

# Predictive Maintenance Diagnostic Report

CURRENT STATUS: NORMAL OPERATION (Failure risk: 0.0%)

## 1. Input Data Snapshot

| Parameter               | Value  |
|-------------------------|--------|
| product id              | L      |
| air temperature [k]     | 298.3  |
| process temperature [k] | 308.5  |
| rotational speed [rpm]  | 1664.0 |
| torque [nm]             | 31.6   |
| tool wear [min]         | 144.0  |
| type                    | I      |

## 2. Model Explanation and Key Factor

SHAP Report: SHAP analysis driven by \*product id L52815\*.

LIME Report: LIME highlights product id\_L48994 as relevant.

**Most Influential Feature: product id L52815**

## 3. Actionable Maintenance Suggestions

- Review historical data trends to detect subtle degradation.