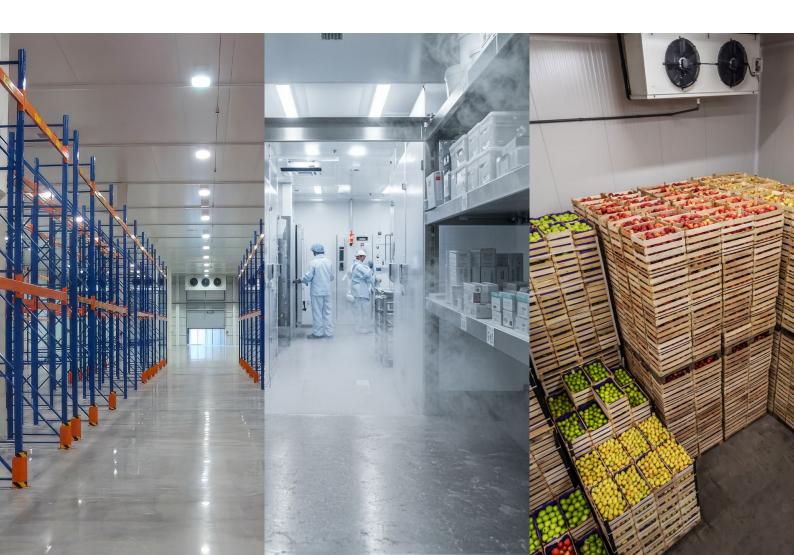
## aggreko

COOLING

# Temporary chilled and cold storage solutions



# Resilient, efficient, and scalable cold storage

With growing global demand across food production, pharmaceuticals, and manufacturing, chilled and cold storage has become a vital component in safely storing and protecting goods. However, in the face of increasing uncertainty – ranging from production fluctuations and seasonal temperature spikes to rising energy costs – businesses are seeking more adaptable and responsive cold storage solutions.

## Staying ahead of challenges – without the capital cost

Evolving environmental regulations, such as the F-gas legislation, along with operational challenges like maintaining continuity during periods of high ambient temperatures, scheduled maintenance, or unexpected outages, further complicate the landscape. Additionally, limited access to capital expenditure makes investing in permanent infrastructure less feasible for many companies.

## Cold storage that flexes with your needs

As a result, temporary chilled and cold storage solutions – whether for short- or long-term use – are becoming an increasingly attractive option. These flexible alternatives offer a practical way to meet fluctuating demand while ensuring compliance, operational resilience, and cost-effectiveness.



# Overcoming cold chain challenges

Aggreko's chilled and cold storage solutions are engineered to meet the real-world challenges faced by companies that rely on precise temperature control.

- Managing elevated ambient temperatures:
- To prevent stock spoilage, it is critical to maintain ambient conditions between -25°C and +5°C. However, rising global temperatures are making this increasingly difficult. Our solutions are designed to meet this challenge, incorporating advanced low-temperature air handling units, air-cooled systems, and ultra-low temperature chillers to ensure temperatures stay within essential parameters.
- Overcoming aging, inefficient systems:
   Under strain, outdated equipment is less reliable and inefficient, in turn requiring more energy and money to operate. Temporary assets, with the best efficiency profiles, can provide a bridging

solution whilst waiting to upgrade or replace

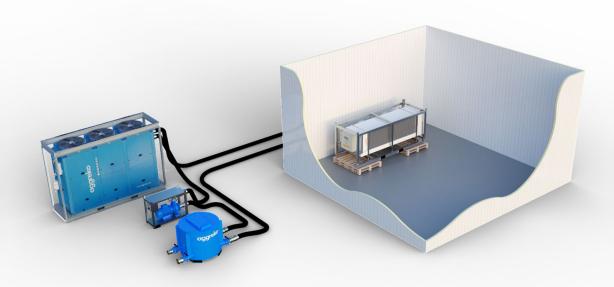
 Providing supplementary capacity during seasonal peaks:

unreliable, outdated systems.

Investing in oversized equipment to meet occasional seasonal demand is not cost-effective. A more efficient approach is to temporarily supplement existing systems during peak periods, which not only ensures sufficient capacity but also helps extend the operational lifespan of permanent infrastructure.

- Navigating changing legislation:
- With regulations like the F-gas phase-down continually evolving, ensuring long-term compliance and making investments in permanent assets can be challenging.
  Our chillers are designed to meet the latest F-gas requirements, offering a range of options that utilise low and ultra-low GWP refrigerants helping you stay compliant and future-ready.
- Supporting sustainability goals:
  - Temporary chillers and cold storage solutions often require dedicated power sources. We offer access to new and cleaner technologies, including Stage V generators and Battery Energy Storage Systems (BESS), helping to reduce fuel usage and harmful emissions.
- Overcoming skills & knowledge gaps:

With well-documented skills shortages across industry, leveraging third-party experts for temporary cold storage solutions provides access to experienced engineering teams, installation specialists, and ongoing technical support. This ensures systems are tailored precisely to application needs while allowing internal teams to concentrate on core operational priorities.



# **Chilled and cold storage applications**

Our temporary chilled and cold storage solutions are ideal for a wide range of applications, including emergency response, capacity shortfalls, pre-commissioning phases, and planned maintenance. We serve sectors such as food and beverage, pharmaceuticals, biotech manufacturing, distribution hubs, supermarkets, and retail cold chains.

## Common use cases

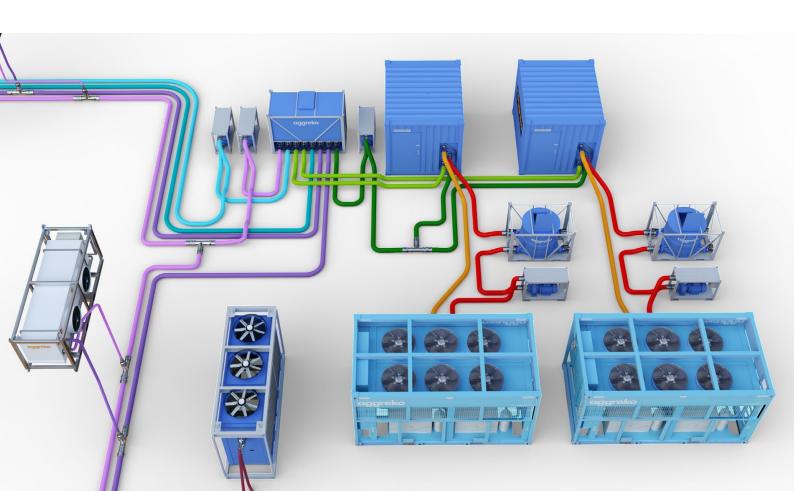
storage environments.

- Equipment failure or loss of power:
   Temporary systems can be deployed within hours to maintain critical
- Planned maintenance:
   Hire solutions ensure operational continuity when internal systems are shut down for upgrade or inspection.
- Pre-commissioning of permanent installations:
   Cold store equipment can bridge operational gaps while a facility awaits full power or services.

• Cooling duty shortfalls:

Aggreko systems can be used to provide supplementary capacity during seasonal peaks or where existing equipment has degraded.

- Long term hire
   Extended hire packages to negate the need for investing in capex altogether
- Proof of concept
   Testing a particular configuration before committing to purchasing in fixed assets



## **Our equipment**



#### Very low temperature solutions

- Scalable low and ultra-low temperature chillers from 50 kW – 550 kW
- 550 kW CO2 refrigerant chiller provides 220 kW of cooling at -40°C
- Low-temperature AHUs designed for uniform air distribution and precise delivery as low as -25°C
- Specialist engineering team to support with project design
- Remote monitoring and diagnostics for tight parameter control



#### **Cooling solutions**

- Industrial chillers ranging from 50 kW to 1500 kW
- Fan coils and air handling units ranging from 15 kW to 500 kW
- Air conditioners available in sizes 50 kW to 250 kW
- Heat exchangers plate and frame, shell and plate, shell and tube
- Cooling towers quick installation for single unit applications or combined modular units for multi-megawatt projects
- Energy efficient units, utilising the latest technology
- Fully engineered systems including buffer tanks, pumps, hoses, and manifolds.



#### **Power solutions**

- Generators ranging in size from 30 kVA to 2100 kVA
- Bio-fuel options significantly lower nitrogen oxide, carbon monoxide and particulate matter emissions
- Battery Energy Storage Systems from 45 kVA to 1000 kVA
- Scalable, flexible modular design tailored to your power requirement
- Flexible decentralised energy hire solutions
- Load on demand solution available to accommodate fluctuating demand, delivering scalable power when you need it most
- 24/7 remote monitoring delivering insights to maximise operational efficiency and uptime

## **Our services**

## **Aggreko Connect**

Aggreko Connect delivers three key reports: the Power Operations Report, Emissions Report, and Chiller Operations Report. The Chiller Operations Report provides valuable insights into your chiller equipment's performance, including setpoint temperature, leaving liquid and return liquid temperatures, Delta T, and ambient temperature.



## **Aggreko Remote Monitoring (ARM)**

All our chillers and power units come equipped with advanced remote monitoring. This enables real-time diagnostics, trend reporting and proactive maintenance insight to ensure optimal performance.



## **Contingency planning**

We offer a rapid-deployment fleet and expert engineering response to help mitigate the risk of product loss during unexpected outages or equipment failures.



#### Rightsizing

Our dedicated design team ensures each solution is precisely matched to the project. This minimises the risk of stock loss due to under-sizing and avoids unnecessary energy costs from oversized systems. Modular units can be scaled to meet specific volume demands without compromising airflow or temperature control - even during door-open cycles.



## **Fuel management**

Aggreko Fuel Services provide reliable, efficient fuel management solutions tailored to keep power systems running smoothly. From fuel supply and delivery to monitoring and optimisation, with expert support and greener fuels to enhance sustainable practices.



## **Engineering design process**



Initial discussion to learn about the requirements of the project.

## Technical response document

Outlines scope of works, thermal load estimates (inc. volume, insulation, u-values, door-cycles), and proposed layout diagrams.

## 3 Site visit

Site assessment includes cooling load calculations, ambient conditions, access limitations and redundancy requirements.



- Bill of materials: Equipment schedule tailored to deliver specified airflow and thermal performance, including all ancillaries.
- Schematic design: Draft singleline diagrams and P&IDs to map temperature and electrical flows.

## Install / commissioning

Our engineers install, test, and commission the equipment.

## Ongoing monitoring and system optimisation

Aggreko Remote Monitoring (ARM) provides proactive diagnostics and live data on power and temperature control equipment such as flow rates, fuel levels, temperatures and other key parameters.

## 7 Deinstall / decommissioning

Our engineers attend site to safely deinstall and decommission equipment. When completed, transport is arranged and equipment is returned to our site. 8

Evaluation of the project

Our technical sales team will work with you to review key project data to evaluate project successes and potential improvements for future projects.



Pre-planning and contingency

We will support you in planning for future projects and evaluate if the site could benefit from an emergency power or temperature control plan, to help mitigate the risks associated with power or equipment failure.

Want to explore more about our detailed design process?

# Why choose Aggreko for chilled and cold storage projects?

## Dual expertise in cooling and power:

Our engineers design both the thermal and electrical elements of every system ensuring seamless integration.

## ✓ End-to-end package:

One supplier means one point of contact. We can provide chillers, AHUs, pumps, tanks, power, cabling, and controls, all maintained and monitored by Aggreko.

## ✓ Smart remote monitoring:

ARM delivers 24/7 remote telemetry, proactive diagnostics, and optimisation support.

## ✓ Scalable & adaptable:

Our solutions are modular by design, allowing flexibility to expand or scale down as demand and ambient conditions change.

## Rapid deployment:

With strategically positioned fleets and engineering teams across Europe, we're ready to respond quickly, ensuring fast, effective support.

## ✓ Greener Upgrades:

Reduce environmental impact with hybrid packages featuring Stage V generators, Battery Storage, HVO compatible fuel systems, and low-GWP refrigerants.

## ✓ Built-in resilience:

N+1 system design (redundancy of key components) is standard, reducing risk of downtime in mission-critical environments.





#### **Added Resilience**

Add resilience to your operations with back-up power and temperate control, decentralised energy and contingency planning. Flexible solutions that allow you to be agile in your approach giving you greater control and without the need or capital expenditure.

#### **Added Efficiency**

Improve efficiency through strategic equipment hire, applying the latest technology and processes to reduce energy consumption, costs and emissions.

#### **Added Productivity**

Supplement on-site power and temperature control systems with temporary equipment to keep operations running during emergencies, shutdowns and seasonal peaks, adapting the rental solution to meet changes in demand.

#### **Added Reassurance**

Receive industry-leading product design and technological expertise, supported by sector experts and skilled engineers.

## **Just add Aggreko**

For more information

