TROX® TECHNIK
The art of handling air

ROOM BALANCING

The safety net.
Positive pressure is a simple way to physically prevent contamination in clean room production facilities. Positive pressure prevents undesired airflows or undesired particles from entering a room. TROX provides systems which ensure that the correct positive pressure is maintained.

Advanced technical equipment and software and the wide range of VAV terminal units mean that electronic control is now an option for nearly all room pressure scenarios. The more critical leakage levels are, the more important is it to plan the pressure control accordingly. While pneumatic solutions are still an option,it is nowadays also possible to achieve precise pressure levels with an electronic system, e.g. with a bypass controller. Electronic control has clear advantages: less coordination effort, no requirement for pressurised air as with pneumatic control, and easy integration with the central BMS.

Proven plug and play communication and integration into the central BMS with LON, BACnet or Modbus, or IP-based communication with Ethernet allow for easy and efficient system integration.

Demand-based solutions.
Flexible building usage plays an immensely important role in the planning of clean room production facilities.

It must be possible to change and extend buildings at a later stage and at minimum cost. TROX air distribution technology and the TROX measurement and control system are ready for the challenge. Our air management systems have a modular structure such that they can be expanded or adapted to changing conditions flexibly and easily.

VAV TERMINAL UNIT TVR WITH EASYLAB CONTROL COMPONENTS FOR ROOM PRESSURE CONTROL IN CRITICAL AREAS

V: 10 – 1,680 l/s
V: 36 – 6,048 m³/h
Δp: 20 – 1,500 Pa
Ø 100 – 400 mm

Closed blade air leakage to EN 1751, class 4 Casing air leakage to EN 1751, class C

EASYLAB

- Room management function: All room related data and configurations stored in one controller
- BMS interfaces: Analog, digital, LON, Modbus, BACnet and Ethernet
- Plug and play: Automatic data exchange between the controllers; no addressing required; interactive commissioning
- Easy maintenance, room diagnosis and room configuration
- Only one communication line between controllers; no addressing
- Rapid and precise control to maintain setpoint values
- Static measurement
- Modular structure of the hardware, with numerous options for expansion