



## THE CLIENT

Medical Moulded Products (MMP) Ltd – formed in 2015 to concentrate on cleanroom manufacture of medical devices and associated products. MMP excel in creating high-quality plastic products that are suitable for use in the medical sector, including spatulas, mixing bowls, syringes, dispensers and overmoulding of any kind.

## THE BRIEF

The client required two mobile Personnel Airlocks (PALs) to act as portable change areas to serve their existing suite of ISO5 softwarell cleanrooms. One of the pods would need to achieve ISO7 classification whilst the other would need to remain unclassified, ensuring there was no pressurisation in the pod that might affect the cleanrooms that it would be serving.



Injection Moulding



No temperature control required



6m<sup>2</sup>



**“A great concept that could become more common”**

Isopod Rapid Cleanrooms Manufacturing Manager Michael Burton said: “It was fun to work on such an interesting concept as this. We’ve built many Isopods over the years, but to construct two different units as mobile changing rooms was really interesting. It’s a great idea and something I can see becoming more prevalent in the future.”

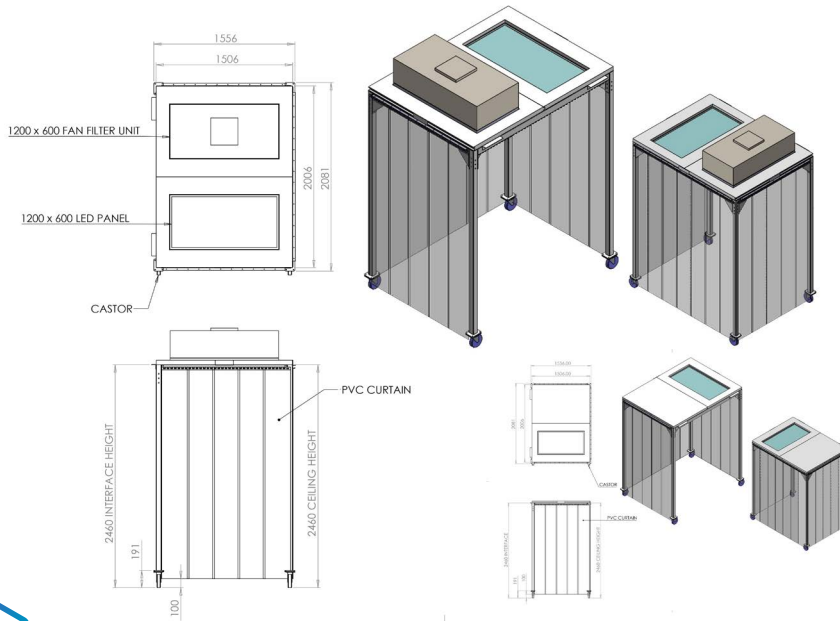
**Michael Burton**  
Isopod Rapid Cleanrooms  
Manufacturing Manager



Medical Moulded Products



**Isopod**  
rapid cleanrooms



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## THE TECH SPECS

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

◆ **Structural:** GT Strip Max PVC strip curtain – 300mm wide/3mm gauge with an internal height of 2.5m and a 50% overlap, GT Lid Pro panelled ceiling, Aluminium 50 x 50 x 3mm Box Section frame with Grade 304 stainless steel connectors.

◆ **Mechanical:** GT Flow Plus Fan Filter Units (FFUs) with H14 HEPA and G4 Filters achieving 60 air changes per hour, 8 x castors.

◆ **Electrical:** GT Lux Plus surface-mounted LED lighting achieving 500 lux.

That particular unit, which was designed to achieve ISO7 classification, was intended to serve the various Class 5 cleanrooms that the client had stationed at their facility. The ISO7 Isopod was required to serve rooms with differing heights and, as such, the Isopod team had to ensure that PVC curtains of differing lengths could be used to 'make up the height difference' when used with the client's smaller unit.

**Handling the pressure:** The unclassified Isopod was designed to serve the client's ISO7 cleanrooms. However, whilst the client still required a clean change area solution for those process spaces, the unit couldn't be filtered as the air pressure within would drive air into the cleanroom. Therefore, the result was two portable units on castors, with one providing around 60 air change rates per hour and the other operating as a non-classified Personnel Airlock.

## THE CHALLENGES

**Curtain call:** Both of the portable Isopods were required to be built to the same dimensions, but only one need to be classified to an ISO14644 standard.

## THE RESULT

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