Traveling worker assembly line (re)balancing problem: model, reduction techniques, and real case studies

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Highlights

- Model for the assembly line (re)balancing problem along with worker assignment
- Worker movement is minimized with a traveling salesman integrated formulation
- A benchmark set and real world assembly line data are used to test the model
- A preprocessing procedure is used to reduce the search space
- Common and automatic tasks, robotic workers and assignment restrictions are treated