

# TRAINING SESSIONS

ALL COURSES HELD  
ON BOTH DAYS

## SMART MANUFACTURING: A JOURNEY FROM LEGACY TO LEADERSHIP

Presented by: Rachel Zucca, CBT Company & Brandon Moore, CBT Company

 **9:30AM - 10:30AM**

*• This session is targeted to plant managers, operations managers, maintenance managers, and reliability managers.*

Smart Manufacturing is revolutionizing the landscape by leveraging technology to drive innovation, improve operational efficiency, and deliver greater value while contributing to sustainability and competitiveness in the global market. Join us on the Legacy to Leadership journey where we will be discussing how to address common challenges such as legacy technology, islands of automation, data overload, and change management.

## CONTINUOUS THERMAL MONITORING: STANDARDS, SAFETY, & SOLUTIONS

Presented by: Shelly DeGrate, Grace Technologies

 **9:30AM - 11:00AM**

*• This class is tailored to plant and maintenance personnel, electrical engineers, and electrical safety managers.*

This session introduces attendees to the fundamentals of Continuous Thermal Monitoring (CTM) and its role in enhancing electrical safety and reliability. Participants will gain an understanding of the industry standards that support CTM - including NFPA 70B, NFPA 70A, NFPA 70E, and IEEE 2969-2025 - and how these frameworks guide safe implementation and compliance. This session also highlights practical applications of CTM in predictive maintenance programs, demonstrating how CTM solutions integrate seamlessly into plant operations to reduce risk, improve uptime, and support standards-based safety plans. By the end of the course, attendees will be able to:

- Explain the principles of CTM and its advantages over traditional thermography.
- Identify the relevant standards and compliance requirements.
- Apply CTM concepts to electrical safety plans and predictive maintenance strategies.
- Evaluate CTM products as part of a standards-driven safety program.

## SAFEGUARDING YOUR DRIVE & MOTOR SYSTEMS: AN INTRODUCTION TO LINE & LOAD PROTECTION

Presented by: Shaun Martin, CBT Company

 **10:00AM - 12:00PM**

*• This session is ideal for maintenance professionals (both mechanical and electrical) as well as engineers and anyone involved in designing or integrating motor drive systems.*

Motor and variable frequency drives are an integral and expensive tool used to enhance manufacturing processes. There are several choices for protecting your investment and the integrity of your system. In this session you will learn the options used to protect both motor and VFD in modern industrial electrical systems. This training will be broken down into Line side and Load side devices.

## A MANUFACTURER'S JOURNEY TO REAL-TIME INSIGHTS: ENABLING OEE, CONDITION MONITORING, AND AI WITH A UNIFIED NAMESPACE

Presented by: Mike Stevens, CBT Company

 **11:00AM - 12:00PM**

*• This session is targeted to manufacturing and plant operations leaders, maintenance and reliability teams, industrial automation and controls engineers, continuous improvement and OEE practitioners, digital transformation and industrial IoT stakeholders.*

Join CBT Company for a real-world look at how manufacturers can turn industrial PLC and sensor data into real-time operational insights using a Unified Namespace. This session walks through the journey of centralizing and contextualizing machine data into a single source of truth to support OEE, condition monitoring, and AI-driven insights. Using FutureView 360, a Unified Namespace Industrial IoT solution, raw machine data is transformed into live and historical views of availability, performance, downtime, throughput, machine condition, and overall equipment health. Attendees will see how a Unified Namespace enables scalable data access, consistent OEE calculations, and condition monitoring that supports both real-time visibility and advanced analytics. The session also explores how AI can be layered on top of this foundation to identify patterns, surface anomalies, and support continuous improvement. The focus is on practical implementation, lessons learned, and the real operational value of moving from disconnected PLC and sensor data to actionable, real-time insights.

MORE TRAINING OPPORTUNITIES ON BACK 

## **SURGE PROTECTION**

Presented by: Jeremy Lieland, Mersen

 **11:00AM - 12:00PM**

- **This class addresses the needs of electrical engineers, electricians and maintenance personnel, facility owners, and control panel designers.**

This course offers an in-depth exploration of surge protection in electrical systems. Participants will begin by examining voltage surges, understanding their characteristics, magnitude, typical behaviors, and primary causes. Key surge protection device (SPD) terminology will be introduced to ensure a solid foundation for interpreting technical documentation and specifications. Further, the course highlights industry best practices for surge protection, and attention will also be given to common application pitfalls, providing guidance on how to avoid mistakes that can compromise protection or system reliability. By the end of the course, attendees will be equipped with the knowledge required to select, apply, and maintain surge protective devices effectively in various environments.

## **PRACTICAL MOTION CONCEPTS**

Presented by: Randy Weinheimer, CBT Company

 **1:00PM - 3:00PM**

- **This session is ideal for engineers and additional professionals seeking to understand more about servo sizing and control.**

While motion control systems may seem simple, without the proper knowledge of motion concepts, the equipment may not function correctly and will likely not work to its full potential and output. Join CBT Specialist, Randy Weinheimer, as he covers the practical motion concepts that will make sure your equipment is being utilized effectively. This list includes:

• Motion Mathematics	• Motion Profiles	• Motion Mechanics
• Motion Tuning	• Servo Loop Gains	• Motion Troubleshooting

## **SECURE ARCHITECTURES IN AN EVER-CONNECTED WORLD: OT CYBERSECURITY**

Presented by: Ankur Mohan, Rockwell Automation, Matt Pike, Rockwell Automation, & Eric Eckman, Aria Cybersecurity

 **1:00PM - 2:00PM**

- **This session is targeted to controls engineers, IT professionals, and management.**

Participants will gain an in-depth understanding of secure network architectures, industry best practices, and the application of Defense-in-Depth strategies within manufacturing environments. The training will also cover leading solutions and technologies relevant to these areas.

## **WIRELESS CONDITION MONITORING APPLIED TO FOOD PROCESS APPLICATIONS**

Presented by: Kevin Walker, Dodge Industrial

 **1:00PM - 2:00PM**

- **This session is intended for professionals in the food and beverage industry.**

Gain valuable insights from six years of real-world experience in implementing remote wireless condition monitoring systems within food processing environments. This course highlights best practices, key challenges, and lessons learned, helping participants understand how wireless technologies can improve equipment reliability, boost operational efficiency, and ensure food safety compliance in their facilities.

## **ETHERNET SWITCH CONSIDERATIONS FOR OT**

Presented by: Dan Fisher, CBT Company & Dustin Allen, CBT Company

 **2:00PM - 3:00PM**

- **This session is ideal for industrial network engineers, system integrators, controls engineers, IT professionals transitioning to OT environments, plant managers, and anyone involved in the specification, design, implementation, or maintenance of industrial networking solutions.**

Selecting the correct industrial Ethernet switch is critical to the performance, reliability, and security of your network. This training class will guide participants through the key considerations necessary for informed switch selection and deployment. Topics will include determining the optimal switch for specific purposes and applications, evaluating environmental factors and their impact on equipment selection, and assessing resiliency options to reduce downtime. The course will also cover critical decisions around communication protocols, media types (such as copper or fiber), and best practices for patching and cable management.

## **THE BASICS OF DYNAMIC BRAKING RESISTORS**

Presented by: Steve Fisher, Post Glover Resistors, Inc

 **2:00PM - 3:00PM**

- **This class is intended for individuals who operate variable frequency drives (VFDs) and require the ability to stop the motor during system operation.**

This training session will provide a comprehensive overview of braking resistors, focusing on their necessity, functionality, and selection process. Participants will gain insights into scenarios that require the use of a braking resistor, the underlying principles governing their operation, and the key factors to consider when choosing an appropriate braking resistor for specific applications.