

## **Machine Metrics – Driving Rapid and Continuous Value with Industrial IoT Technology** (40hrs)

### **Training Description:**

Internet of Things (IoT) initiatives drive significant manufacturing improvement by providing real time and historical insight into what's actually happening on the shop floor. Training will be provided to participants in a software system that helps companies improve equipment efficiencies and also provides real time operational data. The MachineMetrics industrial IoT Platform provides an easy to implement solution for connecting to and capturing data from any piece of discrete manufacturing equipment regardless of brand or age. The platform then feeds this data back to the plant and other consumers within the manufacturing lifecycle in ways that drive value and continuous improvement.

Training will focus on:

- How to use the platform,
- Understanding your machine utilization, and capacity
- Downtime analysis
- Validating job standards, and escalating data to appropriate persons via automation

Training will include:

- How to get your shop machines reporting data - The MachineMetrics Industrial IoT platform will be self-integrated on 5-20 pieces of discrete manufacturing equipment on your shop floor.
- Training will be provided on your networked equipment that supports MTConnect or Fanuc FOCAS.
- Baseline machine utilization, and data collection from your machines in real-time until the training is completed
- Data Analyzation, via dashboards, reports and real-time notifications.
- Applying the data to inform decision making and actions around continuous improvement initiatives, planning & scheduling, machine maintenance, and staffing.

### **Training Objectives:**

- Baseline and Benchmarking of machine utilization – Once your machines are connected, you will be capturing data and develop an initial assessment of your machine utilization that can be monitored for improvement.
- Downtime Analysis – Learn the top reasons for your shop floor downtime through the application of MachineMetrics Operator View Tablets, which enable operators to categorize downtime.
- Job Standard Optimization – Job Standards will be imported (cycle times & set up times) into MachineMetrics and cycle times are tracked for every part produced. Standards are then compared to actual data collected allowing you to adjust your standards.
- Real-Time Notifications & Monitors – Learn to utilize real-time notifications, incidents, and monitoring sending alerts if action is required.

### **Skill Attainment:**

Participants will learn current utilization & capacity for each piece of connected equipment and how to analyze the data. How actual job data can be validated to revise and enhance job standards. How notifications and monitors can be used to alert in real-time, driving faster response time. Lastly participants will learn the impact downtime is having on the business and where to focus efforts to reduce unplanned downtime. These strategies can be carried out on any shop floor.