

What's new  
What's new  
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What's new  
What's new



# Leadership in action



LU-VE Group is an international enterprise with its headquarters in Uboldo (Varese, Italy) along with its main offices and principal production facility. The strength of the Group lies in its 10 production plants located in 7 different countries: Italy, China, Czech Republic, India, Poland, Russia and Sweden.

The companies which make up the Group are:

- **AIA/LU-VE Sweden** (Asarum, Sweden): heat exchangers for refrigeration, air conditioning and industrial applications;
- **HTS Heat Transfer Systems** (Novsedly, Czech Republic): coils for air conditioning, refrigeration and for special applications (trains and means of transport in particular);
- **LU-VE Digital** (Uboldo, VA, Italy): information technology, development and implementation of calculation softwares;
- **LU-VE Exchangers** (Uboldo, VA, Italy): heat exchangers for refrigeration, air conditioning and industrial applications;
- **LU-VE Heat Exchangers** (Changshu, China): heat exchangers for refrigeration and air conditioning, destined for the Chinese and Asian markets;
- **SEST** (Limana, BL, Italy), **SEST LU-VE Polska** (Gliwice, Poland), **“OOO” SEST LU-VE** (Lipetsk, Russia) & **SEST LU-VE China** (Changshu, China): heat exchangers and condensers for refrigerated cabinets and finned heat exchanger coils for commercial refrigeration and air conditioning;
- **SPIROTECH Heat Exchangers** (Bhiwadi, Rajasthan, India): heat exchangers for domestic appliances, air conditioning and refrigeration;
- **TECNAIR LV** (Uboldo, VA, Italy): close control air conditioning for applications in surgical rooms, white rooms, data centres and telephone exchangers;
- **TGD - Thermo Glass Door** (Travacò Siccomario, PV, Italy): glass doors and closing systems for professional, domestic and industrial refrigeration equipment.

## LU-VE Group in numbers:

- over **2,000** employees;
- turnover **€250** million;
- **390,200 sqm.** of total surface area (160,300 covered);
- **2,500 smq.** of R&D laboratories (the largest in Europe and one of the few capable of testing CO2 applications);
- **99** heat exchangers production lines
- over **70%** of production sold in 100 countries.



## Sales companies





## Leadership with passion ...since 1986

Looking back over our **thirty years of development** at the forefront of the commercial and industrial refrigeration sector, I want first of all and foremost to give recognition and well-deserved thanks to all the people who have participated in this **LUcky VEnture**, both inside and alongside the company, sharing the **commitment, effort and passion of always**.

We declare on our website that **“companies are women, men and ideas”** and that **“it’s the grey matter that matters most.”**

Here we wanted to focus on the chromatic themes of transformation: **from the grey matter of LU-VE to the green and blue of the environment**.

Grey matter for a greener world and a bluer sky has been our commitment right from the beginning in **1986**, with the collaboration of the most prestigious universities and international research institutes; all this, together with our customers, with whom and for whom we have designed and constructed the most advanced solutions.

Our 30-year celebratory stand marks the **new LU-VE epiphany**: of products, colours and the proposition of new solutions.

In these three decades of history, LU-VE has produced quality components for the entire industrial and commercial cold chain, for industrial cooling and for the air conditioning of large surface areas as well as close control A/C.

Our ambition is to confer on our products – and therefore also on the systems which use our components – added value in terms of performance and an advantage for the manufacturers who use them, the final users and also for the environment.

**Our ambition is based on the same professionalism, the same dedication and the same passion. It has been so for the last thirty years. And it will be the same in the years to come.**

**Iginio Liberali**

*Founder and President  
LU-VE Group*





ITALY

[www.luve.it](http://www.luve.it)

## Emeritus



### EMERITUS: THE NEW RANGE

Emeritus is the new range of condensers and dry coolers made possible by the collaboration once again of LU-VE and the Polytechnic University of Milan.

Compared to the WSS and Dry&Spray solutions, Emeritus also adds the advantages of evaporative panels to a sophisticated control system which together increase performance levels in all climatic conditions.

#### EMERITUS - Advantages of the synergy of spray technology and evaporative panels:

- Increase of capacity under the same conditions:
  - almost 4 times compared to dry operation
  - over 45% compared to the D&S system
- Reduction of up to -6 dB(A) sound level at the same capacity
- Reduced water consumption by supplying the adiabatic pack with the water which was not evaporated on the coil (reduction on annual base)
- Energy savings through a sophisticated control system which optimizes the operation of the machine based on working conditions.
- Up to 50% footprint reduction
- Reduction of the quantity of refrigerant fluid
- Can operate at lower DT1 compared to traditional systems (and therefore at outlet temperature of the inside fluid which is closer to the wet bulb temperature)
- Construction modifications to facilitate transportation also in containers.
- Manufactured by: LU-VE Exchangers (Italy).

## Nidea® inside

New Intelligent Defrosting Apparatus

### NIDEA: INTELLIGENT DEFROST

Nidea® (New Intelligent Defrosting Apparatus) is the result of close research collaboration between LU-VE Group and the Polytechnic University of Milan. The system has grown out of the necessity to optimize all the dynamics of the defrost process of unit coolers and avoid wasting energy and money, without reducing the functionality of the equipment.

The complex algorithm of Nidea® is able to calculate and recognise the Optimal Defrost Point which is always variable.



- Lowers defrost energy consumption
- Lowers compressor energy consumption
- Lowers the level of dissipated heat
- Increases the COP (coefficient of performance)

Nidea® is the Intelligent response to the waste involved in periodic and constant defrosting based on a logic of precaution. In a traditional system the cycle is activated independently of the real need for defrosting.

Nidea is equipped with two temperature sensors which determine the deactivation of the defrost cycle.

Nidea, thanks to its pressure sensor, calculates and registers the parameters to identify the time and duration of optimal activation.

Nidea registers and "reasons" in order to manage any anomalies.

Nidea is adaptable and has a Self Calibrating System in order to automatically change the parameters and the set points in accordance with the current working condition.

The process of overmoulding which seals in the PCB (Printed Circuit Board) enables correct functioning in a humid environment down to a minimum temperature of -30°C.

#### Compared to traditional defrosting (4 per day):

- 75% less defrost cycles with just one cycle per day!
- 30% reduction of energy costs of the total refrigerant plant



## SPIROTECH INDIA JOINS LU-VE GROUP

On 19 September 2016, LU-VE announced the acquisition of Spirotech Heat Exchangers Private Limited, a leading Indian company manufacturing and selling heat exchanger coils.

Spirotech (based in Bhiwadi, Rajasthan, about 60 km south of New Delhi) produces technologically advanced heat exchangers coils (copper/aluminium and aluminium/aluminium) having end applications in domestic appliances, air conditioning and refrigeration. The company was founded in 1994 by Dr. Rajeshwar Kumar Malhotra and Mr Subramaniam Srinivasan. Spirotech is strong of 360

employees and has a total surface of 40,500 sq. m (11,000 covered). Turnover is €21 million: 70% of revenues derives from export.

LU-VE will have 95% of shares of Spirotech. The remaining 5% will be held by Mr S. Srinivasan, who will continue as the Managing Director. Dr. Malhotra will remain engaged with Spirotech as a Consultant and provide full support in transition as Spirotech is integrated with the LU-VE Group. He will also maintain his position as Chairman of Board of Directors.

# SPIROTECH

INDIA



[www.spirotechindia.in](http://www.spirotechindia.in)

## LU-VE DIGITAL CALCULATION SOFTWARE

Set up in early 2016, LU-VE Digital is an ad hoc company, dedicated to information technology and the development and implementation of calculation software (AIACalc; SEST eGenius; LU-VE Refriger; Tecnaire - Sales) used by production companies and customers.

LU-VE Digital deals with all the on-line activities of the Group. In the near future, LU-VE Digital will also look after IoT (the Internet of Things): the new frontier connecting products and the internet.



**LU-VE**  
DIGITAL  
ITALY

[www.luve.it](http://www.luve.it)



## HTS: NEW AHU APPLICATION WORLD

LU-VE Group and HTS continue on their path towards innovation and advanced IT.

HTS is presenting the launch of new product range for AHU Application World. A co-design and client partnership project. A dedicated software has been developed with a very high precision output. The exactness in thermodynamic calculations, the real time cost/offer are only two of the competitive advantages, the software offers the customer important cost savings and efficiency in responding to the market. The project envisages a fast process from concept to product, liaising 3D drawing development for customized high quality solutions.

A new stride has also been taken towards 3D dimension reading. HTS is able to offer its clients a new technical answer that allows them to read 3D drawings with 2D devices.

Environment partnership matched with energy efficiency remains a constant key development factor. Ongoing projects for no-leak solutions for sensitive applications and product design to use natural refrigerants are some of latest developments geared to energy consumption reduction and safety.



**HTS**  
HEAT TRANSFER SYSTEMS

CZECH REP.

[www.htsystems.cz](http://www.htsystems.cz)



### AIA LAUNCHES X3I

X3i stands for Industrial design in PN10 or PN16 applications.

Chassis in "Magnelis" C5 performance.

1250 mm Fan with AC IEC electrical Motor.

Heat exchanger with up to 8 Row in depth with 10, 12 or 16 mm pipes.

Fin Material in ALMG 2.5, Epoxy coated Fins and Aluminum.

Fin space from 2,1 up to 5 mm in order to handle demanding environments.

"Blygold" treatment of the Heat exchangers is available as option.

LT/HT Setup available with a Maximum Temperature of 110° C

Electrical Motors including PTO and Space heaters as Standard.

### Mechanical Options

Guardrail surrounding the unit including ladder with Fall protection.

Prefabricated custom-made external headers.

Vibration dampers, valves and sensors.

Pipe compensators on liquid side upon customer demands.

Painted in RAL 9003 as standard. Other RAL codes available on request.

Corrosion class C4H as standard. C5 and C5M on request.

### Electrical Options

Frequency Controlled speed (VSD) with Modbus or Profibus communication as option.

Solutions for external location of VSD.

Electrical Cabinet up to IP 67. IP 65 as Standard.

Fire protected, classified, Halogen Cable.

**AIA**

SWEDEN

[www.aia.se](http://www.aia.se)

## SEST: CATOCOAT AND GREEN SOLUTIONS

SEST, with more than 40 years of strong experience, is taking a new step forward towards environmentally sustainable technological innovation.

**Catocoat:** totally new coating equipment with the latest technologies has been installed. Catocoat uses water-based products and ecological degreasing systems based on evaporation technology. The latest-generation oven cuts emissions, almost entirely recovering its energy consumption. The innovative laboratory (the Catocoat Lab) guarantees constant quality of the product and process. R&D and know-how combine to create a highly resistant product which can withstand severe operating conditions and aggressive chemical agents. A product of high quality and with low environmental impact.

**New green solution** for commercial refrigeration. As a trend-setting company which understands and incorporates the needs of the market, SEST has designed and developed a new fin configuration that allows us to fully exploit the characteristics of the low GWP gases currently available, especially propane and carbon dioxide. High quality and performance: an eco-friendly product that uses green refrigerants with improved heat exchange performance efficiency.



**SEST™**

ITALY - POLAND - RUSSIA

[www.sest.it](http://www.sest.it)

**TGD**  
ThermoGlassDoor

ITALY

[www.tgd.it](http://www.tgd.it)



## NEW GLASS INSERT

**E-Cut Wide Look** is a brand new product presented for the first time at Chillventa 2016. It is an innovative glass insert, which can be applied to any positive-temperature open multideck appliance and can be easily fitted during the appliance production process or during retrofitting operations on operating coolers.

The aim of the component is to cut energy consumption and to preserve a comfortable temperature in the aisles of the store, reducing the high cold-dispersion of open refrigerated display units, while maximizing the visibility of the products

### E-Cut Wide Look technical datasheet:

- Maximum visibility thanks to reduced frame (12 mm on all four sides)
- High insulation safety glass unit (Ug=1.2)
- Silk screened external glass layer
- Low emissivity internal glass layer, colours toning down free
- Four options of closing devices, all 500.000 cycles tested
- Self-closing systems inertia over 70° door opening
- Self-closing system automatically engage below 70° door opening
- Opening door block at 110°
- Easy fitting: fast and easy installation of the pre-assembled kit, with no need for special tools or skills
- Immediate cost saving and increase of product selling efficiency
- Available options:
- High efficiencies T5 and LED selection to improve selling product visibility
- Anti – reflective glass for the correct presentation of selling products in every lighting condition
- Wide range of standard and customised handles

The purpose of the E-cut Wide Look is to reduce up to 50% of the energy consumed by open multideck appliances, keeping product visibility as wide as possible.

