

# SBOM NLP VALIDATION REPORT

## Validation Parameters

Workcenter Plant Reference:	002
Workcenter Production Area Reference:	015
Workcenter Use Single Final Assembly:	Yes
NLP Model Used:	en_core_web_sm

Report generated on: 2025-05-24 22:25:07

## NLP-based Twisted Wires Validation Results

**FAILURE: Mismatches found between SBOM and Excel**

### NLP Processing Details:

- \* Pitch mismatch for 41(1): XML=25.0, Excel=20.0
- \* Open end length 2 (untwist b) mismatch for 41(1): XML=55.0, Excel=50.0
- \* Pitch mismatch for 51(1): XML=25.0, Excel=20.0
- \* Open end length 2 (untwist b) mismatch for 51(1): XML=55.0, Excel=50.0
- \* Pitch mismatch for 41(1): XML=25.0, Excel=20.0
- \* Open end length 2 (untwist b) mismatch for 41(1): XML=55.0, Excel=50.0
- \* Pitch mismatch for 51(1): XML=25.0, Excel=20.0
- \* Open end length 2 (untwist b) mismatch for 51(1): XML=55.0, Excel=50.0
- \* Wire 20(1) not found in Excel sheet
- \* Wire 43(1) not found in Excel sheet
- \* Wire 55(1) not found in Excel sheet

## NLP Validation Summary

Validation Category	Issues Found	Status
Work Center Attributes	0	PASS
Twisted Wires (NLP Validation)	11	FAIL
<b>OVERALL NLP VALIDATION STATUS</b>	<b>11</b>	<b>FAIL</b>

## NLP Processing Notes

1. This validation used spaCy's NLP model (en\_core\_web\_sm) to parse wire descriptions.
2. The system extracts wire numbers, colors, and measurements from natural language descriptions.
3. Comparisons are made with a tolerance of  $\pm 0.01$  for floating point values.
4. Some descriptions may be parsed differently than regex-based approaches.

*This is an automatically generated NLP validation report  
For any discrepancies, please contact the validation team*