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Balancing a Robotic Spot Welding Manufacturing Line: an Industrial Case Study

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Highlights

- A model for Robotic Spot Welding Manufacturing Line Balancing is presented.
- The model takes in account accessibility and movement times between welding points.
- Multiple robots per station define interference constraints in the model.
- The models predictions are validated by comparisons with empirical data.
- Up to 6.6% productivity gain achieved when compared to the as-is configurations.

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