

NaturaSi One Stop Solution



Remote CO₂ System with heat recovery

In Turin, Italy, AHT installed a complete remote CO₂ system with heat recovery at NaturaSi. The customer is a leading brand in Italy in the distribution and sale of organic products, with over 300 specialised retailers. In their shops, environmental sustainability and energy efficiency are key aspects. Through careful renovation, NaturaSi has created a building characterised by a strong focus on the environment, equipped with wood-fibre thermal insulation, next-generation installations, certified wood and ecological paints. Naturally, the refrigeration system must comply with these values and support the approach of the customer.

AHT Italy offered a solution with the natural refrigerant CO₂. NaturaSi was looking for a solution that guaranteed an energy efficient integrated system with heat recovery and cutting-edge technology that must be compliant with the current and future F-GAS regulatory developments. AHT Italy was able to fulfill all these requirements with the CO₂ system which includes the compressor rack „Conveni-Pack“ from Daikin. In total the system offers more than 13 meters of vertical refrigerators & freezers, a serve over counter, one medium temperature cold room aggregate, three round flow air conditioning cassettes and a Conveni-Pack from Daikin.

Year of Installation

2023

Installed System

- _ Conveni-Pack
- _ Round flow cassettes
- _ HM Multidecks
- _ HVTR & HVCU counters
- _ MT Cold room aggregate

Project requirements

Provide an energy efficient, sustainable system that complies with the current and future F-Gas regulation.

“As far as refrigeration systems are concerned, we have tried to include what we believe is the top at the moment, and therefore we have chosen to work with AHT Italia.”

_Fabio Gasparato
Technical Consultant Ecor Naturasi Spa

In this project, the complete HVAC+R system was supplied with solutions from the Daikin group, AHT Italia was the reference partner for the consultancy, supply and execution of all the part related to commercial refrigeration and systems for the customer. **The solution installed by AHT Italia is the first CO₂ conveni-pack system with heat recovery made in Italy.** One of NaturaSi's goal was the desire to create a store that would act as a forerunner in terms of energy efficiency and sustainability.

Maximizing energy efficiency

The CO₂ refrigeration MT cabinets are connected to the same units where round flow cassettes are connected and allows it to recover the produced heat for heating purposes of the shop. The new system of AHT is approximately 20% more energy efficient than the R404A system NaturaSi previously had.

The installation is completed by a monitoring system with which the customer has control over the operation of the units and their performance. With this system, NaturaSi has moved from fixed maintenance intervals to constant control, with the aim of achieving the best possible performance of all units.

