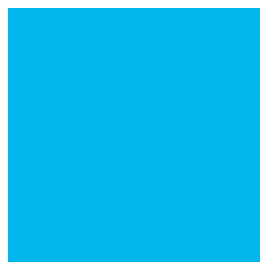




ENVIRONMENTAL
CLIMATE CONTROL
EQUIPMENT
& SOLUTIONS



CINEMA



Ventilation | Free Cooling
Energy recovery | Heating

ETT, the air handling expert

ENERGIE TRANSFERT THERMIQUE is recognised in the cinema sector as a specialist in the design and manufacture of air handling systems.

ETT stands out with its wide range of **services** (consulting, optimisation, auditing, training, etc.). Forging close partnerships with customers is central to our strategy.

Based at the western tip of France, our 18000 m² factory (with 16000 m² dedicated to manufacturing), is certified **ISO 9001** and **ISO 14001**.

With more than 240 employees, ETT is present all over France in 8 regional offices and across the world thanks to its network of agents and distributors.

Bolstered by its Research and Development Department, ETT chose to place innovation and respect for the environment at the heart of its development strategy.



1979

Creation of **Energie Transfert Thermique**

1999

AFAQ ISO 9001 certification
no. QUAL/1994/2016e

2001

Extension of the factory and new organisational structure: 8000 m² manufacturing plant, R&D Department

2007

ETT executives take over the company (LMBO)

2010

AFAQ ISO 14001 certification
no. QUAL/2010/37694.2

2011

ETT doubles its production capacity

2015

Eurovent Certification



ETT supports the evolution of the cinema sector

Cinematic technology has evolved dramatically since 1895: from single cinema rooms showing early films with an intermission for each reel change to **modern multiplexes showing films up to 4 hours long in rooms that can sit hundreds of people.**

Cinemas managed to adapt to the evolving needs of audiences by developing new production technologies, **improving thermal and acoustic comfort in projection rooms** and reducing energy consumption.

To best meet the needs of the cinema sector, **ETT has developed a market-driven strategy** based on innovation and respect for the environment.



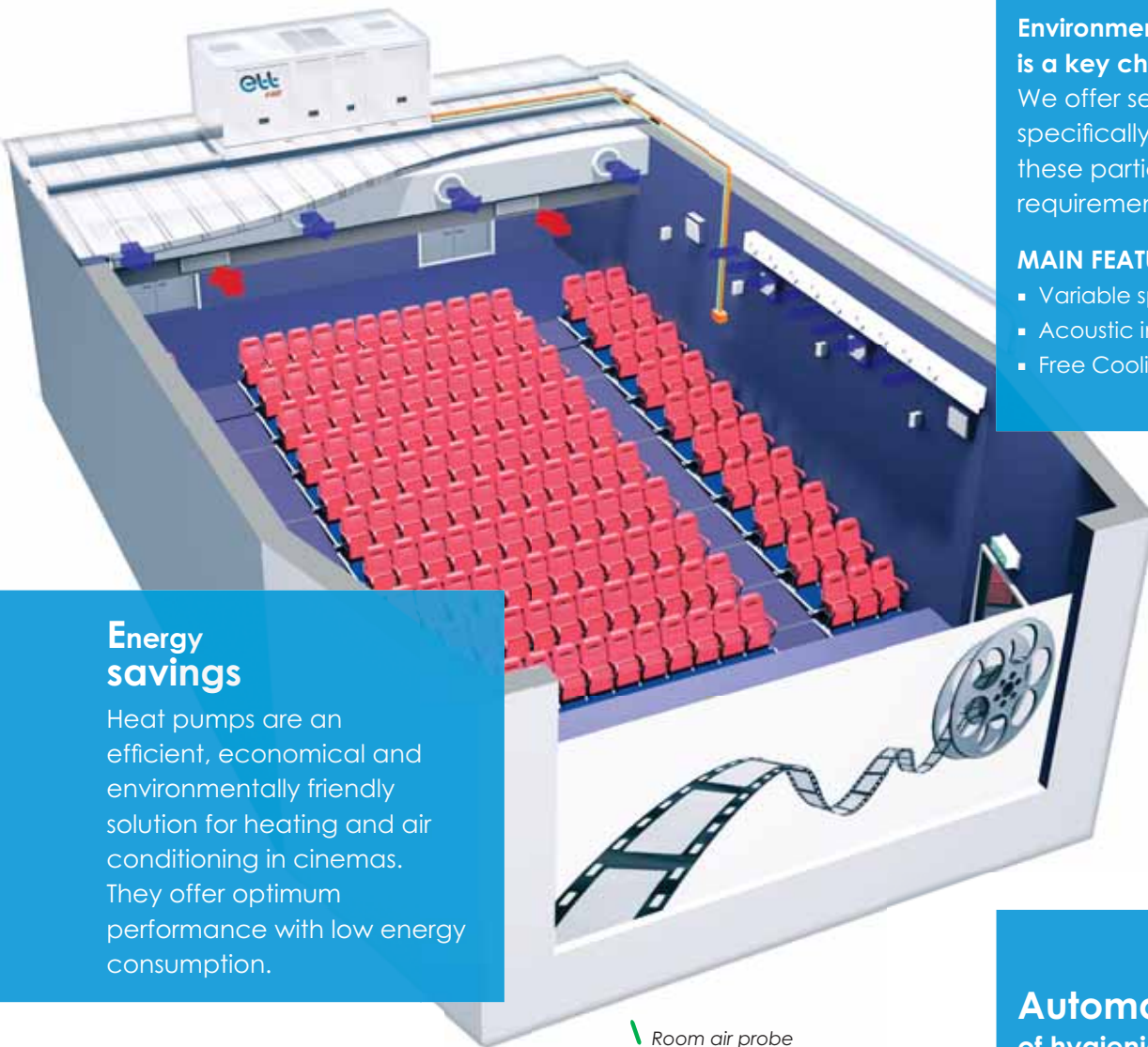
ETT provides **custom solutions** for all types of cinemas, new facilities as well as renovation projects. As a response to the challenges of these demanding economic times, **our solutions focus on total cost reduction** considering all aspects: acquisition cost, installation and commissioning costs, operating costs (energy consumption and maintenance costs).

ETT's smart communication system, **ETT SysCom**, includes a **monitoring tool** perfectly suited for cinemas: ETT MediaCom. It allows you to control your installation easily and effectively **for optimum operating cost management.**

Air handling solutions for **cinema facilities** Essential **features**

ETT, IMPROVED THERMAL AND ACOUSTIC COMFORT

We developed specialised units to ensure optimal comfort in cinemas, regardless of building occupancy levels.



Energy savings

Heat pumps are an efficient, economical and environmentally friendly solution for heating and air conditioning in cinemas. They offer optimum performance with low energy consumption.

Our plus points

Bespoke units

Dimensions and capacities **specially adapted to your project requirements** (SRV, Variable Cooling System).

Optional internet-based communication system (ETT MediaCom)

Installation

ETT units can be installed either outdoor (on the rooftop) or indoor (in a technical room)

ETT Services

Our team will guide you every step of the way, from commissioning to operational support.

Acoustic comfort

Environmental noise reduction is a key challenge for cinemas.

We offer self-contained units specifically designed to meet these particular acoustic requirements.

MAIN FEATURES

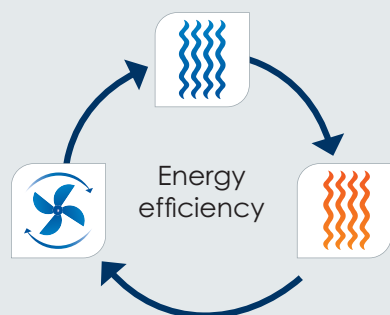
- Variable speed compressor
- Acoustic insulation
- Free Cooling

Automatic adjustment of hygienic fresh air intake based on the occupancy level

ETT solutions offer temperature management regardless of building occupancy levels (humidity management is also available as an option).

3 technologies

to address all the
challenges



1 Cooling

Air conditioning available
when needed.

2 Ventilation

Air flow adapted to
occupants' needs thanks to
innovative technology.

3 Heating

Energy recovery for optimised
consumption.

Technological solutions specially adapted to the constraints of cinemas

Applying our knowledge



Bolstered by its **Research and Development Department**, ETT builds on **innovation, respect for the environment** and **energy efficiency**.

To address current challenges and help you reduce your energy bill, our approach focuses on improving thermal efficiency while reducing operating costs.

ETT solutions combine energy recovery and thermodynamic systems to achieve coefficients of performance (COPs) of 10 or higher.

Our standards go beyond existing norms to provide the best comfort level.

ETT units include a precise temperature control system to ensure thermal comfort and carefully selected and perfectly sized high-tech components for optimised acoustic comfort.

ETT solutions offer unparalleled energy efficiency and air quality for cinemas.

ETT is strongly **committed to customer satisfaction**. To this end, we have built up a comprehensive network of professionals to provide every customer with a **dedicated contact person** according to his project and requirements.

We undertake to help you:

- maintain optimum air quality;
- ensure the best possible acoustic comfort;
- reduce energy consumption;
- meet environmental constraints.

ETT SysCom: Communication/Control Supervision

ETT SysCom ensures **precise and reliable control** of the equipment for optimised **energy efficiency**.





to ensure the success of **your project**



Opting for ETT means opting for an expert partner in air handling solutions for cinemas. Our teams will guide you every step of the way, from project study to operating support.

Beyond acoustic and thermal comfort, ETT offers comprehensive solutions including products and services specially adapted to the requirements of cinema operators, such as our supervision system, **ETT MediaCom**. This tool allows you to reduce your energy bill through energy consumption monitoring.



In 86% of cases, excessive energy use in HVAC systems is due to incorrect or inappropriate configuration.

ETT supports you from project study to operation and offers a comprehensive range of services : **service contracts, auditing, training and spare parts.**



ETT low noise solution



CINEFFI LN

The low noise EFFICIENCE unit designed for cinemas



For many years now, **ETT** has developed air handling systems specifically designed for cinema facilities.

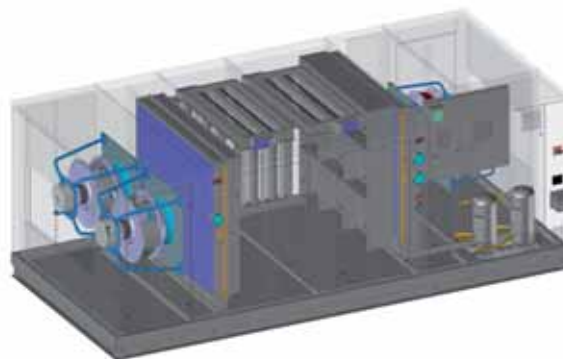
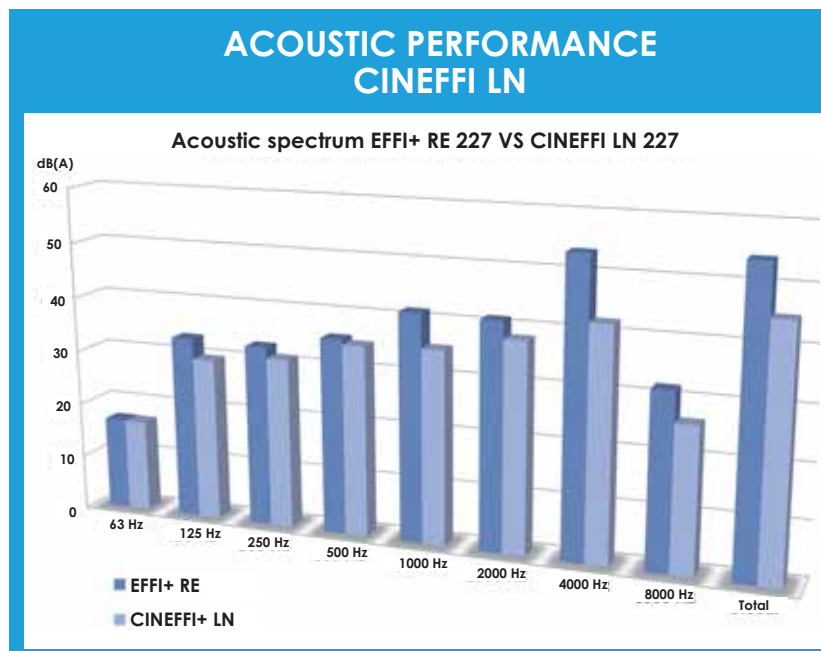
CINEFFI LN is a high performance double flow heat pump with 4 dampers, designed for heating, Free Cooling and air conditioning in projection rooms.

CINEFFI LN ensures air extraction and fresh air modulation without indoor pressure change for optimum comfort.

Noise level is a critical factor for ventilation systems in cinemas.

CINEFFI LN is the low noise unit specially designed for cinema facilities.

With acoustic and thermal insulation on casing, carefully sized and selected supply and exhaust fans, acoustic insulation in the technical section and sound jackets on compressors, this unit ensures unparalleled low noise performance.



➤ TECHNICAL FEATURES

- Rigid, compact and lightweight packaged unit
- Acoustic and thermal insulation on aluminium casing
- Plug fan with EC motor
- G4 ecofilter (+ optional F7 filter without fibreglass)
- Technical section insulation with STOPFLAM flexible fire-proof polyurethane foam (optional)
- R410A refrigerant
- ETT Tandem technology
- ETT controller with display
- ETT SysCom: communication, control and supervision system (optional)



ETT low-energy solution

CINEFFI LC

The low-energy EFFICIENCE unit designed for cinemas



CINEFFI LC is a reversible double flow heat pump with high performance rotary exchanger.

Designed for buildings with high fresh air requirement, **CINEFFI LC** gives priority to energy recovery on exhaust air thanks to the rotary heat exchanger.

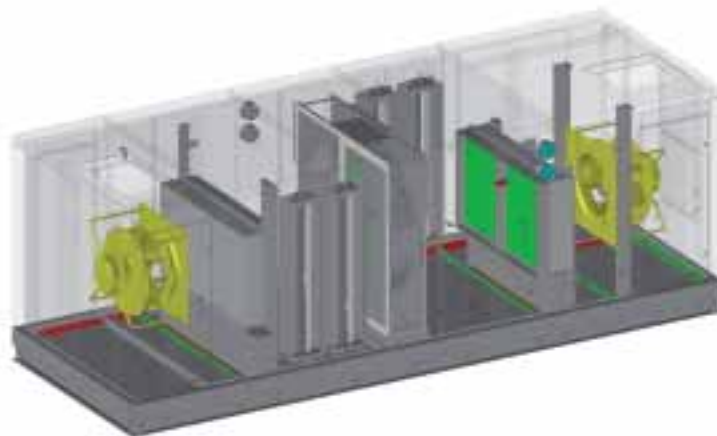
The unit also features a reversible heat pump to complement heat recovery and maintain the desired supply air temperature.

The **CINEFFI LC** has been developed to **meet the economic constraints of cinema operators.**

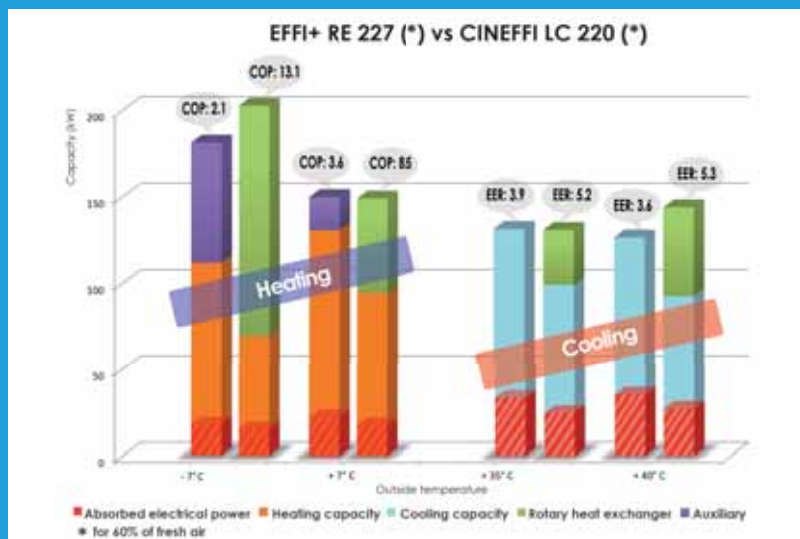
CINEFFI LC is the low-energy unit designed for cinema's operating cost reduction through significant energy savings.

➤ TECHNICAL FEATURES

- Exhaust air section for heat recovery and/ or removal on exhaust air (depending on the operating mode)
- Heat recovery section with rotary heat exchanger
- Plug fan with EC motor
- **G4 ecofilter** (+ optional F7 filter without fibreglass)
- R410A refrigerant
- **ETT SysCom: Communication, control and supervision system** (optional)



ENERGY PERFORMANCE CINEFFI LC



ETT control systems



ETT SysCom

ETT optional **control** and **supervision** systems ensure **precise and reliable control** of the installation.

All ETT units are connected to an ETT SysCom communication system to facilitate unit management through **local or remote communication**.

PGD TOUCH



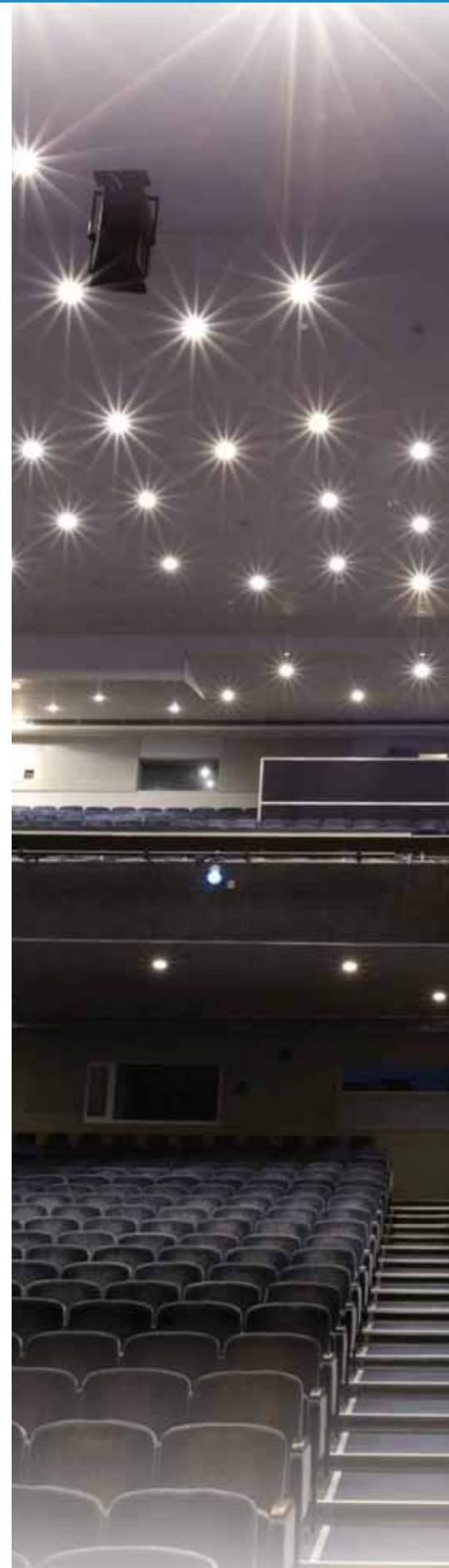
The **PGD Touch terminal controls one or several units via serial communication with the main controller**.

The control box is connected to the first unit; if the installation comprises several units, the other units are connected over an RS485 network using the Modbus protocol.

The PGD Touch terminal includes a 7" touchscreen. The system allows you to remotely monitor operating state, adjust unit setpoints, check history, etc.



Main controller





ETT supervision system

ETT MediaCom

In 86% of cases, excessive energy use in HVAC systems is due to incorrect or inappropriate configuration.

For cinemas, the energy cost represents a significant part of the overall budget, regardless the number and the size of projection rooms.

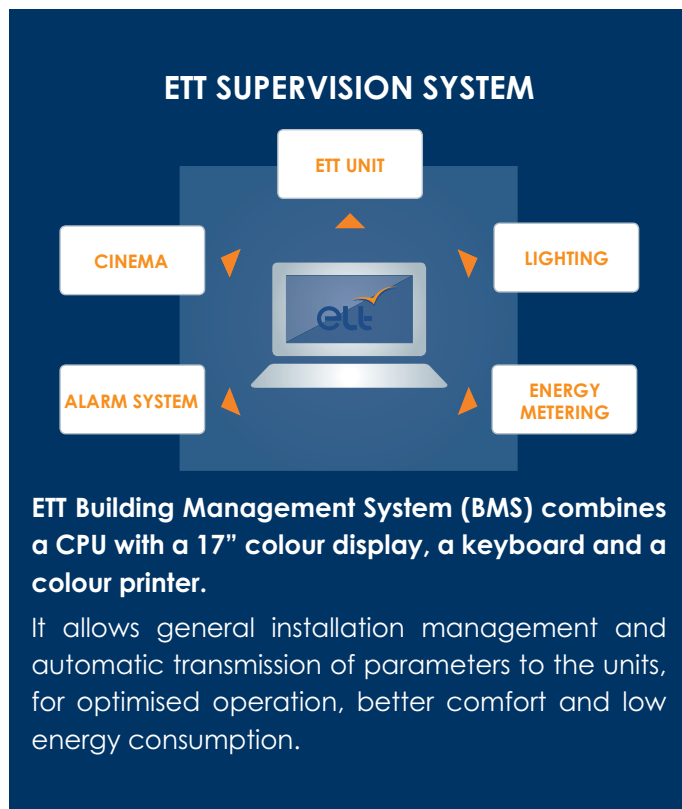
ETT offers a secured internet-based communication system (with login credentials): **ETT MediaCom**.



ETT MediaCom allows you to remotely monitor the energy consumption of your heating, ventilation and air conditioning system.

Two options are available:

- **ETT MediaCom supervision - Level 1**
 - MediaCom equipment
 - Equipment installation (cables not included)
 - Supervision access
 - Alarm notification by email (possibility to register several email addresses)
- **ETT MediaCom supervision - Level 2**
 - Setpoints monitoring and adjustment by ETT
 - Monthly report by ETT



ETT Services: Service contracts



Service contracts & audit

For optimised operation
of your installation

ETT Service Contract increases the lifespan of your HVAC equipment.

Regular audits maintain a high level of energy efficiency and keep your operating costs down.

ETT Services offers you specialist knowledge to **get the most out of your installation** with a service contract tailored to your needs:

- **Comprehensive installation audit** (ad hoc and/or annual)
- **Guarantee extension**
- **Refrigeration circuits leakage checking**
- **Regulatory safety controls**
- Technical support
- **Operational consulting**
- **Optimisation solutions**
- Repairs

Installation retrofit & upgrade

Technical retrofit
and equipment optimisation

Benefit from **ETT's latest HVAC technologies** to **optimise your air handling and energy recovery systems** and reduce your energy bill.

Improve the efficiency of your system with:

- Energy use optimisation
- Refrigeration circuits renovation
- Replacement of R22 refrigerant
- Control optimisation
- **ETT units upgrade**
- **Implementation of ETT SysCom communication tools**
- Equipment retrofit





ETT Services: Training

Three training programmes

**Train your teams
to get the most of your equipment**

Train your staff in operating and maintaining air handling units with energy recovery and high performance heat pumps **to ensure optimum equipment efficiency.**

Better understanding of your HVAC system will enable you to **manage equipment energy use to reduce the operating cost of your installation.**

➤ **Operation and maintenance training**

- Units operating principle
- Basic settings
- Operation and maintenance recommendations

➤ **Advanced operational training**

- HVAC systems operating and control principle
- Unit safety devices
- Operation and maintenance recommendations
- Main components' role and operating principle
- Operating instructions and recommendations

➤ **Custom training**

- ETT can create a training program tailored to your project and needs.
- ETT instructors will discuss the requirements with you to determine the appropriate training duration, date and location.

Spare parts



ETT Services provides you with all spare parts you may need: **refrigeration parts** (Scroll compressors, crankcase heater), **ventilation parts** (propeller fans, standard 95% gravimetric filters), **control parts** (pCO₅+, analogue air flow control probes), **electrical parts** (electrical protections, drives), and **hydraulic parts** (3-way valve engines, paddle type flow switches).

There is a custom solution for every cinema facility



ETT is strongly **committed to customer satisfaction**. To this end, we have built up a comprehensive network of professionals to provide every customer with a **dedicated contact person** according to his project and requirements.







ETT & ecodesign:

GREEN DESIGN involves DECONSTRUCTION: ETT units are 98% recyclable.

- **Aluminium: a good choice for the planet!**
 - Aluminium is endlessly 100% recyclable. Recycling covers over 30% of aluminium needs.
- **Low polluting ETT manufacturing process:**
 - Selective sorting, waste recovery, 60% of waste is recycled.
 - No paint on casings, no use of solvent.
 - ISO 14001 Certification (Environmental Management System).
- **Consumables: efficient waste management:**
 - Filtration: ETT includes ecodesign air filters (sorting frame - grille - media).



Reference: MARK-PLA_03.00-EN

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