

When a Boeing or Airbus commercial aircraft experiences a problem and is grounded in a remote location, it is vital to get it fixed and back in the air as soon as possible. That's where solutions provider Support Air comes in. Support Air flies to the rescue to provide a site infrastructure that allows technical engineers to carry out repair work on the plane where there is no existing facility.

"It is our job to create an environment where aircraft operators can ship in their team of technical engineers and carry out repair work on the planes," said Danny Coughlin, managing director of Support Air. "In most cases, this means we have to firstly build the aircraft hangar and then supply all the tools."

Robust and reliable

To deliver this essential service Support Air requires robust and reliable equipment which is capable of being easily transported to different locations across the globe. Since airtools are the primary equipment in aircraft repair, the most vital requirement is the availability of 100 per cent reliable compressed air. Offering a range of benefits including bespoke options, a small footprint, low weight and reliability, CompAir compressors were the obvious choice.

After listening to Support Air's requirements, West Midlands based distributor, Oscott Air recommended two Comp Air LS15 screw compressors. The machines were supplied as a complete stand-alone compressed air package - with a dryer and filters built into special crates, enabling them to be quickly and easily moved from one location to the next - wherever in the world they are needed.

For efficient set up once on site, all the required hoses and fittings were provided delivering a simple, plug and play solution. CompAir's LS15 compressors are a third lighter than the compressors Support Air used previously, and less than half the volume. This has resulted in a number of benefits. Support Air has a target limit of only 50 tonnes for all its equipment.

Optimum compressor configuration

Working with Oscott Air, the company has been able to identify the optimum compressor configuration and achieve substantial weight and space savings by tailoring the compressor configuration for each job. Coughlin explained: "For each project, we identity the compressed air flow required and then take the precise number of compressors needed to meet demand. We have enough room in the crate to allow for three compressors in total."

The smaller footprint has made transit more efficient as the machines take up less room, and there are further benefits when on site. "It may sound daft given that the engineers work in an aircraft hangar, but we do have to be careful with the amount of space we use because the hangar is usually positioned at the end

CompAir helps Support Air fly to the rescue



"CompAir's compressors allow us to deliver on our promise to support the aircraft industry around the world." - Danny Coughlin, managing director, Support Air.

of a runway or taxi runway," said Coughlin. "If you imagine the length of run that a plane requires to take off and land, then it is important that we don't take up valuable space and compacting our site footprint is a must."

The LS15 compressors are built to deliver maximum output for minimum input, reducing energy costs, and also offer a low noise level of just 69dB(A). This means the machines can be positioned in close proximity to the point of use, reducing the amount of pipework required and using less space.

CompAir compressors are renowned for their reliability which is one of the reasons Support Air chose CompAir. Coughlin concluded: "The saying that time is money is never more true than in the commercial aircraft industry. When a plane is grounded due to technical problems, speed is of the essence. The price of an inoperable aircraft can run into thousands of pounds everyday, and there is also the issue of reputation, so it is vital that we are as responsive as possible. Through their reliability and additional benefits, CompAir's compressors allow us to deliver on our promise to support the aircraft industry around the world."

Colin Mander, director of industrial sales at CompAir, added: "Support Air had very specific and unusual requirements. It's not everyday that a compressed air user needs to fly their compressors around the world. The L series lubricated screw machines are perfect for the job, offering a number of benefits including compact installation, low and easy maintenance and operational up to 45oC - all necessary features when working in hostile and extreme conditions."

www.compair.com

Pressure-indicating sensor film helps eliminate leaks and aids fluid control in hydraulics and pneumatics



A GASKETED INTERFACE



Pressurex, a tactile pressure indicating sensor film from Sensor Products Inc., is claimed to quickly and accurately measure surface pressure distribution and magnitude between any mating or contacting surfaces. In gasket and Oring seal assemblies, it profiles interfacial contact, showing how surfaces engage and deform under stress to create sealing flaws and inconsistencies. In hydraulics and pneumatics, it improves fluid power by diagnosing current and potential leakage areas in fittings, couplers and connectors.

Pressurex comes in the form of thin flexible plastic sheet, physically similar in appearance to paper. It detects surface pressure from 2 up to 43,200 PSI (0.14 to 3,000kg/cm2). When subjected to pressure, it instantaneously and permanently changes colour. This colour change is directly proportional to the actual pressure applied. Precise pressure magnitude is easily determined by comparing the resultant colour intensity to a colour correlation chart (conceptually similar to interpreting Litmus paper).

Pressurex is used in design and manufacturing as well as in machine and component inspection.

It has proven successful in assessing surface contact irregularities in clamps, bolted joints, lamination presses, welding heads, and clutch and brake assemblies, among others.

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