Core Room Optimization

Project Objectives:
- Identify and, if possible, eliminate double material handling within the Core Room
- Decrease searching time for appropriate documentation and production materials by 60%
- Create a smooth production flow within the Core Room
- Reduce the Non-Value Added travel distance of the materials
- Increase throughput of the Core Room by 30%
- Reduce WIP by 60%
- Increase worker safety through ergonomic analysis

Final Design:
- Developed a Future State Heat Map and analyzed travel distance reduced during setup
- New layout featuring a FIFO lane organized storage area
- Calculated how much WIP is needed on hand for maximum production thus allowing Aurora Metals to control their WIP accordingly
- Reduction in searching time for documentation and production materials through an improved color coded visual identification system
- Ergonomic improvements and suggestions to reduce operator discomfort

Design Tasks:
- Collect and analyze data to determine the amount of cores needed per shift
- Implement a visual management system to appropriately label carts within the storage area
- Implement FIFO lanes to reduce the searching time for appropriate production materials
- Create a Heat Map to analyze and improve the storage of core boxes to reduce distance travelled for setups
- Perform ergonomic analysis ensuring the safety of workers

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