

## X-CUBE CROFCU REDUCES ENERGY COSTS



Most clean rooms are characterised by a very high air change rate. Depending on the situation, it may be necessary to change the air volume in a room up to 40 times per hour. On the other hand, only a few people may be working in the production rooms or labs at any one time. This means that only a small quantity of air is 'used' and hence only a low fresh air flow rate is required. A similar case are thermal loads, which need to be dissipated only in selected spots.

Enter the X-CUBE CROFCU – and with it a completely new design concept for clean rooms. The compact, factory tested secondary unit for use with centralised ventilation and air conditioning systems is typically installed in false ceilings.

With its unique features it meets the essential requirements on the ventilation and air conditioning of class C and class D clean rooms.

- Dissipation of high thermal loads
- Addition of fresh air as required
- Maintenance of room pressure by integral volume flow rate control

Filters that can be adapted as required are the perfect addition to the product.

X-CUBE CROFCU increases the efficiency.

The quasi plug-in construction of the X-CUBE CROFCU reduces the installation time on site considerably. More savings potential results from the easy and straightforward maintenance since all components are easily accessible.

Fresh air is added based on demand such that no energy is wasted. A factory acceptance test ensures that each unit complies with the applicable standards and meets the requirements of the customer. All required parameters are factory set. As a consequence, only a minimum amount of time is required for commissioning and on-site tests.

Straightforward installation of the X-CUBE CROFCU.

The X-CUBE CROFCU is delivered ready to operate. Transport is easy as holes are provided for the insertion of transportation rods such that the unit can be lifted with a crane. The dimensions fit the usual grid sizes of clean room ceilings. Due to its rigid base the unit can be safely installed on ceilings or set up on the floor. Any wiring inside the CROFCU is already complete and need not be performed on site.

X-CUBE CROFCU is flexible.

It is possible to use the X-CUBE CROFCU as a single unit or to combine several units. In conjunction with the TROX software this results in a

flexible ventilation solution for clean rooms. The X-CUBE CROFCU allows for stand-alone operation as well as for integration with modern building management systems.

## X-CUBE CROFCU – THE ADVANTAGES AT A GLANCE.



- Suitable for all clean room strategies
- Suitable for all classes of clean rooms (ISO 14644-1) when combined with particulate filters
- Pumped chilled water cooling system (up to 8 kWh) with room temperature control
- Variable recirculated air volume flow rates of up to 6,000 m<sup>3</sup>/h
- Increased flexibility if several units are connected
- Energy-efficient plug fan with EC motor
- Addition of fresh air from 50 m<sup>3</sup>/h to 2000 m<sup>3</sup>/h
- Monitoring of filters downstream
- Contamination check by means of pressure zone control
- Space-saving since only smaller ducts are required when compared to conventional recirculation systems
- Simple and quick commissioning due to plug and play