Internet Of Things for the Compressed Air industry
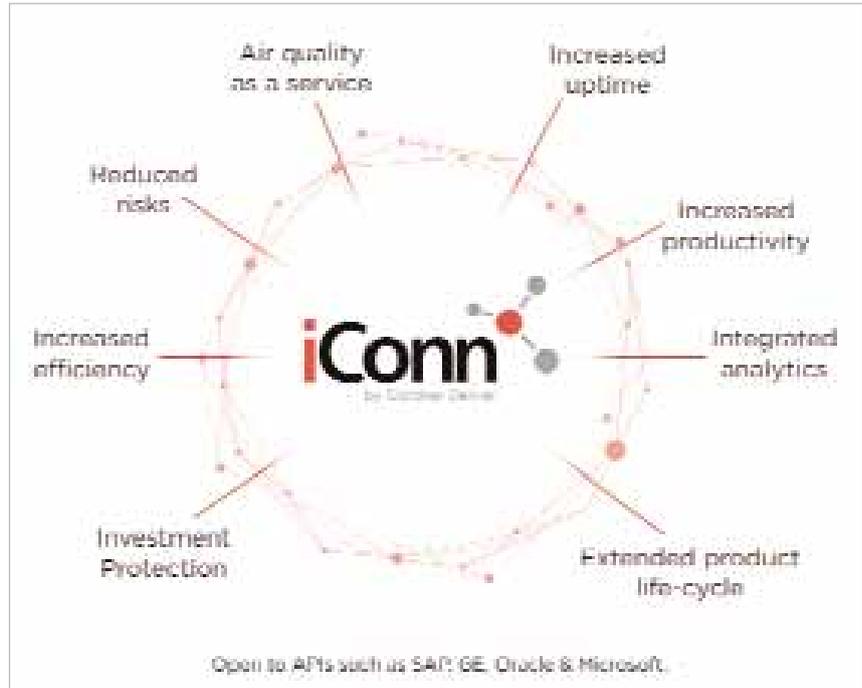
Compressed air gets connected with iConn.

Gardner Denver has launched iConn, a cloud-based, air management platform from its CompAir brand that enables operators to manage, optimise and improve compressed air-based services.

As Industry 4.0 is driving manufacturers to share and analyse asset data, customers are demanding more intelligent insights into their compressed air performance that will remove risks, improve productivity and reduce energy consumption.

The CompAir iConn has been developed to meet this requirement by delivering advanced analytics, which enable operators to stay in control of their installation. The system can provide historic, real-time, predictive and cognitive analytics, enabling users to rectify potential issues before they happen.

The iConn cloud platform is particularly beneficial for businesses with multiple, remote sites or unmanned installations. It enables users to monitor compressor performance from a single

Open to APIs such as SAP, GE, Oracle & Microsoft.

location, via their mobile device, tablet or PC. iConn helps minimize fault incidences for increased uptime, and also provides detailed machine parameters and over-time trend analysis to enable plant managers to optimize system performance.

Compressor or ancillary asset data can be transferred securely via GSM, Ethernet or Wi-Fi to a wide range of connected devices. iConn's secure cloud based services allow users to view real-time analytics or access data via open APIs.

CompAir experts can also access the information to help customers make informed choices around compressor air optimization, maintenance schedules and energy performance.

The iConn platform is designed to suit the application and level of service required:

❖ **iConn Assess** is for entry-level installations and provides a detailed overview of compressor system performance, helping operators to view and analyse key operating data online and take action to rectify any potential issues.

❖ **iConn Protect** features a predictive maintenance-scheduling tool, which notifies the customer of any anticipated machine faults and enables service to be scheduled in advanced to rectify any issues before they lead to equipment downtime.

❖ **iConn Manage** offers a comprehensive insight into compressor performance, alongside a 24/7 service option from Gardner Denver's technical team, providing advanced analytics, remote monitoring and efficiency audits.

Basic Data Analytics

Enabling understanding of product performance in the field. This is the easier step to take but needed to help you understand your initial business plan.

❖ Maintenance routines can be planned based on real time data.

❖ Engineers and technicians can be optimized according to the machine schedules.

❖ Downtime can still occur, however you transition from reactive to proactive.

❖ This has high value and you change the whole client experience.

Predictive Maintenance

Accelerating your understanding of machine usage and sensor data. You may not have enough data, or good quality sensors.

❖ However, this is one of the key drivers, sensors have become more intelligent and cheaper.

❖ It brings your engineering schedules more forward-based on probability of failure.

❖ Equally it accelerates your design envelope and helps the business learn

Augmented Reality

This is where the connected services and products are overlaid with virtual services.

❖ Typical use cases involve products being disassembled virtually for the service engineer.

❖ It allows them to break down a compressor without referencing paper based systems

Cognitive

This is where you move the predictive fixed algorithms into ones that learn. However, before learning, they have to be taught.

❖ Only large companies with AI-enabled tools are pushing this envelope. But they are bringing it to the masses.

❖ It automates algorithms and in some proven examples, gives recommendations not answers, before the human has analyzed or absorbed the data.

iConn is available as standard on all new CompAir machines and can be retrofitted to existing compressor installations. The system will also support ancillary and non-Gardner Denver based products, providing a one-stop digital experience for managing an entire compressed air system.

Rastgar & Co is authorized distributor of CompAir, a brand of Gardner Denver, in Pakistan with complete after-sales service and spare solutions. For more information contact 111 727 777 or email io@rastgar.com.◆