TEXAS STATE

INGRAM SCHOOL OF ENGINEERING

Project Background

Continental, a leader in automotive technology operates 57 global facilities. At their New Braunfels site, an Autonomous Mobility Division has been created to enhance their surface mount technology processes. To support this initiative, our senior design team has been tasked to gather data that will help enrich their TPM Lesson database and aid in the enhancement of their training programs.

Problem Statement

- Continental expressed the importance of maintaining a preventative maintenance routine for their machines.
- Employees expressed their dissatisfaction with the existing training documents. Therefore, the company requires improved training documents that can help them operate and maintain machines with more confidence and efficiency.
- The objective is to minimize the learning curve for new employees, minimize the risk of potential errors that can disrupt the production line, fulfill the desire for better comprehensive training, and ultimately reduce the costs and time that the plant could incur.

Deliverables

- Training Documents for the 3rd generation Assembly line
- Document uses terms and images in order to make it as easy to understand as possible.
- Video Training

M1.03 – Automotive Training & Development Project

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Preventative Vs. Corrective

| | Preventative Maintenance | |
|---|------------------------------|---|
| • | Proactive | • |
| • | Increased equipment lifespan | • |
| • | High cost due to regular | • |
| | maintenance | • |
| | | |

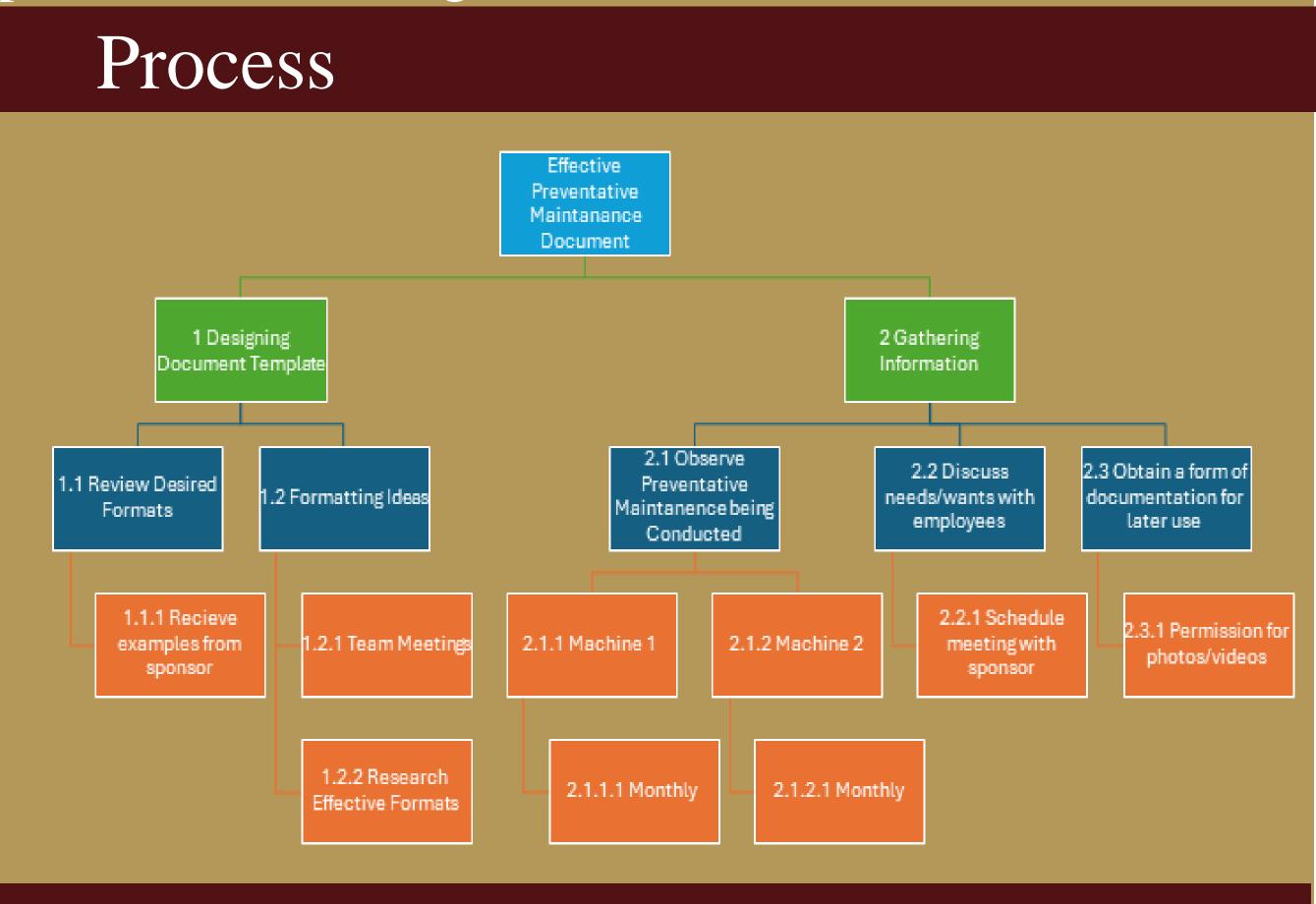
Preventative maintenance can be the difference between a smooth operating assembly

line and an event measured in lost production and high costs.

Main Focuses

- Current Documents
- Ideas for improvement
- Scheduling Observations

Needs/wants



Challenges

- Timing for scheduled preventative maintenance
- Different ideas from different departments
 - Gaining familiarity with machines

Accomplishments

- Having interactive sessions with senior leaders
- Gaining hands-on experience with the preventative maintenance team
- Creating a rough draft template of a monthly preventative maintenance document

- Corrective Maintenance
- Reactive
- Low planning
- Can have lower initial costs
- No consideration for lifespan



- line.





Future Plans

• Have separate documents for each machine in the 3XX line.

Meet desires of both the maintenance team and the engineering team.

• Ensure all sets of PM's are completed for every frequency required by Continental.

• If time permits, attempt to create video training for all machines on the 3rd generation assembly

Ensure that anyone, no matter education or

skill level, can understand and perform the tasks required for each frequency of PM's.

The Team

Acknowledgments

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