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Engineering
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Details on the following projects are available in the Annual Reports

| # | TITLE | YEAR |
|----|--|------|
| 1 | A vibration exposure calculator with subjective feedback for people in public transport | 2024 |
| 2 | Camera-based rail wheel wear measuring system | 2024 |
| 3 | Development of a virtual reality TIG welding training simulator | 2024 |
| 4 | Investigation of vertical wheel-rail force and rail stress state: Wheel defects | 2024 |
| 5 | An open-source digital image correlation software system in python. | 2024 |
| 6 | Development of a decision-support roadmap for performing a life cycle assessment on rail vehicles. | 2024 |
| 7 | An optical rail wheel measuring solution. | 2024 |
| 8 | Data mining for predictive rolling stock maintenance | 2024 |
| 9 | An open-source digital image correlation software system in python. | 2023 |
| 10 | Development of a decision-support roadmap for performing a life cycle assessment on rail vehicles. | 2023 |
| 11 | An optical rail wheel measuring solution. | 2023 |
| 12 | Operators' safety and productivity in the rail maintenance environment: an ergonomic study. | 2023 |



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| | | |
|----|--|------|
| 13 | Warehouse space optimisation. | 2023 |
| 14 | Optical based detection of railcar wheel flat spots | 2023 |
| 15 | Using a model train to identify track defects. | 2023 |
| 16 | Development of a virtual reality technology welding simulator. | 2023 |
| 17 | Whole-body vibration calculator for occupants of railway vehicles. | 2023 |
| 18 | An optical rail wheel measuring solution. | 2022 |
| 19 | Measurement of rail car aerodynamic load coefficients. | 2022 |
| 20 | Quantify, assess and improve the employee satisfaction levels for Gibela's engineering division. | 2022 |
| 21 | Rail track condition monitoring: Track Gauge. | 2022 |
| 22 | Modelling of a four-point train rail car levelling system. | 2022 |
| 23 | Human behaviour on product safety. | 2022 |
| 24 | Machine learning implementation for railway sub-system failure predictions. | 2022 |