

## **Challenges**

## **Overall Equipment Effectiveness (OEE)**

Your Overall Equipment Effectiveness programs are not delivering the expected returns preventing you from optimizing productivity and meeting demand. This can be caused by machine inefficiencies, unplanned downtimes and rejected output due to quality issues.

ARE MACHINE INEFFICIENCIES
PREVENTING YOU FROM MEETING DEMAND?



### **Energy efficiency and sustainability**

Did you know that manufacturing plants typically lose 30% of compressed air due to leakage? This negatively affects energy efficiency and may prevent you from meeting sustainability goals and reducing CO<sub>2</sub> footprint.

AIR LEAKS
CONTRIBUTE TO 30%
LOSS OF COMPRESSED AIR.



#### Interoperability and integration

As manufacturers look to unlock the benefits of Digital Transformation, it can be overwhelming to tackle the various architectures and connections needed to realize the benefits brought by various suppliers.

TOO MANY ARCHITECTURES TO REALIZE THE TRUE BENFITS?





For more information: www.Emerson.com/Digital-Transformation-Pneumatics

## **OUR SOLUTIONS - IIoT applications provide actionable insight**

Emerson's IIoT solutions help to digitally transform your operations to help you achieve performance improvements. These solutions are built upon intelligent devices creating new data and software analysis that provide actionable information to help you improve overall equipment effectiveness (OEE), optimize production and achieve your sustainability goals.

## Fast access to actionable insights

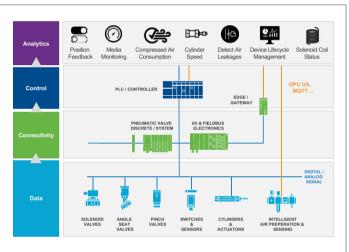
**Improve OEE and Production Uptime** – monitor actuator and valve performance cycles and condition, to prevent unexpected failures affecting machine availability (predictive maintenance).

**Optimize Energy, Emissions and Utilities** – detect irregularities through real-time monitoring of utilities such as water, air gas, electricity and steam. Monitor air consumption and leak detection helping to reduce energy use.



# Scalable solutions offer easy integration into existing system architecture

Our devices are embed with open IIoT protocols, such as OPC UA and MQTT, allowing them to easily connect into existing customer cloud systems or software tools, including MES or SCADA. This means that implementation specialists no longer need to handle bits and bytes, because these protocols are self-describing and making integration very easy and fast. We offer various, flexible architecture designs to deliver the actionable insights – it is not necessary to interfere with the existing control architecture and our solutions can easily retrofit to existing machines with the use of edge gateways.



#### AVENTICS™ Series AF2 Air Flow Sensor





## AVENTICS™ AV03 Valve Systems with IIoT capabilities





#### AVENTICS™ SPA Smart Pneumatics Analyzer





