

Application story

Druck UNIK 5000 sensors used to test ventilator performance



Industry supplied
Configurable Modular
Pressure Sensors



Application
Leak testing of medical
ventilator equipment at
the end of the customer's
production process



Product/service
UNIK 5000 Configurable
Silicon Pressure
Sensing Platform



Customer type
Medical ventilator
manufacturer



Benefits
Configured specifically to
application's requirements

Best in class performance
for stability, low power and
frequency response

Short lead-time

Customer's challenge

Based in the US, Druck's customer is one of the largest medical ventilator manufacturers in the world.

Druck's customer's challenge

Ventilation equipment applies pressure to gases to help patients receive enough oxygen while the body's normal oxygenation function is restricted. The gas pressure needs to be accurately controlled to allow ventilation, but at the same time not to cause any harm to the patient.

During the manufacturing process, ventilator pressure regulation needs to be tested against an accurate pressure standard and the ventilators' components must be tested for leaks.

Druck's customer needed a highly accurate, low pressure sensor for the pressure test with high levels of sensitivity for leak testing. When implementing new production facilities, the customer also needed the equipment to be supplied quickly.

The necessity for high quality reliable ventilators throughout the world's hospitals is well established. Recently, there have been developments in ventilator technology to help patients who need more efficient access to oxygen, which has led to the advancement of different technical solutions. With the advancement of these technical solutions, new production facilities were created, where the precise measurement of pressure and accurate leak testing is required during production testing of the ventilators being produced.

Druck's solution

Druck's customer selected the UNIK 5000 configurable pressure sensor which offers a high performance and bespoke design and is available at a short lead time.

Druck manufactures silicon sensing elements and has over 45 years' experience of pushing the boundaries of technical performance. The low-pressure silicon sensing elements that Druck has developed are deployed in the UNIK 5000 series of configurable pressure sensors, enabling the customer to access high quality, low pressure measurement in a readily available product.

The combination of Druck's technology's high performance at low pressure and its large, flexible manufacturing facility, has enabled the business to support multiple customers in developing innovative ventilation solutions and allows them to ramp up production at their facilities quickly.



Picture 1: UNIK 5000 pressure sensing platform

Druck's added value

The introduction of Druck's UNIK 5000 configurable pressure Sensor offers significant benefits:

- Increased efficiency: the customer was able to buy high performance test equipment, which assimilated quickly into their manufacturing process.
- Savings in time and cost: Druck's rapid manufacturing capability was able to supply the customer with products in line with the implementation of their manufacturing processes.

The new ventilator solutions supplied by Druck have enabled our customer to help their customer (hospitals around the world) to save lives.