ALDES

The Twisted 850

B uildings in the UAE should have high mixing rates of space air diffusion, whose ideal level is for someone to feel neither hot nor cold.

This, according to Francois Biguenet, product manager at Aldes Group. "The comfort in air diffusion is when there is nothing to feel, nothing to hear and nothing to see," he said, referring to the new Aldes air diffusers, which do not create noise and can be installed in ceilings as part of their design.

Speaking before the Air Diffusion Seminar, held recently in Dubai, Biguenet said the diffusion by air mixing, which accounts for 70% of the HVAC systems in Western Europe, is best for the UEA due to its hot temperature.

The diffusion by active chilled beams, which is 20% of the HVAC systems in Western Europe, is good for green buildings in that region. "We're not promoting this in the







Aldes' Swirl Diffuser Twisted 850

Middle East," he said.

Aldes, which manufactures the whole range of grilles and diffusers for the HVAC industry, introduced its new Swirl Diffuser Twisted 850 to the Middle East market during the seminar

Dedicated to air conditioning, the product is equipped with a patented system of swirl diffusion, providing added mixing capacity on a wide range of airflow. It achieves the "Coandă effect", or when a low pressure area causes the moving air mass to cling to and flow close to the ceiling surface.

In space air diffusion, a good air distribution design is one that makes use of room surfaces to keep supply air away from the occupied area.

A component of an HVAC system for commercial buildings, a chilled beam is located in the room itself and uses water to remove heat from a room. This system relies on air handling units to remove heat from the room air and transfer it to the water. The chilled water is, then, blown into occupied spaces through ducts.

No wonder Biguenet pointed out that commercial buildings, schools, universities, dry labs and hospitals must "optimise energy consumption through good ductworks".

He said that design, energy efficiency and comfort in HVAC products and design are what the current market needs. "The ease of using the product, its good design and its easy installation and commissioning," he said, "are what consumers are looking for."

TRANE

RTAC XE

dding the RTAC XE (EXtra Efficiency) to its RTAC range of air-cooled helical-rotary chilled water systems, Trane says that the newly launched product is particularly suitable for applications requiring reliability and safety. This includes industrial, hotel and office buildings, hospitals and clean rooms. The new RTAC XE 430-1520KW-chilled water system is Eurovent Class A certified, with an average Energy Efficiency Ratio (EER) of 3.15.

According to Trane, energy saving is achieved with the patented falling film evaporator technology, minimising the expense of operating a chilled water system, which can amount to over 90% of the total lifetime cost of an HVAC system.

Manufacturers enumerate the following features of the new product:

- The RTAC XE is equipped with a compressor with variable unloading, which is able to closely match a building's cooling load or an industrial process load.
- The RTAC XE's helicalrotary compressor has few moving parts to maximise operational reliability.
- To ensure quick and



seamless installation, RTAC XE units are tested, and refrigerant and oil charged in the factory.

• The compact system requires minimal clearance space around the unit to ensure it fits into small spaces.

"Maximum energy efficiency and reliability are equally important factors in minimising the lifetime costs of operating an HVAC system," says Pierre Cazal, Vice President, Product Management and Equipment Solutions for Trane Europe, Middle East, India and Africa. "The RTAC XE delivers both. With the RTAC XE, customers get safety and robustness, as well as built-in energy efficient technology."