<u>Guardtech</u> <u>Group</u> ELECTRONICS MODULAR





THE CLIENT

Swisstronics Contract Manufacturing AG – developers and manufacturers of products of high quality using state-of-theart equipment. Swisstronics offer complete outsourcing solutions for the development and manufacturing of electronic component assemblies as well as complete devices and systems.

THE BRIEF

The client required a modular cleanroom process zone and change area over 130m² of their existing host building to extend their Electronics assemblies operations. The room would require positive pressurisation, temperature & humidity control, vision panels and 1000 lux lighting, as well as a large transfer hatch.





130m²

Electronics

24+/-2C 50% +/-10% RH



Guardbech group International Case Study

<u>Switzerland</u>

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"It was a pleasure to work for such a distinguished client..."

Guardtech Cleanrooms Project Manager Elliott Pearce, who steered the Guardtech Cleanrooms team, said: "It was a pleasure to work for such a distinguished client in a completely new territory for us. The Group's expansion into Europe is really exciting and we hope to return to Switzerland again soon to install more Guardtech Cleanrooms modulars – which show off the best of British when it comes to construction."

> **Elliott Pearce** Guardtech Cleanrooms Project Manager

Guardtech



CLIENT CASE STUDY

ELECTRONICS MODULAR





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THE TECH SPECS

A controlled environment designed, installed, cleaned and commissioned by Guardtech built to the following specification:

 Structural: GT Shell Plus semi-flush wall panelling system, GT Lid Plus walkable panelled ceiling system, GT Access Plus semi-flush single and double doors.

◆ Electrical: GT Lux Plus LED lighting units providing 1000 lux at bench level in the main process area and 500 lux in change area, 15 x 13amp sockets in surface-mount trunking, CAT6 data sockets, 3-phase power outlets.

 Mechanical: GT Flow Plus H14 HEPA Fan Filter Units with G4 filters providing 18 air changes per hour, GT Air Pro Upflow CRAC close control Air Handling Unit (AHU) with carbon filtration, compressed air – Residual oil content Class 1, Residual dust class 2, Water content class 4 double connections.

THE CHALLENGES

Hatching a plan: The client required a transfer hatch to support their operation – however, the standard stainless steel sizes were inadequate, and so the Guardtech team had a 1,000m3 hatch specially commissioned from a polypropylene carcass.

Walking on the roof: Following a site survey, the Guardtech Design Team extended two walls to meet a slab above to ensure a walk-on ceiling, with limited space, was available to use.

New territory: The main difficulty throughout this project was sourcing additional/replacement materials. Given that this was one of our first major overseas construction projects, we had to overcome the challenge of unexpected lead times, costs and resource available for any last-minute works.

The language barrier also offered up another challenge – making co-ordination with other contractors on site, such as regional electricians, more difficult than usual. But the Guardtech Cleanrooms team were malleable enough to find a positive and practical way forward.

Difficulty in store: There was no room available for a designated site storage zone and so the team had to keep equipment and materials in the already limited build space. Construction also ran alongside the client's manufacturing line, meaning we had to work within a tent to control dust and particulate exposure. Once again though, these were all issues the team had faced before and they refused to let them affect the quality or speed of delivery.

THE RESULT

Guardtech Group Project Manager Elliott Pearce, who steered the Guardtech Cleanrooms team, said: "It was a pleasure to work for such a distinguished client in a completely new territory for us. The Group's expansion into Europe is really exciting and we hope to return to Switzerland again soon to install more Guardtech Cleanrooms modulars – which show off the best of British when it comes to construction."