



Case Study

Assessing mock-ups through virtual attendance technology

Using HoloLens virtual technology to overcome challenges when global customers aren't able to attend reviews in person.

Challenge

The phase of creating ergonomic mock-ups holds significant importance in the development of UltraSAFE high containment systems. This crucial stage involves determining the optimal operating positions that accommodate the complex processing requirements, enabling operators to work comfortably and efficiently within the system.

However, working with global customers poses a challenge, as physical attendance at the review may not always be feasible due to constraints such as geographic locations, travel limitations, time, and cost.

Solution

Howorth design and manufacture the mock-ups utilising PVC materials to provide an accurate representation of the final solution including all integrated process systems, containers and tools etc. to ensure the review is as realistic as possible. Powder handling processes are also replicated utilising a surrogate material such as lactose.

In cases where the customer cannot physically attend the review, Howorth offers the option of conducting the review "live" using HoloLens virtual technology. This innovative approach enables operators to interact in real time, ensuring that all aspects are thoroughly reviewed by key stakeholders. This remote system is also beneficial as it allows the use of actual equipment within our assembly area to explain how the new containment systems are configured and utilised.

Outcome

Ensuring complete satisfaction and comfort of the project team and operators with the design is crucial for the successful implementation of the final system. Making amendments and modifications to the system becomes exceedingly challenging once it has been installed.

The use of the HoloLens virtual technology enables customer interaction without being present ensuring there are no delays in project delivery.

After the review process is completed, the mock-up is frequently shipped to the customer's site to be used as a training aid before the arrival of the final system.