## OPERATIONAL TECHNOLOGY **CYBER & INDUSTRIAL ASSESSMENTS**

## TAKE ACTION TO IMPROVE CYBERSECURITY AND REDUCE RISK WITH OUR COMPREHENSIVE CYBER AND INDUSTRIAL ASSESSMENTS.

Interstates knows the current OT cybersecurity landscape. Our wide breadth of expertise and many years of experience can help improve your cybersecurity stance, but it doesn't stop there. We use our range of skills to diagnose and explain all the risks and vulnerabilities we see at your plant, from OT and beyond. Our assessments are comprehensive – you'll get the added value of insight into all areas of your operations. Let us help you find the smartest solution for the entirety of your manufacturing environment – starting with stronger cybersecurity.

## OT CYBERSECURITY ASSESSMENT

Understand the current state of cybersecurity within your manufacturing environment. Interstates will verify the people, process and technology controls the plant has implemented and give actionable recommendations on how the plant can improve its cybersecurity stance. We'll perform assessments that can be performed against the following standards:

NIST Cybersecurity Framework | NIST 800-53 | CIS Top 20 Critical Security Controls for Effective Cyber Defense | Your Organizational Standards

## OT NETWORK HEALTH ASSESSMENT

The OT Network Assessment involves an on-site visit to review the design, configurations and control network utilization against industry standards. We provide a network drawing along with any findings and recommendations upon completion of the assessment. When assessing the health of the OT environment, Interstates considers the following:

Network topology | Network configuration | Network performance and health

**AVERAGE ON-SITE TIME** 

**AVERAGE ON-SITE TIME** 



## OT INFRASTRUCTURE ASSESSMENT

The OT Infrastructure Assessment is designed to identify any single points of failure within the organization as well as identify weaknesses and give recommendations to increase resiliency and/or redundancy capabilities. The infrastructure assessment will also review connections to external sources such as third parties and check those connections' security. The OT Infrastructure Assessment reviews the following:

Network infrastructure | Virtualization infrastructure | General infrastructure including power, backup power, and cabling | Active Directory and application security | Backup and recovery | Processes and procedures including change control and simulation and testing environments

## **OT INVENTORY**

The OT Inventory Assessment will review and document network assets within the manufacturing area, including firewalls, switches, servers, PLCs, HMIs and other controls network devices. Interstates documents inventory information such as asset name, firmware versions, model number, IP address and MAC address in an asset inventory delivered to the client. The OT Inventory Assessment will cover assets such as the following:

Core and edge network switches | Controls, applications and data collection servers | Ethernet-connected PLCs and HMIs | All ethernet-connected Industrial Control Systems (ICS) devices

#### **CALIBRATIONS**

Interstates installs and calibrates instrumentation. We come in on shutdowns or scheduled maintenance and preform instrument calibrations and installs. We then provide turn over documentation to the client stating how the device was found and left along with other comments. Below is a list of common devices we calibrate.

Temperature transmitters | Level transmitters | Flow transmitter | Pressure transmitters Gas monitors | Conductivity transmitters | Current transmitters | Verify control valves stoke to the proper position

#### HAZARD MONITORING SYSTEM ASSESSMENT

Interstates service technicians will check your hazard monitoring system's operation to ensure the system protects your people and equipment from a hazard of a dust explosion. The system inspection includes checking the function of each sensor and the associated interlock. Typical sensors tested include:

Bearing Temperature sensors | Belt Alignment sensors | Speed sensors | Vibration sensors



## **HEAT TRACE AUDIT**

Heat trace is a heated conductor wrapped around pipes to keep the process at the correct temperature or from freezing. We audit the heat trace to ensure it is working correctly and identify any lines that are not working or spots with missing insulation. We can also update drawings to represent heat trace in the field. Facilities should conduct heat trace audits before the cold season arrives to catch freezing problems before they happen.

#### STEAM TRAP AUDITS

Steam is typically one of a plant's most significant expenses; one way to manage that cost is through steam traps' efficiency. Our device allows users to enter the steam trap information like trap type, process connection, line size and application. The tool gathers information such as if the trap is blocked, blowing by or leaking. It can also tell the leak's size and how much steam is lost per hour. We generate a report for the client that informs them of the traps they need to replace and the estimated annual steam lost from the faulty traps.

#### SPARE INVENTORY ASSESSMENT

Having spare inventory is critical to maintaining the highest amount of uptime within a manufacturing plant. The spare inventory assessment will very what the plant has on hand for spare parts, and if that inventory is enough to maintain the required uptime.

**AVERAGE ON-SITE TIME** 

### **ELECTRIC ROOM RX**

An electric room audit is the first step in improving the health of your electrical infrastructure. An electrical engineer will visit your facility to collect and inventory electrical gear, review code compliance and collect other information relevant to the electrical system. Interstates reviews the data and creates a risk profile. The electric room RX team will develop conceptual options for remediation solutions to address the identified risks.

**AVERAGE ON-SITE TIME** 

## **INSTALL BASE EVALUATION**

An audit of a client's site to identify electrical, automation or OT risks and prioritize mitigation. We provide you with the information needed to understand a plant's risk from obsolescence, networking practices, software licenses and cybersecurity. It also provides an excellent starting point to identify where additional investment in automation that results in the best ROI.



# 2-4 DATS AVERAGE ON-SITE TIME

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#### **ELECTRICAL PREVENTATIVE MAINTENANCE**

Infrared electrical inspections find hot spots caused by defects in connections and components. We use infrared thermography to find areas of excess heat caused by increased resistance to correct problems before a component fails. If a component fails, it can cause damage to the component which creates safety hazards and loss of productivity. Because increased heating is a sign of failure, infrared is the best diagnostic tool available for finding these hot connections in the early stages of degeneration. Conditions detectable by an IR scan include:

Loose/deteriorated connections | Overloads | Open circuits | Unbalanced loads | Inductive heating Harmonics | Defective Equipment

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## **COMPRESSED AIR AUDIT**

A compressed air audit begins with specialists coming to your site. A technician examines your compressed air system using visual and ultrasonic inspections to identify air leaks and other system issues. Addressing compressed air leaks and issues identified in the audit can save facilities tens of thousands of dollars a year.

#### **DIG INTO OUR SOLUTION**

If you're ready to get started or need more information, contact OTIS@interstates.com



