

CO2 Secondary Refrigeration Unit

This secondary refrigeration unit is designed for medium and large cold storage. It utilizes R744 as a secondary refrigerant and is compatible with multiple primary refrigerants.



ADDITIONAL IMAGES



Product Overview

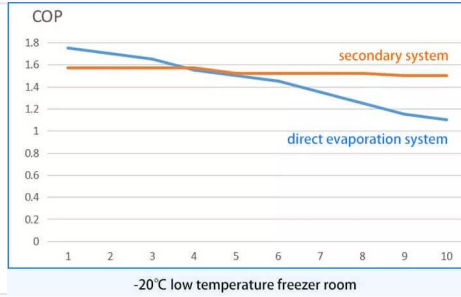
CONFIGURABLE CONTAINER SHELL

Modular and adaptable container shell design for industrial cold storage environments.

High-Efficiency CO2 Secondary Refrigeration

This advanced secondary refrigeration unit utilizes R744 (CO2) to provide a safe, environmentally friendly, and efficient cooling solution for medium and large-scale cold storage facilities. By eliminating refrigeration oil from the evaporator and pipeline, the system significantly improves heat transfer efficiency and overall COP performance. Designed with modularity in mind, it provides stable operation even at low temperatures down to -30°C.

Technical Specifications



Efficiency comparison showing the stable COP performance of the secondary system at low temperatures.

Energy Regulation Stages

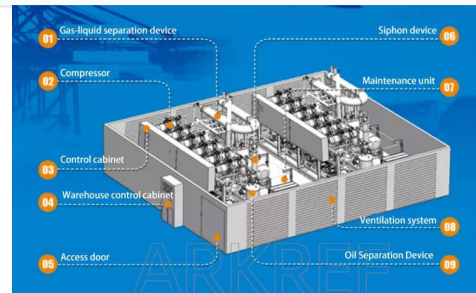
- 100%
- 75%
- 50%

Primary Refrigerants	R22, R507A, R404A, R134A, R448A, R449A
Secondary Refrigerant	R744 (CO ₂)
Evaporation Temperature Range	-45 to -5°C

System Features

THE HEAT EXCHANGE TEMPERATURE DIFFERENCE IS SMALLER

The system design ensures a smaller heat exchange temperature difference for superior cooling performance.



Comprehensive layout of integrated system components including separation and control devices.

Key Operational Advantages

- Non-toxic and non-flammable operation
- Reduced frost formation rate
- Improved heat transfer efficiency
- Lower total operating costs

Integrated System Components

Component Name

Gas-liquid separation device

Compressor

Oil separation device

Siphon device

Ventilation system

Control & Warehouse cabinets