# TECHNICAL SERVICES GROUP (TSG)



Compressed air systems present one of the largest and most frequent opportunities for energy reduction in industrial facilities. Zorn Compressor offers a comprehensive lineup of energy savings services and products to help you optimize your system and lower operating costs.

The Zorn Technical Solutions Group (TSG) features of team of experienced compressed air experts dedicated to assist you with maximizing system performance, lowering operational costs and improving system reliability.

Our energy-savings portfolio includes: a variety of assessment and audit programs, compressed air leak detection & repair service, compressed air load shedding, air quality testing (ISO 8573-1) and multiple compressor control panels. All our TSG offerings are based upon Compressed Air Best Practices and DOE Guidelines.

## AIR QUALITY TESTING

Zorn Compressor & Equipment provides compressed air quality services for the manufacturing sector. The Global Food Safety Initiative (GFSI), as promoted by the Safe Quality Food (SQF) and British Retail Consortium (BRC) organizations, has established compressed air testing requirements for the food, packaging, supplement and pet food sectors. A periodic compressed air test program can provide critical information about your air quality. PWO sampling per ISO 8573-7 tests for particles in the 0.5-5 micron range, water vapor, and total oil (aerosol and vapor); testing is also available for microbial contamination and particulate testing to the 0.1-0.5 micron range.

## **SQF Air Purity Compressed Air & Gas Testing Specifications**

Zorn Compressor & Equipment works in partnership with an A2LA Accredited Laboratory in compliance with ISO 17025 as required by SQF Code, Edition 7, Section 2.5.6. Zorn's Air Quality Testing Services will provide a qualified technician to perform testing, and includes all test equipment, sampling media, shipping costs and lab analysis.

### Microbiological testing per ISO 8573

Compressed air systems can foster microbial growth due to moisture, oil, and warm temperatures. A microbial monitoring program, as suggested by the International Society of Pharmaceutical Engineers (ISPE) Good Practice Guide – Process Gases, is essential for any manufacturer using compressed air or gasses in critical processes. Compressed air and process gases are sampled using a specialized apparatus to expose contact plates to the gas stream in orfer to capture any microorganisms present. Sample anaylisys includes Total Plate Count (TPC), bactrial classification by gram stain, and total fungle plate count. Micro testing is imperative to avoid microbial contaminants inside controlled environments, such as production areas and clean rooms.



## **ASSESSMENT & AUDIT PROGRAMS**



System Walkthrough

Your Zorn Account Representative (CAC Level II Certified) will tour both the supply side and demand sides of your system, looking for potential areas of operational improvement and energy reduction. Together, you will review an "Opportunity Index" that will estimate annual operating costs and identify areas for improvement.

**System Snapshot** 

This 3-5 day data collection and review will help you determine current demand levels, pressure stability and compressor utilization. Additionally, an estimate of electrical operating costs is provided based upon the data collected.

**Demand-side Assessment** 

Data is collected for 1 to 2 weeks in order to assess the distribution system and the processes that consume compressed air. A detailed analysis will be provided based on the following potential areas of study:

High-speed, cyclical applications

Open blowing applications

Bag house pulses

Header pressure

Pressure Drop locations

Supply-side Assessment

A Department of Energy Certified AIRMaster Specialist will collect data from your compressed air system for 7 – 10 days and provide analysis related to compressor utilization, air treatment pressure drop, system demands and pressure, estimated annual operating costs and demand side events. Additionally, we will check the system dewpoint and provide a compressed air quality evaluation. Solution modeling is available with estimated ROI information.

**Full System Audit** 

One of our DOE AIRMaster Specialist will perform an in-depth analysis of both the supply side and demand side of your system with emphasis on measuring and analyzing specific system events. In addition to the information provided in the Supply Side Assessment, a full system pressure map is created to help understand the health of your system. A detailed P&ID drawing of your supply side is provided to help further understand the dynamics of your system.

**Leak Detection** 

A trained technician will utilize ultrasonic detection equipment to identify, tag, and log compressed air leaks. A detailed report will be provided that provides leak loss data, estimated current annual costs of leaks, and recommended repair options.

TO LEARN MORE ABOUT TECHNICAL SOLUTIONS GROUP, PLEASE CONTACT US

800-476-4637 | ZORNAIR.COM

## **MEET THE TSG TEAM**



#### **Adam Johnson**

Director

Adam has over 25 years of compressed air industry experience and is leading our Technical Solutions Group to provide high value services and products that help you save energy and improve your systems.

Adam performs energy savings system analysis for compressed air, vacuum and low-pressure systems. Adam is a qualified DOE AIRMaster Certified Specialist and is focused on helping customers save energy and improve processes by performing detailed, comprehensive compressed air and vacuum system audits and designing multiple compressor system control panels.

#### **Dick Offut**

Corporate Service Manager

Dick started in the industry in 1983 and has been at Zorn since 1991. He has extensive experience and training with rotary and centrifugal compressor controls. Dick also leads the training on machinery training for Zorn technicians.

Among Dick's area of focus are control retrofits, central automation panels and centrifugal rebuilds and upgrades.

#### **Doug Nader**

Senior Service Representative

Doug started in the industry in 1987 and has been with Zorn since 2023. Doug helps train Zorn technicians alongside his TSG responsibilities.

Doug's areas of focus include centrifugal compressors, control system installation, technician training, and technical field support. He specializes in oil free rotary screw compressors, all air dryers, large reciprocating compressors, and control upgrades.

### Dan Plucinski

Field Technician

Dan has been with Zorn Compressor since 2014 and focuses on performing energy savings leak detection and repair services. Additionally, Dan executes our Air Quality Testing program where we test compressed air for SQF certification purposes and Grade D breathable air to help ensure safety.

Dan has certifications in ISO 8573 and Air Quality Testing procedures as well as certification from passing the UE Instruments class for leak detections.

### **Brandon DeLacy**

Field Technician

Brandon DeLacy joined the TSG team in 2024 as our newest air quality services technician, performing ultrasonic leak detections and air quality testing.

He is certified to perform ISO 8573 Air Quality Testing and has undergone extensive training in leak detection services with hundreds of hours of in-field experience.