TPM BODY OF KNOWLEDGE

Total Productive Maintenance

International Lean Six Sigma Institute

- TPM foundation
- TPM History
- Purpose of TPM
- The pillars of TPM
- Teamwork and total engagement
- 5S and visual workplace management

- Aims of Autonomous Maintenance
- Basic equipment conditions
- The AM steps
- Sources of contamination and fast deterioration
- Hard to access areas
- Autonomous Maintenance Kaizen
- CILT standards

- Aims of the Focused Improvement
- Six big losses
- OEE: availability x performance x quality
- Loss structure deployment
- Focused Improvement project steps and PDCA
- ECRS methodology

- Aims of the Planned Maintenance
- Equipment register/data base
- Criticality assessment - ABC ranking
- Mean Time Between Failures (MTBF)
- Mean Time To Repair (MTTR)
- Reactive Maintenance and breakdowns RCA
- Time Based Maintenance
- Condition Based Maintenance
- Predictive Maintenance
- Spares parts management
- Planned maintenance Kaizen
- CMMS
- FMEA

- Aim of Quality Maintenance
- Zero-defect conditions
- Quality maintenance matrix
- 4M analysis: man, machine, material, method

- Aim of Education and Training
- Training Needs Analysis
- Skills matrix
- One Point Lesson

- Operator and maintainer learning pathways
- On-the-job training

- Aim of Early Equipment & Product Management
- Operator and maintainer input to design
- Lessons learned; maintenance prevention
- Life-cycle cost concept
- Reliability, maintainability and operability

- Safety, Health and Environment in TPM
- Hazard identification; task risk assessment
- Ergonomics and human factors
- Near-miss reporting

- Aim of Office TPM
- Administrative process and loss mapping
- Administrative process improvement