Nadia Verstraete

Materials Engineer · Metals and Failure Analysis

materials-engineer@example.test · Ghent, Belgium

Education

2018 **MEng Materials Engineering**
Scheldt Centre for Applied Engineering

Projects

2024 **Coating change assessment**
Compared adhesion and corrosion results for six witness panels after a change in surface preparation. Provided the process owner with proposed checks for the pilot run.

Summary

Materials engineer investigating metal component failures and assessing substitutions for process equipment. Uses microscopy, hardness and service records to test possible causes and turn findings into checkable engineering recommendations.

Experience

2021-04 – Present **Materials Engineer**
Silver Loom Process Equipment

- Investigated cracking in 38 returned assemblies using metallographic sections, joint geometry and service records. Prioritised checks on the affected surface treatment before recommending a design trial.
- Reconciled material certificates for 14 production lots after a proposed grade substitution. Compared corrosion data and tolerance risks and submitted results to design authority for disposition.
- Reviewed test reports with quality engineers and separated repeatable observations from results limited by specimen condition. Added sample orientation and preparation to the request form.

2018-10 – 2021-03 **Materials Laboratory Engineer**
Alder Fen Laboratories

- Prepared cross-sections and hardness traverses from failed production parts. Retained specimen identifiers and image coordinates so the lead engineer could repeat each observation.
- Compared reference and trial specimens in routine corrosion screening. Documented outliers separately for repeat assessment.

Skills

Metallography · Fracture investigation · Hardness testing · Material specification review

Languages

Dutch · English · French