liquid Helium ... light, economical and practical



STRATOS® LHe-Containers



Vaccum super-insulated transport and supply containers for stationary and mobile use. Make use of the many advantages of the STRATOS® series for your applications with deeply cold, liquid helium. Easy handling and high safety standards are the marks of this lightweight.

We produce these high-tech containers with lots of experience, technical know-how and highly qualified manufacturing skill

Naturally, the Cryo-containers are type approved according to the international dangerous goods guideline ADR2011 and the European transport equipment directive 2010/35/EU with the π marking.

That the evaporation of gas is used highly efficiently to cool the neck tube, the radiation shield and the insulation adds to the high level of economy of the system.

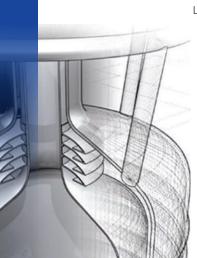
Convincing Option: Highly efficient, electrical pressure build-up control feature

Economical and also space saving solution in the integrated heating system. It enables a regulated pressure buildup for easy extraction of the helium without external He-pressure gas.

optimized heating evaporates liquid helium and overheats the helium gas in order to achieve good pressure efficiency.



Level Control Device











STRATOS® 1000 SL

Optional: Integrated, patented LHe decanting siphon with Anti-Oscillation Facility and Filling **Connectors**

This extraction system is applicable with the STRATOS® 250, 380 and 1000SL in order to prevent thermoacoustic vibrations on standstill.

In order to fill the STRATOS® containers or extract from the STRATOS®containers adaptors in various dimensions are available suitable for the consumer.

- easy and safe: no need to install a
- extraction tube remains constantly
- no loss of helium when a siphon is installed
- no problem in lower rooms
- low investment costs for siphon due to adapter system for filling into varying consumers
- low siphon wear and tear due to secure and protective storage on the container
- patented anti-oscillation-system ensures low evaporation rates

Advantages that convince:

- · efficient He-exhaust gas cooling system
- low evaporation rate (only 0.9 % in STRATOS® 100SL)
- optimized super-insulation
- · robust transport frame
- compact dimensions
- · safety neck tube
- patented anti-oscillation-system (optional)
- · vacuum valve safety facility and integrated safety facility on the security extension.
- smooth running castors
- safety extension with exhaust pressure build-up and evacuation connection
- overflow device which can be shut off (70 mbar)
- various extraction facilities are possible
- easy to set pressure regulator
- transfer pressure of 0-500 mbar
- low maintenance
- · wide range of accessories

So that you have an easy time ...



Beside the function as a transport and supply container the smaller STRATOS® can also be used for execution of Cryo-experiments. STRATOS® 250-1000 SL serve to supply liquid helium to MR-tomographs and large cryostats.



100 SL

Aluminium

1,5

56

68

0,9

1.405

700

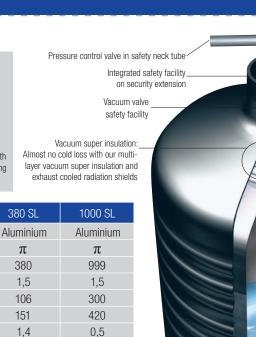
700

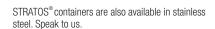
100

55

KF 50

794.21109





Deeply cold liquid helium

As accessoires to the STRATOS®-containers we offer:

Anti-Oscillation-Device

Container Description

Container material

Acceptance marking Geometrical content [1]

Weight empty [kg] 1)

Weight full [kg]

Total Height [mm]

Total Width [mm]

Outer Diameter [mm]

Castor Diameter [mm]

Neck Diameter [mm]

Connections

Operating overpressure [bar]

Stat. Evaporation Rate [%/day]

- integrated decanting siphon
- adapter set for MRT-filling

250 SL

Aluminium

1,5

90

121

1.550

750

740

KF 25

782.00868

1,5

106

151

1.900

750

740

125

80

KF 25

782.00900

- anti-magnetic castors
- level display

- elektric pressure build-up and lots more

2.020

1200

1220

160

80

KF 25

782.00904

Cryo-Supply Systems

The vacuum super-insulated containers by Cryotherm serve to store and transport the deeply cold fluid gases. We deliver for you the ideal supply containers for all uses in research, development, $medicine \ and \ industry-completely \ equipped \ and \ immediately \ operational.$

 $\label{lin-Supply Container (25 - 100 l) - APOLLO LIN-Supply Container (50 - 350 l) SATURN LIN-Transport Container (100 - 300 l) - MERKUR Transport Tank (500 - 2,000 l) SIRIUS LIN-Supply Container (1,000 - 2,000 l) + HELIOS LHe-Storage Container (100 - 10,000 l) - HELIOS LHE-STORAGE (100 - 10,000 l) - HELIOS LHE-STORAGE$ STRATOS® LHe-Transport Container (100 -1,000 I)

Cryo-Piping Systems

In order to transport deeply cold fluid gases from A to B almost without any loss we have developed special vacuum super-insulated transfer piping. These transfer piping systems are distinguished by high thermal quality. For LIN/LOx/LAr/LHe/LH,

rigid transfer piping (DN 14-100) · flexible transfer piping (DN 20-32) plug-in coupling - weld coupling · gas phase separator (10 l) · phase separator (50 - 200 l)

Cryo-Customizing/Cryo-Engineering

If you have completely individual research tasks to perform. Do you have the right partner for the job? Whether you work in micro-electronics or one of the many other areas of research we have the specialist staff who know your field and speak your language.

Cryo-Storage Systems

Today storage periods of many years are in demand. Make use of our Cryo - Storage Systems for long - term storage of biological, medicinal and chemical materials in laboratories and Cryobanks. BIOSAFE® MD-sample storage system (medical product) (120 -1,400 l) $BIOSAFE^{\circ}SC\text{-sample storage system (120-1,400 I)} \cdot CHRONOS^{\circ}\text{-sample container (120-1,400 I)} \\ STELLA^{\circ}\text{-work container (0.5-63 I)} \cdot Freezing apparatus (3.3-16 I)} \cdot dryo shipper$

Cooling of Transport Systems

Deep frozen foods cover an ever larger part of our daily requirements. For an optimal cooling quality we equip your cold storage vehicles, trailers, semi-trailers, swap bodies and containers with transportable Crvo-Systems. CRYOGEN®-Trans-System

After-Sales-Service

Installation/Assembly, Start Up, Spare Parts Service, Repair/Maintenance, Instruction/Training, Technical Hotline +49 (0)2741 958575

¹⁾The vessels' weight may vary depending on the equipment used!



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