

Predictive Maintenance Diagnostic Report

CURRENT STATUS: HIGH RISK OF MACHINE FAILURE (Confidence: 100.0%)

1. Input Data Snapshot

Parameter	Value
product id	L
air temperature [k]	298.9
process temperature [k]	309.1
rotational speed [rpm]	2861.0
torque [nm]	4.6
tool wear [min]	143.0
type	I

2. Model Explanation and Key Factor

SHAP Report: SHAP analysis driven by *product id L49617*.

LIME Report: LIME highlights product id_L51486 as relevant.

Most Influential Feature: product id L49617

3. Actionable Maintenance Suggestions

- URGENT: Isolate the unit and proceed with component replacement or major repair planning.