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 **ORIGIN**

## THE CLIENT

Origin – manufacturers of versatile packaging solutions for the global pharmaceutical market. Origin take care of the design, manufacture and consolidated supply of a wide range of pharmaceutical packaging. In this instance, their leading aseptic filling expertise and large-scale manufacturing production lines were required to package reagents used in COVID-19 diagnostic kits.



Diagnostics



21°C+/-3°C



470m<sup>2</sup>



## THE BRIEF

**In response to the upscaling of COVID-19 diagnostics across the UK, Origin were briefed with assembling a 'reagent-fill' facility in an extremely quick timescale. Origin turned to Guardtech to help condense a 24-week build schedule into half that time to meet the increasing demand of COVID-19 testing, with both firms keen to play**

**their part in the national effort to fight the virus. Origin required six ISO5 cleanrooms for their aseptic filling processes and a larger background environment at ISO7 for packaging of materials and associated utilities to support the process equipment, such as power units, water and compressed air.**

## ABOUT US...

From About Us on [www.originltd.com](http://www.originltd.com)

"Origin offers customers a remarkable range of versatile packaging solutions that respond to the unique needs of the global pharmaceutical marketplace.

"With our division that contains experts in materials which shield and protect a pharmaceutical preparations integrity, we facilitate our customer's vision to succeed by providing a wide scope; from concept design through to market solutions, supported by extensive global resources."

 **ORIGIN**



**Guardtech**  
cleanrooms

# REAGENT MANUFACTURING

Contact Us



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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 PIR Wall Panels](#) – including glazed panels, [GT Lid Plus Ceiling Grid & Tiles](#), [GT Access Pro Rapid Roll Doors](#).
- ◆ **Electrical:**  
 13-amp small power, flush-mounted with embedded containment within the panel core, three-phase power sockets ceiling mounted, electromagnetic door interlock system, automatic swing-arm door closing systems on large double doors with infrared activation, digital touchscreen HMI group fan speed controller.
- ◆ **Mechanical:**  
[GT Flow Plus Fan Filter Units](#) including H14 HEPA filters

provided a total air supply of 115,500m<sup>3</sup> per hour, GT Air Plus – four off 25kw VRF units ducted throughout the plenum, stainless steel sinks installed with point-of-use heater and associated plumbing.

- ◆ **Monitoring:**  
[GT Scan Max CF21R Part 11 compliant Environmental Monitoring Software](#) with connected temperature, humidity and pressure probes serving all cleanrooms with additional in-room LCD displays and three 49-inch display screens in ISO7 packaging hall.
- ◆ **Furniture:** Stainless steel stepover benches, wall-mounted dispensers, stainless steel pedal bins, stainless steel sink unit, bespoke stainless workbenches.

## THE CHALLENGES

**Schedule:** Due to the nature of the client's business model being focussed on immediate COVID response, time was of the essence and a lot of work was done up front to identify the appropriate materials and

resources to condense a standard 24-week building schedule to a compressed 12-week operation. This also included working around other contractors operating in the main hub and facilitating the client's process equipment installation and commissioning while the cleanrooms were being fabricated.

**Christmas and COVID:** The 12-week schedule overlapped the Christmas break, so Guardtech had to facilitate holiday working amidst a landscape that was already difficult due to general COVID complications, travel restrictions and virus management onsite.

**HVAC:** Due to time constraints, Origin's HVAC system had to be installed using 'off-the-shelf' components – therefore the design had to be well thought out by Guardtech's team to ensure the best possible results.

**Brexit:** With the UK leaving the EU at the turn of year, a number of key components had to be tightly managed in terms of the shipping and importation process to avoid delays.



## THE RESULT

Jon Sewell, Origin's Aseptic Filling Program Lead, said: "Guardtech were a remarkable partner to work with – against the odds of an evolving brief, an incredibly challenging timeframe, and Brexit threatening to disrupt vital parts of the supply chain, they delivered a substantial project on time and budget. Level headed and fair, nothing was too much bother to discuss and solutions were provided time after time."

**Guardtech Operations Director Conor Barwise said:** "With such a challenging schedule and necessity that the highest quality was achieved, it was essential that the communication between all project stakeholders was effective and continuous."

"We worked alongside the main contractor and client with an openness and proactiveness that ensured all stakeholders and teams onsite worked



together in a positive manner. Any issues or disruptions to the schedule were reviewed collectively and managed pragmatically. "My personal highlight, and a moment that captures the very essence of Guardtech, was

helping our own and client's teams with the Deep Cleaning of the facility in the final stages. We all worked together, through to midnight and beyond, to get the project over the line while still managing a smile throughout!"