

# Case Study

**weisstechnik** has equipped a 1,500 square metres operating department with air-conditioning technology

## WHY

New operating department with five operating theatres over 1,500 square metres

## HOW

Demand-oriented clean air technology and innovative operating theatre air-conditioning technology

## WHAT

Vindur Laminar Flow clean air ceilings with low-turbulence displacement flow and surgical smoke extraction

### WHY - The Challenge.

The Clinique des Grangettes is a renowned private hospital in the centre of Geneva. One of the clinic's key areas is specialised surgery. When building the new operating department with five operating theatres each measuring 50 square metres, modern equipment designed for efficiency was particularly important to the hospital. All areas should be multifunctional and it must be possible to perform the same operations in all operating theatres. Therefore, all operating rooms were equipped with the same peripheral equipment such as surgical ceilings, surgical lights and supply stations.

### HOW - The Idea.

The MediClean specialists from **weisstechnik** were responsible for planning and implementing the air-conditioning technology for the operating theatres. The heart of the operating theatre air-conditioning technology are the clean air ceilings. These must meet special requirements to protect patients and operating theatre staff in the best possible way and at the same time operate economically. In the Clinique des Grangettes, the fresh air is therefore first processed in another hospital area and then fed into the operating theatre department. To guarantee a permanently reliable supply of clean air, MediClean OR clean air ceilings with low-turbulence displacement flow were installed.



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### WHAT - The Solution.

The MediClean OR clean air ceilings with low-turbulence displacement flow have a nine-square-metre air outlet equipped with H14 filters. A screen of clean air is created under this large air outlet area, which safely shields the patient, surgery staff and instruments from the environment during the procedure. Impure germs from outside cannot penetrate the low-particle protective zone, so the germ load in this sensitive area is extremely reduced.

### Selected Product: **Vindur**<sup>®</sup> Laminar Flow Clean Air Ceilings

The Clinique des Grangettes opted for a surgical smoke extraction system to complement its clean air surgical ceilings. This protects against harmful smoke, aerosols, nanoparticles and other substances released when working with HF, RF, laser and ultrasound instruments. The smoke extraction system removes the smoke where it is produced: directly at the wound. Surgeons can position the suction tube themselves to achieve optimal extraction with a clear view.

### Services at a glance

- Airconditioning consultation
- Planning and installation of the entire clean air technology
- Installation and commissioning together with the customer

