

MCE-5: Machine Reliability

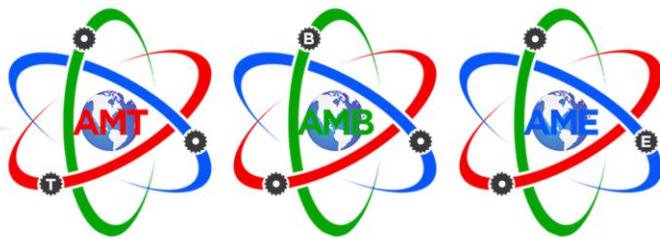
Part of the AMT Academy 2018

How to Provide the AMT Program and the Advanced Manufacturing Career Pathways

December 11-12, 2018

**State Technical College of Missouri at the Lewis & Clark Career Center
2400 Zumbuhl Road, St. Charles, MO 63301**

Hosted by Toyota Motor North America, MOFAME, and State Tech.



The Federation
for Advanced Manufacturing Education

PURPOSE of the Academy

- Provide professional development training for new staff (employers, education, and others) at existing programs and at new programs that are starting.

MCE-5: Machine Reliability Training

- Conclude the teaching of the 5 Manufacturing Core Exercises (the main Academy in July only has time to teach the first 4)
- MCE-5 teaches a practice for machines and systems which:
 - Lengthens MTBF (Mean-Time-Between Failure)
 - Prepares more effective back-up when failure does occur
 - Teaches a disciplined, problem-solving approach for sustained machine operation
 - Uses a Reliability Centered Maintenance approach focusing on Failure Mode Analysis

WHO SHOULD ATTEND

- AMT-designated faculty at new and existing programs. Providing the AMT Program is very different than providing traditional college education and cannot be effectively done without the training to do so.
- MCE-5 is most effective for those who have attended the 4 prior MCE's, especially MCE-3: Lean Manufacturing for Maintenance, and MCE-4: Problem Solving.
- Employer sponsors of AMT students can also send appropriate employees for this high quality training.

AGENDA:

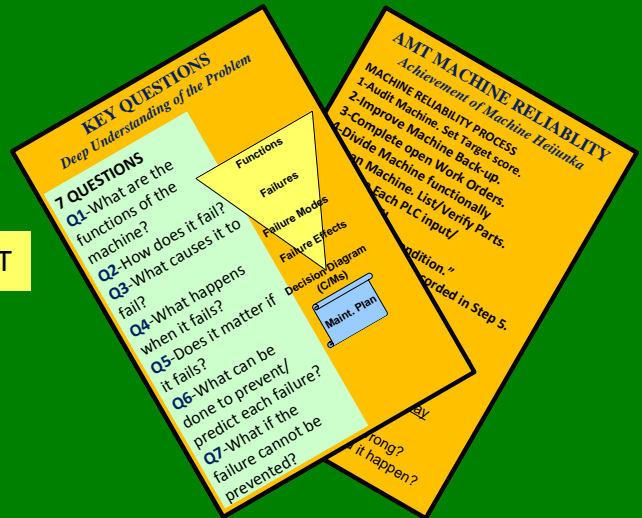
DAY 1: December 11. Topics include:

- Overview: Lean Manufacturing, MCE-3 principles
- Current Maintenance Issues, Practices, and Problems
- What is Failure Mode Analysis (FMEA)?
- Proactive tools that use FMEA
- Reliability Centered Maintenance
- Maintenance Network
- First hands-on project

Each day starts at 8 AM EST

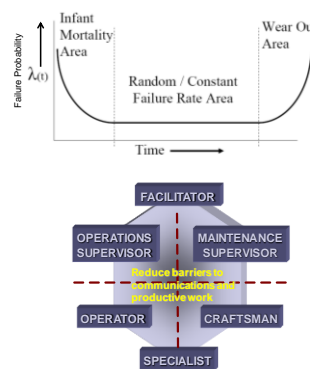
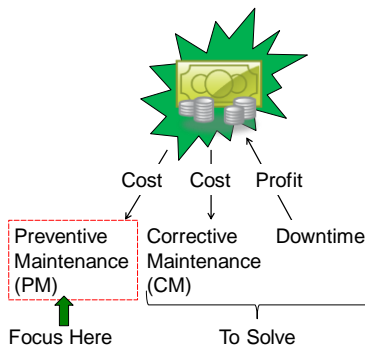
DAY 2: December 12. Topics include:

- Second Project: The Manufacturing Simulator
 - Simulator Introduction
 - Simulator operational history
 - MCE-5 and FMEA analysis project
 - MCE-5 Report preparation
- Team Report Out using team-built MCE-5 project charts



COST: No cost for registration. Materials are provided by the Academy. Attendees are responsible for their own travel, lodging, and food costs. Daily lunch will be on your own (1 hour break).

Learning Unbound!



| Rank | PDCA | PDCA | PDCA | PD | Nothing | Rank | Safety | Line Stop | Cost |
|------|----------|------------|--------------------------|-------------------------------------|-------------------------------------|------|------------------------------|----------------------------|--------------------------|
| | Unlikely | Can happen | Has happened in industry | Has Happened at Toyota in last 5 yr | Has Happened at Toyota in last 1 yr | | | | |
| 4 | E | D | C | B | A | 4 | Severe Injury | > 8 hrs Line Stop | Capital >20% of Asset |
| 3 | | | | | | 3 | Lost Time / Minor Injury | > 1 Hr Line Stop All Shops | >5% of Asset |
| 2 | | | | | | 2 | OSHA Recordable No Lost Time | > 1 hr Line Stop Any Shop | Capital < 5% of Asset |
| 1 | | | | | | 1 | Non OSHA Recordable | Near Miss on Line Stop | Increased Operating Cost |
| 0 | | | | | | 0 | None | None | None |

INFORMATION & REGISTRATION: www.fame-usa.com/events/MCE5-2018/

DIRECTIONS

Airports: STL (St. Louis Lambert International Airport)

Driving: Navigate to I-70 in/near St. Louis; I-70 Exit 227 onto ZumbelH Rd. North; About 0.6 mi. and turn right into the main entrance of the school.

Geo Location: 38°47' 22.8"N 90°32' 07.7"W or 38.794840, -90.535458

