

accenture



DESIGNED, SUPPLIED, DELIVERED:

Coordinating production of medical ventilators for the UK

VENTILATOR
CHALLENGE | UK



CHALLENGE

When the UK stood in the face of a rapidly escalating COVID-19 outbreak across the nation, the British Government sought to prepare its National Health Service (NHS) and ensure sufficient supply of lifesaving medical equipment.

But with thousands of people being admitted to hospitals daily, they feared an impending shortage of intensive care beds and machines vital for treating critically ill patients. So the UK Prime Minister called on industry to manufacture new ventilators, asking companies across the country to help meet the unprecedented demand.

Responding to the call for assistance, the High Value Manufacturing Catapult CEO, Dick Elsy, pulled numerous leading aerospace, automotive and engineering businesses - including Smiths Group, Penlon, Rolls-Royce, GKN Aerospace, McLaren, DHL and Accenture – together to form the VentilatorChallengeUK consortium.

This aimed to pool skills and cross-industry expertise to design and deliver medical ventilators to hospitals nationwide.

The consortium submitted a range of design options, all based on existing technologies which can be assembled from parts largely available in the UK. After evaluation and testing, the consortium chose two existing ventilator designs, one by Smiths Group and one by Penlon, and sprung into action to progress production.



WHAT ACCENTURE DID

Given our long-standing relationship with Rolls-Royce and close collaboration with companies involved with UK Made Smarter, Accenture was asked to provide assistance to the consortium.

The aim was to support, over aggressive timescales, the scaling up of a new supply chain and facilitate the rapid assembly of the Smiths Group ventilators.

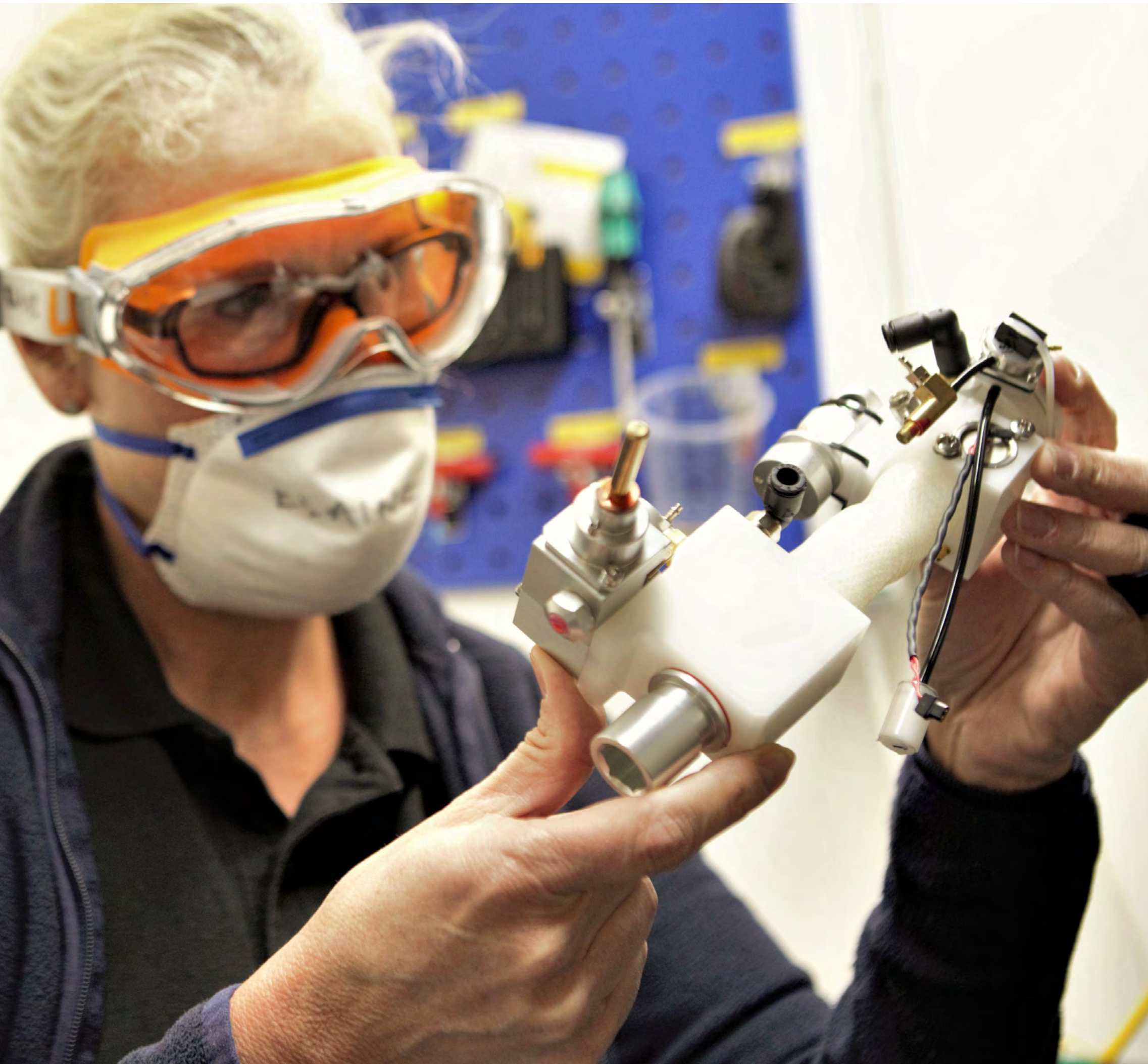
Overseeing the flow of materials, Accenture is integrated with Rolls-Royce sourcing teams to order and stock the right amount of product at the various assembly locations.

Rolls-Royce identified more than 100 suppliers who could fulfil the engineering design requirement and provide the 292 unique parts. Accenture's role is to precisely coordinate some 3.4million total parts from the source of supply to final assembly build.

We manage the order placement, expediting the payment process and working with DHL who are providing transport and warehousing services. Parts are inspected and sent onwards to be assembled into ventilators by companies including Rolls-Royce and GKN Aerospace before finally being dispatched for use by the Department of Health.

Working with Avanade, our joint venture with Microsoft, we deployed and now support an Enterprise Resource Planning system (ERP), Dynamics365, to tightly integrate the supply operations and purchasing functions, and have implemented a Procure-to-Pay accounts cycle. This automation brings greater efficiency, and with the supply chain control tower, enabled by PowerBI and E2Open software, Accenture provides coordination, oversight and governance across the whole process from start to finish.





PEOPLE AND CULTURE

Formed to address a potentially critical shortage in supply of ventilators in the UK during the COVID-19 pandemic, VentilatorChallengeUK is a direct response to a global humanitarian health crisis.

By the end of March, there were thousands of new virus cases every day, so the NHS needed to prepare for an overwhelming number of patient admissions to its intensive care wards.

Given the urgency, Accenture dedicated a team to the project, delighted to put our expertise towards resolving the UK's ventilator supply shortage. We are working as quickly as possible to order parts and expediate inbound shipments, ensuring all actions are completed swiftly and upholding efficient practices including making all payments in a timely manner.

Thanks to our ongoing work with UK manufacturing companies through our digital manufacturing practice (industry X.0) and proven expertise on procurement transformation for Rolls-Royce, Accenture is a natural fit to support the consortium, bringing the capability and scalability to deliver the supply chain at speed.

Every morning and evening, we report into Government COVID-19 meetings, to update them on the supply and production progress. Plus co-lead twice daily governance meets with the consortium members.

VALUE DELIVERED

Just two days after being brought onto the project, Accenture started issuing new purchase orders.

Within ten days, Accenture and Avanade had designed the supply chain processes, establishing protocols for the flow of information, product and payments across more than 100 organisations globally. And after five weeks, we had 100% of the parts needed to build the first batch of ventilators.

We quickly set-up a system that orchestrates the movement of all 3.4million parts to the three different manufacturing locations where they are being assembled. With the control tower, we monitor and manage the process end-to-end, providing visibility to all consortium members through new digital dashboards showing the status and real-time metrics of the parts being sourced, those in transit and those in assembly.

By unlocking the power of our digital manufacturing and supply chain expertise, and building on our close working relationships with industry leaders, Accenture has successfully enabled UK ventilator manufacturing to help the British people.

A ventilator was built in 47 days through the new additional supply chain team, and the consortium is continuing to work at full speed to deliver more units to the NHS as soon as possible. These ventilators will help people in intensive care units at the critical stages of Covid-19 by maintaining their respiratory function and helping them breathe, with the potential to save lives.

