

Howden's experts facilitate training and sales processes across the world

Augmented training and product demonstrations enable manufacturers to scale their expertise efficiently

Global businesses depend on their experts every single day. Products are designed and manufactured on one side of the world and distributed on the other—meaning product, sales, and customer service teams rely on experts to travel across the globe for support. In order to efficiently scale employee expertise, manufacturers need a way to conduct effective training and knowledge transfer remotely.

Augmented reality improves the way that knowledge, instruction, and training are created and delivered. This powerful technology layers 3D digital content on top of the real-world environment to empower frontline workers with critical information they need to get their jobs done safely and accurately. Through immersive, 3D augmented reality, manufacturers are able to scale expertise efficiently and give their workforce the knowledge they need to succeed.

Howden saw an opportunity to improve training and knowledge transfer

Headquartered in Glasgow, Scotland and backed by over 160 years of industry experience, Howden is a global engineering business that provides customers with industrial products supporting multiple sectors—including power generation, oil and gas, wastewater, metals, mining, and transportation. They focus on quality solutions for air and gas handling, and their wide range of rotating equipment helps customers solve the toughest application engineering challenges.

Howden's engineering and product experts are in high demand as they support colleagues and customers around the globe. They often have to travel to train sales teams and support manufacturing and field service teams—a time consuming and costly process that impacts efficiency and ability to scale.

For example, Howden designs, engineers, and manufacturers their turbo blowers—machines that move gas or air using pressure—in Europe, but they are serviced and sold in many different countries. In order to ensure that service, manufacturing, and sales teams have a good understanding of these complex pieces of equipment, they need to provide an effective means of training. This can be difficult as physical units are often required to provide the necessary level of detail. If a piece of equipment is already in a production environment, it will require that the equipment be taken offline during the training, which can result in costly downtime.



Howden partnered with PTC to implement augmented reality training and sales initiatives

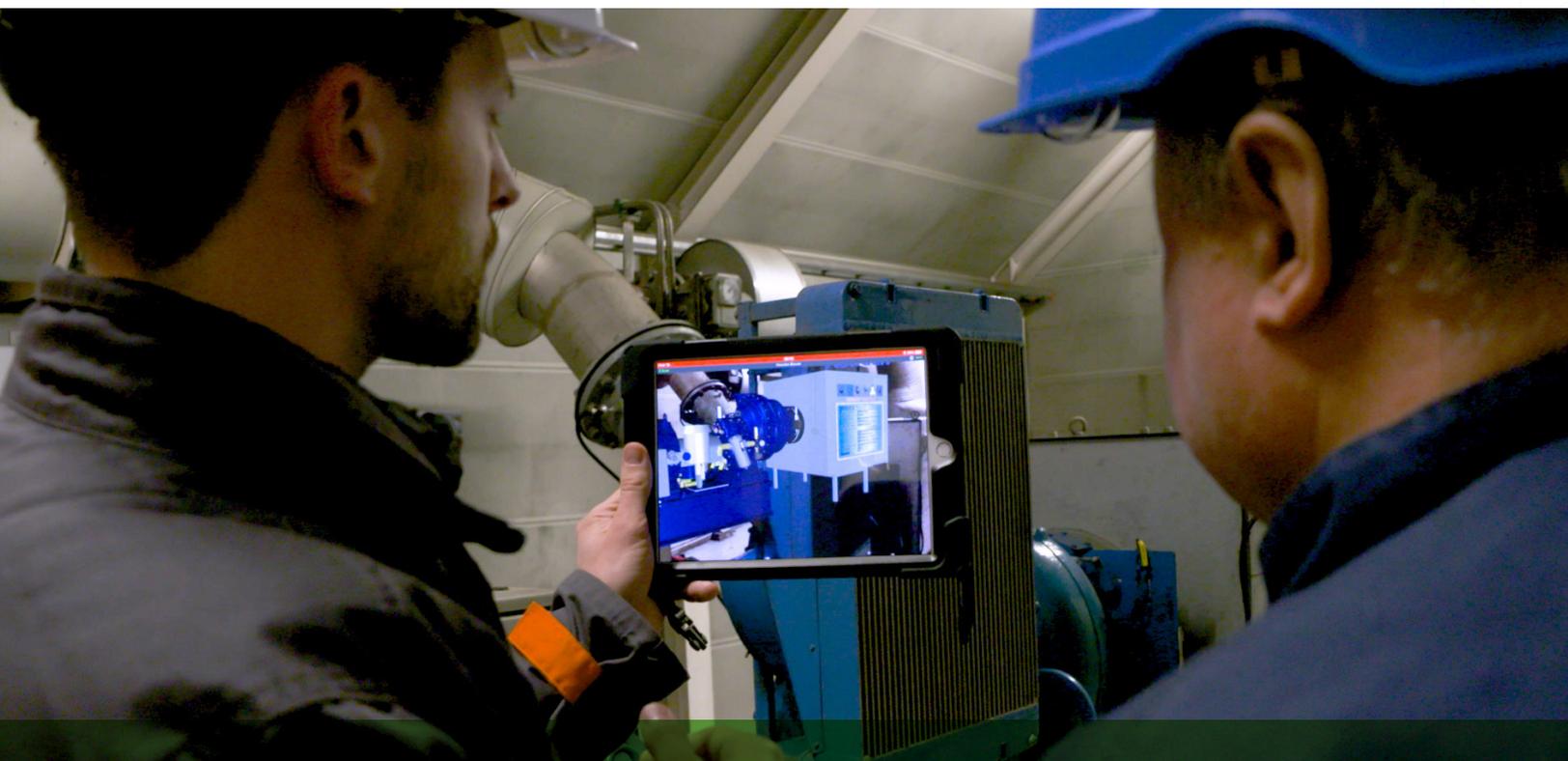
Howden recognized that they needed to find a better solution to scale product expertise to internal teams. They decided to use immersive 3D virtual product demonstrations to provide highly visual, augmented reality experiences from remote locations.

Building on their existing partnership with PTC, Howden determined that the unique capabilities of Vuforia Studio made it the perfect augmented reality tool for improving understanding on complex, mission critical equipment. Vuforia Studio is an efficient augmented reality authoring and publishing solution which leverages existing 3D CAD models to facilitate product demonstration and training experiences. It can also incorporate animated sequences and IoT data from ThingWorx to provide additional insights and clarity.

Starting with their turbo blower product unit in Europe, Howden designed a pilot program for a

standardized augmented training process that could be deployed across the business. Through these immersive visual learning experiences built with Vuforia Studio, Howden's product units educate regional sales teams and other internal teams about complex product features—in a manner that improves comprehension and retention. In combination with traditional presentation formats, Howden found that the augmented reality experience makes information easier for teams to understand and digest.

The same technology also opened the door to a different opportunity: empowering their sales teams to give detailed product demonstrations to customers. Howden's sales teams use these immersive, full-size, virtual product experiences to help improve their sales process. Virtual 3D product demonstrations allow them to show customers the size, scale, and functionality of massive compressors by providing them with an augmented reality experience viewable on their mobile device. This was particularly valuable as face-to-face sales meetings became impossible due to the impact of COVID-19.

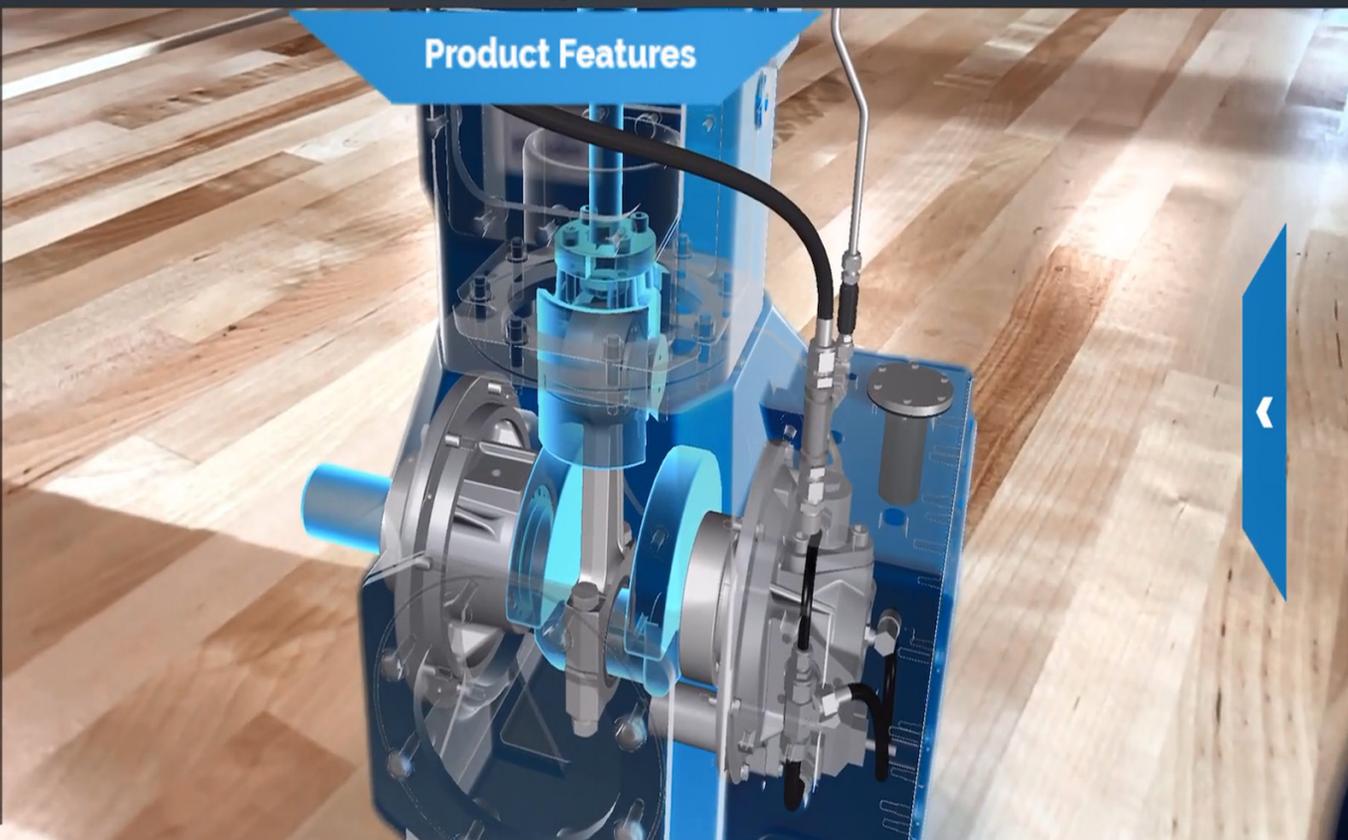


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Howden Diaphragm Compressor



Product Features



Crosshead-piston

Oil pressure limiter

Crankshaft

Diaphragm set

Head detection system

Howden established an efficient and effective process for training and sales

The result is a comprehensive augmented-reality-enabled training and product visualization experience that enables experts to support multiple teams in different locations—improving workforce efficiency and scaling the expertise that makes Howden such a powerful force in the industry. Howden has already begun expanding their training to more of their product lines.

Additionally, sales teams have accelerated the sales process by giving more detailed and compelling demonstrations to customers remotely. Even when the disruptions caused by COVID-19 are gone, Vuforia Studio will be an essential tool for every sales team.

"Really," says Graeme Russell, Commercial Lead, Data-Driven Advantage at Howden. "it's all about scaling over 160 years of product expertise effectively and efficiently—across all parts of our business."

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