

Maintain Clean, Controlled Environments with Enershield Air Barriers

In industries like Semiconductor manufacturing, Pharmaceuticals, Life Sciences, Aerostructure and Composite manufacturing, maintaining controlled environments is critical, especially when equipment or personnel are continually entering or exiting these controlled areas.

Enershield Air Barriers are the market leading air separation technology for open doorways up to 11.5m high and are a proven and effective solution to reduce the ingress and transfer of environmental conditions and contaminants that can negatively affect sensitive manufacturing processes.



Temperature & Humidity

Proven to reduce heat, cold and humidity transfer by up to 90%



Sustainability

Reduce energy consumption & CO2e emissions



Fumes and Chemical Contaminants

Can improve indoor air quality and reduce the transfer of VOC's, fumes and other gases

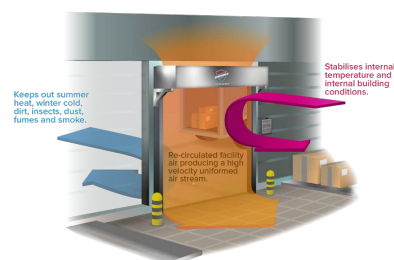


Particulate Matter & Airborne Contaminants

Reduce the ingress of particulate matter (PM10, PM2.5, PM1 & ultrafine) by up to 80%, dust and other airborne contaminants.

Delivering Operational Stability

The installation of an Enershield Air Barrier can assist with the challenges of maintaining controlled environments substantially reducing the ingress and transfer of environmental conditions and contaminants that can affect sensitive manufacturing processes.



A Breath of Fresh Air: Stabilising Temperature, Humidity and Contamination Control in Orthopaedic Production

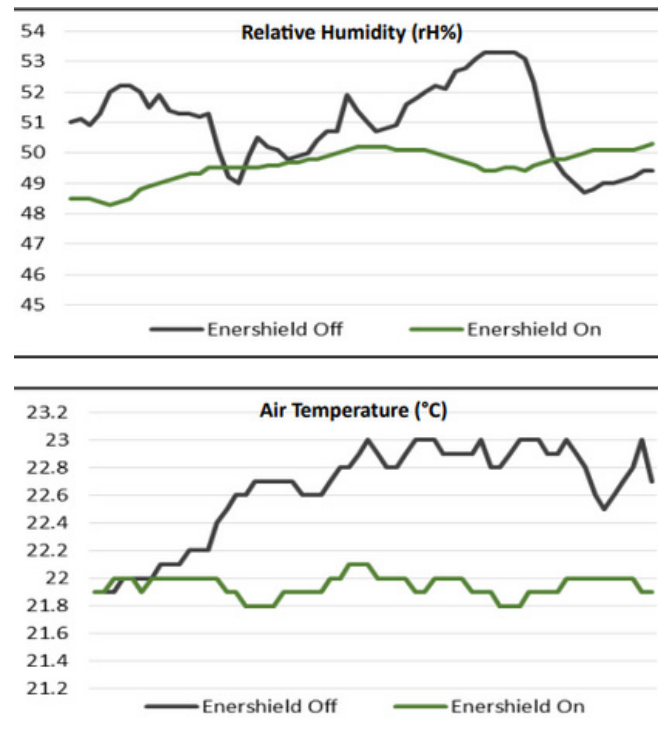
The Client

Our client is a global leader in providing healthcare solutions in orthopaedics, spinal care, sports medicine, and neurosciences.

The Challenge

Manufacturing orthopaedics at their facility in Ireland, our client required a controlled environment be maintained within their product drying room to achieve their desired product yield.

Due to a high volume of traffic in and out of the drying room through multiple doorways and openings, they found it difficult to maintain the required temperature, relative humidity and cleanliness which was critical to the drying process and delivery of their desired product yield. To try to mitigate problem previously they had positively pressurised the room and tried to stabilise the temperature and relative humidity utilising their HVAC system. This approach was ineffective leading to unstable conditions and poor product yield.



The Solution

After discussing the issues with our client, we installed Enershield Air Barriers over the drying room doorways and openings to provide environmental separation, which stabilised internal conditions and reduced the ingress of external contaminants.

The Result

The Enershield Air Barriers have stabilised both the temperature and the relative humidity (RH) within the drying room, keeping within the critical range for both as seen in the measurements taken. The stabilisation of the internal conditions, coupled to reduction in the ingress of external contaminants led to an increase in product yield and removed the need to positively pressurise the room.

“Erratic air conditions have always been a major issue within our drying room. The installation of the Enershield Air Barriers has stabilised the air conditions, with the results being very positive.”

- Foundry Technologist.