

## LU-VE notes

LU-VE was one of the exhibitors in the recently concluded Chillventa event in Germany. Khalil Semaan, the Managing Director (Middle East) for LU-VE, holds court on the company's Minichannel technology and on its strategies for the region **With reduced refrigerant use in the Mini Channel, developed by LU-VE, are you promoting it as a green product that is capable of earning LEED credits from an environmental perspective?**

The LU-VE Minichannel Coil is a revolutionary design in the business of heat exchangers and will be the future of the Cu/Al coil (condenser/evaporator) with a much reduced quantity of refrigerant in operation and low-energy consumption in the process involved in producing the coil. In terms of reduction of refrigerant during operation, we are talking about using 50-60% less compared to the same capacity coil currently used in the market. And regarding the energy consumption while producing the coil, we are looking at 10-15% less than the cost of energy to produce the same capacity coil, currently in the market. Here when we are talking about refrigerants, we mean, of course, the HFC refrigerants (R134A, R407C, R410A and R404A). With all the above features, the LU-VE Minichannel Coil will be capable of earning LEED credits from the environmental perspective. **You claim that the product is also low noise and low power consumption – you speak of important new solutions for dry coolers and condensers using brand new motorisation and optimised thermodynamics, which will reduce the noise levels and energy consumption between 10 and 20%. Please do talk us through these**

In terms of noise reduction, LU-VE's new design, Whisperer (patented silencer approved by TUV Laboratories) insures the reduction of 5db when it is installed to all fan motors over 500mm diameter. And in terms of power consumption, we really do need to talk with regards to condensers and evaporators. First, the condensers. The new generation of Active Control Technology Controller permits the efficiency optimisation of the total integration of the system and not only the condenser or the fluid cooler. This technology uses Logic Control to keep the rotation of the fan motor of the condenser/fluid cooler directly linked to the condensing temperature; in this regard, the maximum fan motor rotation will insure a higher capacity of the condenser/fluid cooler and, therefore, a low condensing temperature. So the efficiency of the compressor will be higher, and the result is having a system that consumes 27% less energy. Secondly, the evaporators. The LU-VE Jetstreamer design will reduce the accumulation of the frost on the coil and, consequently, will reduce the defrost cycles during the day. The result of this is a 20% savings in energy. **How well is the product performing in the hostile ambient and dust conditions of the Middle East?** LU-VE has already a wide experience of units installed in the region in the last 30 years and, therefore, these conditions are well known and are not a real issue for us. The products of LU-VE have casings of galvanised steel with epoxy-polyester powder coating; as an option for the high-corrosive nature of the application, LU-VE can offer on request casings with stainless steel, S/S 316L. Regarding the coil, the standard type is CU/AL, but as an option, LU-VE offers Cu/Alupaint, Cu/Cu, and Cu/Cu with electro-tinning for industrial and off-shore/marine applications, with various fin spacings available on request for applications in very dusty conditions. **What specific plans do you have for the product in the Middle East? In particular, what is your thrust strategy into the Saudi market?**

LU-VE products are very much suitable for the Middle East region. LU-VE is not new in the region, especially in Saudi Arabia, where LU-VE sold its equipment to the Del Monte Project, one of the biggest industrial refrigeration projects in the Kingdom, using ammonia as a refrigerant. Therefore, our strategy is to increase our presence in the region with a much closer presence to the existing customers, to potential ones and to the consultants and advisors, in order to enable them to better know the innovative features and advantages of our wide and complete product range. **In the industrial refrigeration sector, clients are asking for reliability more than energy efficiency. At least in the case of compressors, several clients that we spoke to complained how they were losing equipment regularly. Also, there are issues regarding improper installation practices, inadequate training of the client's technicians and also inadequate after-sales service. How are you, as a company, addressing these issues?**

In the industrial business, there is a different approach, where after-sales service is a crucial point. LU-VE is going to have a reactive strategy to follow up closely with the clients about their need of spare parts. It will give them technical advice and support. But the more important element will be the proactive strategy, which involves building up the contracting channel by providing training and conducting seminars to share technical information and proper installation practices.