UseCase – Live System Training Guide

1 Introduction

By the end of this chapter, participants will understand:

- the purpose of the Predictive Quality System
- why the system is used on the gearbox production line
- the benefits the system brings to quality and production
- the role that humans continue to play in the decision-making process

This chapter aims to:

- establish a common basic understanding
- build acceptance of the system
- reduce uncertainties regarding AI
- explain the relationship between production, quality and AI

2 System Topology

By the end of this chapter, participants will understand:

- which systems are interconnected
- where the data comes from
- how data is processed
- how the AI arrives at its results
- which components are critical to the system

This chapter aims to:

- create transparency regarding the data flow
- increase confidence in the system
- make the technical architecture understandable
- show which data the AI analyses
- illustrate the dependence on sensor technology and data quality

3 Dashboard Walktrough

By the end of this chapter, participants will be able to:

- use the key dashboards
- find relevant information
- recognise warnings and status messages
- interpret production and quality information
- distinguish between normal and critical conditions

This chapter aims to:

- build confidence in using the live system
- provide training in navigating the system
- explain the key KPIs and indicators
- teach practical use of the dashboard
- prepare participants for real-world production situations

4 Interpretation of results

By the end of this chapter, participants will be able to:

- interpret AI results correctly
- assess risk levels
- recognise critical situations
- distinguish between warnings and actual errors
- derive appropriate measures

This chapter aims to:

- improve understanding of AI outputs
- avoid misinterpretations
- explain the limitations of the system
- clarify the interaction between AI and subject matter expertise
- provide training in the safe handling of warnings

5 Standard processes

By the end of this chapter, participants will be able to:

- follow standardised procedures for handling alerts
- respond appropriately to quality risks
- document actions taken
- apply escalation procedures
- work with the system confidently and in a structured manner

This chapter aims to:

- ensure a consistent approach
- reduce response times
- avoid errors when handling alerts
- ensure operational safety
- define clear processes for the shop floor

6 Roles & Responsibilities

By the end of this chapter, participants will understand:

- their own role in the predictive quality process
- the responsibilities of the various teams
- when escalation is necessary
- who makes decisions
- how collaboration between production, quality and engineering works

This chapter aims to:

- clearly define responsibilities
- avoid overlaps and uncertainties
- strengthen collaboration between departments
- establish clear decision-making pathways
- ensure the integration of the system into existing processes