Sampling

Provides lot-based sampling as well as sub-material sampling at metrology steps

Overview

In many cases it's not practical to inspect or measure every single lot; and even in an inspection or metrology step, it's not practical to inspect or measure every single unit of a lot. The Sampling module provides the capability to implement sampling strategies by pre-defining 1) which materials must go through an inspection or metrology step based on time or counters; and 2) which sub-materials to be measured at an inspection or metrology step. Once the sampling strategy is defined, the system will execute and enforce it automatically.

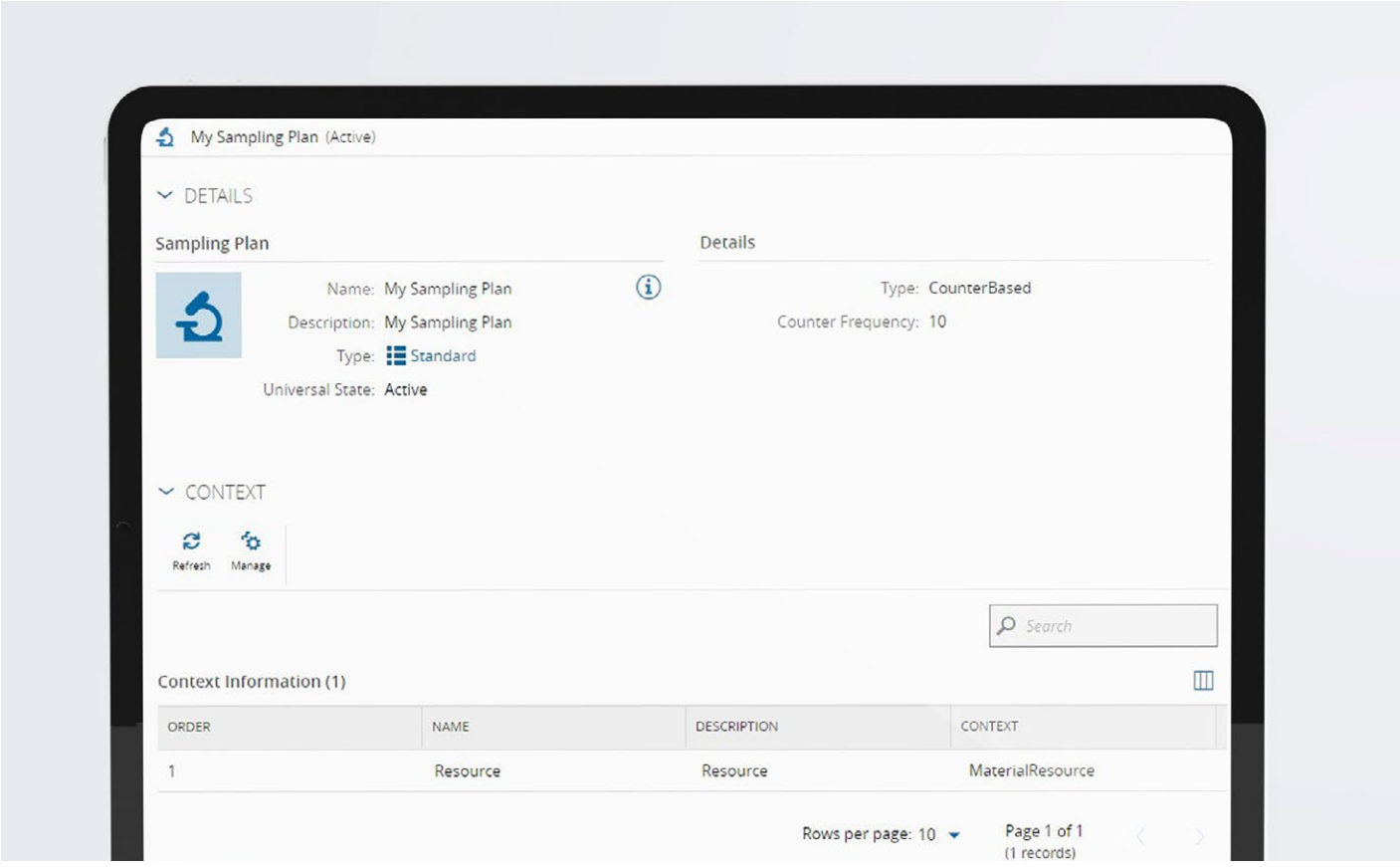

Figure 1 Sampling Plan example

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Key Features

- Support for static and dynamic inspection plans, including AQL, supporting:
  - In-process measurements as well as measurements that are performed in different inspection stations (e.g.: a lab)
  - Variable and Attribute results
  - The definition and capture of measurement instruments, ensuring that they are calibrated and that they cover the required range and have the required precision
  - Automatic severity switching rules
- Support for lot-based sampling strategies based on flexible contexts that can be:
  - Counter based (e.g.: every 10th lot of a certain product)
  - Time based (e.g.: one lot from a certain equipment every 8 hours)
- Support for sub-material selection at a metrology step, for example to measure the top, middle and bottom wafers and in that particular sequence. The sub-materials to be measured can be defined manually or by a business rule (system or user-defined).
- Integration with Material Tracking and transparent to the user.

Benefits

- Improved process control
- Reduction of costs
- Reduction in the opportunity for errors

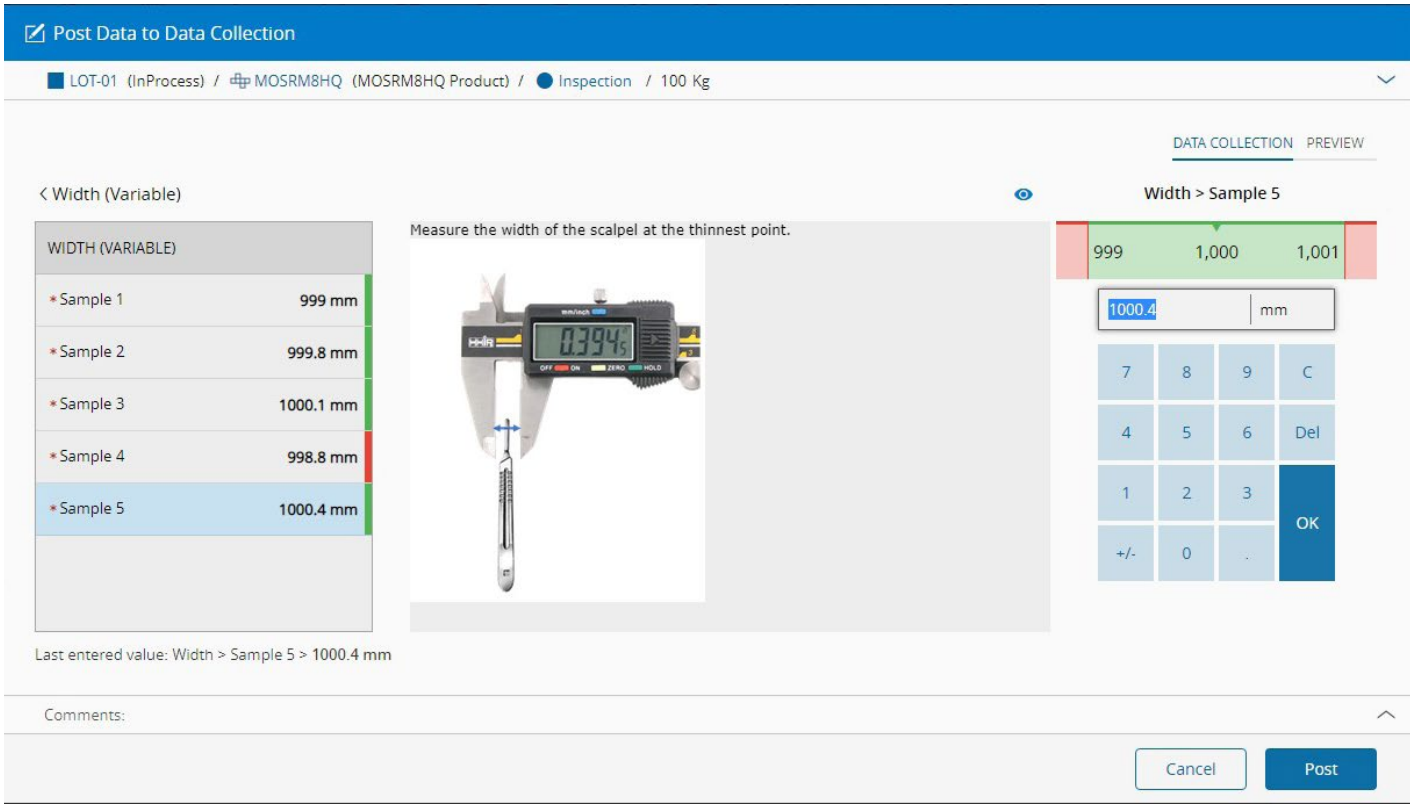

Figure 2 Inspection example

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