



Naturally,  
LU-VE makes it better



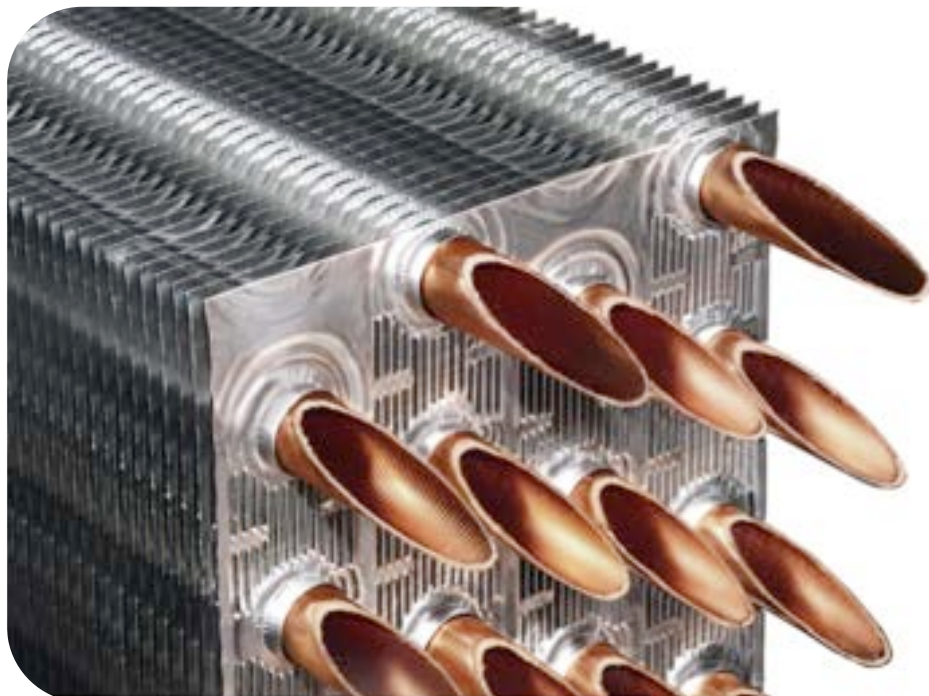


Heat exchanger  
solutions

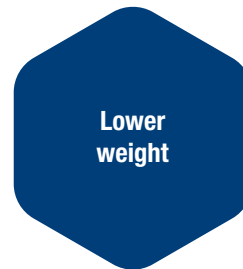
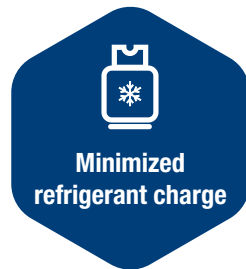


Thanks to the constant research and development led by **continuous innovation** in the manufacturing of heat exchangers, we are able to offer the best solutions for a wide variety of markets and applications operating (also in challenging conditions).

Our passion is there to satisfy market needs and to contribute **to a more sustainable world**.



- **Tube miniaturization** = reduced refrigerant charge
- **High performance** heat transfer technology
- **Zero defect policy**
- **E-Genius:** dedicated calculation software
- Reusable packaging = **low carbon footprint**
- Proximity to customers = **reduced transport emissions**
- **Single-material:** full aluminium coils



# New heat exchanger with 4 mm diameter tube

LU-VE Group research has led to the creation of a new heat exchanger with 4mm diameter tube which **improves performance by minimizing refrigerant charge.**



- Ideal solution **for residential heat pumps**
- Further **20% reduction of internal volume\***
- **Reduced refrigerant charge**
- Safer use of **A2L refrigerants**
- **Less copper**, optimizing cost
- **Improved performance\*\***
- **Lighter weight**
- Guaranteed production **flexibility**

\*compared to 5 mm tube

\*\*compared to traditional solutions with equal heat transfer surface



## REFRIGERATION

Refrigerated display cases and serve-over counters  
Positive temperature vertical and semi vertical cabinets  
Negative temperature vertical and horizontal cabinets  
Condensing units / Monoblocks



## HVAC

Split / Condensing units  
Chiller and heat pumps  
(air to water units)  
Roof top (air to air units)  
Fan coil, cassette, terminal units  
Chilled beams  
AHU/Heat recovery



## REFRIGERATED TRANSPORT

Refrigerated trailers and trucks  
Refrigerated containers for marine application



## HOUSEHOLD APPLIANCE

Heat pumps systems for  
tumble dryer applications



## VEHICLE AIR CONDITIONING

Railways  
Automotive  
Bus/Coach  
Agricultural machines



## RESIDENTIAL HEAT PUMP

Indoor/outdoor fin and tube heat  
exchanger for heat pumps

# Coils - fins and tubes

Each solution is engineered to fit the requirements of the market with tailor-made products.

**The productive experience of LU-VE Group** has always interpreted material and technology research as the real first step towards **proposing innovation.**

## tubes



### COPPER

Material frequently used in the production of heat exchangers, available with grooved or smooth internal surface, to guarantee operation at different pressures.



### ALUMINIUM

Alternative material, providing a lighter and cheaper exchanger, facilitating its recycling.

## FIN SURFACE

Aluminium and copper



### FLAT

Flat fins have the lowest resistance to air flow and reduced ice accumulation.



### CORRUGATED

Corrugated fins improve the heat transfer factor to a lower degree than louvered fins, but with a lower pressure drop on the air side.

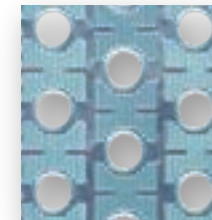


### LOUVERED

Louvered fins increase the heat-transfer capacity by creating air turbulence, considering the same exchanging surface.

## FIN SURFACE TREATMENTS

Surface treatments available on request



### HYDROPHILIC

With this treatment fins become hydrophilic and therefore "wetable", avoiding the formation of drops.



### HYDROPHOBIC

Epoxy-based treatment that effectively inhibits dust and bacteria build up.



### SUPER HYDROPHOBIC

Nanotechnology used to create a surface coating that guarantees high protection against corrosion and the deposit of dust.

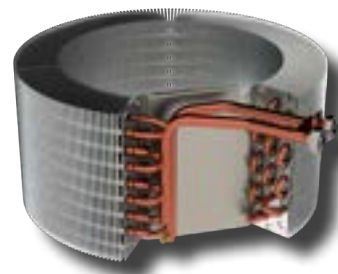
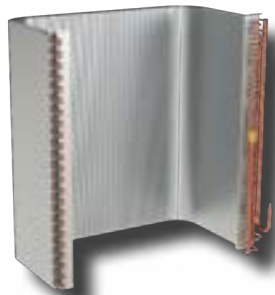
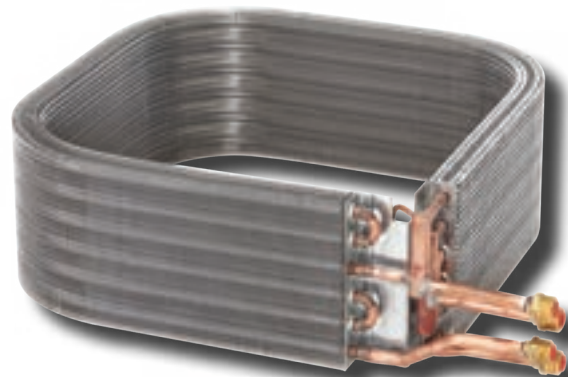


# Coils - technology

## ADDITIONAL PROCESSES

### BENT HEAT EXCHANGERS

For all applications in the air conditioning and residential heat pump sector, where specific flexibility and restricted dimensions of the finished product is requested, LU-VE provides its customers shaped exchangers with various radii of bend. Typical applications are: chillers, heat pumps and cassettes.



## PROTECTION YOU CAN TRUST

### CATOCOAT



**CATOCOAT** is the tested and guaranteed **coating technology** which LU-VE has been offering to its customers **since 1996** and which today has evolved even further using new technologically advanced equipment.

**The main advantages** of the CATOCOAT technology are:

- Extensive and regular treatment in any complex shapes
- **Thin film**
- **Corrosion resistance** in salt spray test > 1,000 hours
- **Better resistance** compared to the other powder treatment technologies and pre-coated raw materials
- **Food products compliance**
- Low environmental impact thanks to the use of water-based paints and state-of-the-art installation works

## EXCLUSIVE TECHNOLOGY

### ST: Standard steel condensers



**Tubeless steel heat exchangers.**

**Over 26,000,000 units** manufactured up to 2022 using a unique patented method.

**The combination of high mechanical strength and anticorrosion treatment** make it ideal for applications without physical protection.

**Thanks to its structure, fin cleaning can easily be done with compressed air.**



[www.luvegroup.com](http://www.luvegroup.com)



**OUR BEST DAYS HAVE YET TO BE LIVED**

Nazim Hikmet

