



solutions for europe
natural refrigerants

16-17 March 2015 in Brussels

Ensuring
environmentally
sustainable systems
stable growth

Francesco Mastrapasqua, EPTA



EPTA

THE NATURAL WAY UP



Advanced Solutions for your Store



eurocryor





«The preferred local partner for customized products and refrigeration system solutions.

The ultimate technology and design for the unique store.»



Specific concept cases

Power Racks

Cold Rooms

Installation

Service & Maintenance

Project Management

Professional Training

Retrofit

Energy Management





Global Partner in the commercial refrigeration & food and beverage sector



LIMANA



SOLESINO



POMEZIA



CASALE MONFERRATO



HENDAYE



ST.QUENTIN FAL.



BRADFORD



ROSARIO



QINGDAO



CORLU



CHA-AM



1. Turnover 680 M€

2. Personnel 4.000 people

3. R&D Investments 1,5% of the turnover





Green products, made in green factories
Self powered, controlled emissions, heat recovery, lean manufacturing



Frame assembly

HFC/HFO



Warehouse

CO2



Quality

Clima



Test

Chillers



Power systems area	5.000 sqm
Production CO2	400 systems/year
Personnel	70 heads
Systems in operation	1000+



Convenience / Supermarket Hard Discounts



Variable speed drive MT/LT

Electrical control board

High Temp version

Heating mode

Indoor / Outdoor

Emergency back up

Distinctive features

Extremely compact design

Regulation optimized at factory

Weather resistant

Easy access for maintenance

Robust and safe construction

Efficient

- Production 100 systems/year
- Strong and stable growth in particular from Hard Discounts
- Expected 50% growth rate in the next 3 years

Next development tasks:

- reduce the capital cost of installation
- massify site start up assistance and training
- add new comfort cooling capabilities
- maximize the global system efficiency with additional energy management options



Supermarket / Hypermarket



ECO₂ Large

Variable speed drive MT/LT

Electrical control board

High Temp version

Heating mode

Hot water sanitary

Indoor / Outdoor

- Production 150 systems/year
- Stable consistent demand but lower than smaller formats
- Expected 30-35% growth rate in the next 3 years

The demand is driven by cooling capacity and/or the possibility to have back up and security systems installed at factory, which may extend the time of intervention, particularly appreciated by frigorists/contractors.

Distinctive features

IMPROVED MAINTENANCE AND RELIABILITY

- All main components assure easy access.
- At least two plate heat exchangers, sized to allow constant working even during repair, maintenance or breakdown with back-up and high pressure safety switch.
- Easy inspection of suction and liquid line filters with by-pass for maintenance.
- Suction and discharge headers and oil pipes placed on the same side to simplify compressor maintenance.
- Angled valves allow improved safety during maintenance operations.

CREATE YOUR PERSONAL PACK CONFIGURATION

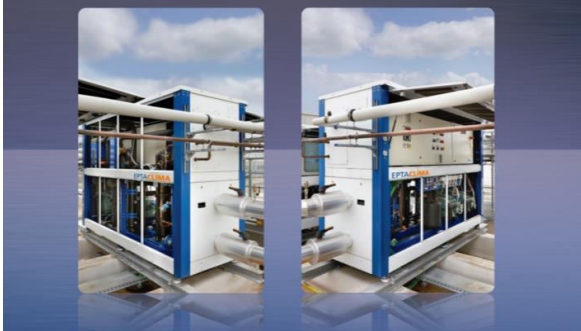
- Soundproof housing for outdoor installation
- Frequency controls to reach the best compressor efficiency at any condition
- Pressure switch panel with back-up and safety switches – immediate shut-down in case of system failures
- Modules with or without static control board! Very large choice of components
- Back-up devices low pressure electronic back-up and high pressure safety switch
- On-board condenser for primary fluid R136A with safety valves



Supermarket / Hypermarket



EPTACLIMA



Combine your heating and refrigeration systems to optimize the energy consumption of your store.



Heating + A/C

Indoor / Outdoor

Energy management

The perfect management of the store capital cost
It balances capital investment, energy efficiency and technological innovation

EPTACLIMA combines the refrigeration and comfort needs of a store with simplicity

Simple, complete, economical and practical



Hypermarket



PUMPED CO2 HYBRID

Ambient temperature neutral

Efficient

F-Gas ready!

Distinctive features

Carbon footprint reduction 50%

HFC charge -50% vs DX

High Tevap - No overheating

Simplified case controls

Low and stable pressure levels

Production 20/30 systems/year

The drivers of demand are

- High ambient temperature
- Local taxation policies on HFC refrigerants
- Partial store remodeling.



« In EPTA we are deeply convinced that the main axes of development to ensure environmentally sustainable systems stable growth in the future is knowledge management. »



Training Centre



HISTORY

The Epta training centre was completed in 2009 and was designed for training staff from throughout the Epta group and later expanded to train engineers from throughout the industry.

The primary focus was on the widespread adoption of CO2 as a refrigerant and the necessary skills that this required passing on to the workforce.

A full complement of CO2 systems are available for training and research:-

Cascade system – a two compressor cascade system featuring Bitzer compressors and standby cooling together with inverter control.

Transcritical Booster system – A multi compressor system comprising MT and LT booster compressors. The system is configured to utilise multiple transcritical and flash gas solutions. The plant is equipped with inverters and standby cooling.

Pumped system – featuring the latest Grundfos hermetic refrigerant pump, and multiple regulation valve options.

In 2010 the centre was accepted as a City & Guilds approved training provider and expanded its operation into conventional refrigeration technology.

STAFF

The centre is manned by two City and Guilds approved assessors and a number of tutors who can deliver the courses in a multitude of languages.

All the staff working within the centre have many years of experience working with CO2 systems around the world.

Administration staff also provide additional support and can assist with booking queries and special requests.

We have a commitment to our Clients for quality and simplicity: EPTA always offers Equipment&Training together

❑ Training is essential for the expansion of CO2 systems and often a decision key factor as it breaks barriers of concern

❑ There is a tremendous demand for training and the capability of the industry is growing but still insufficient

❑ Training MUST be practical, professional and to all levels of concerned operators



LEADING MARKET AND TECHNOLOGY TRENDS FOR NATURAL REFRIGERANTS



- ❑ In our position of turn key system provider, Epta is massively investing in the development and improvement of CO₂/NR technologies
- ❑ An integrated approach to all HVAC&R needs of a store opens new interesting opportunities for energy management (Full Green Stores)
- ❑ Training and technical assistance capabilities are fundamental assets that may boost the CO₂ uptake
- ❑ The markets which evolve faster are those where incentivations, taxation, ban policies apply - The increasing price of HFC/HFO refrigerants will also play an important role in the CO₂ switching policy of our Clients
- ❑ Future growth drivers are capital cost control, energy efficiency, simplicity



EPTA THE NATURAL WAY UP



Advanced Solutions for your Store



eurocryor





solutions for europe

natural refrigerants

16-17 March 2015 in Brussels

Thank you very much!