

# 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.

The screenshot displays a web interface for configuring a sampling plan. The main section is titled 'My Sampling Plan (Active)'. Under the 'DETAILS' section, the 'Sampling Plan' details are shown:

- Name: My Sampling Plan
- Description: My Sampling Plan
- Type: Standard
- Universal State: Active
- Type: CounterBased
- Counter Frequency: 10

Below the details, there is a 'CONTEXT' section with 'Refresh' and 'Manage' buttons. A search bar is present above a table of context information.

ORDER	NAME	DESCRIPTION	CONTEXT
1	Resource	Resource	MaterialResource

At the bottom right, there is a pagination control showing 'Rows per page: 10' and 'Page 1 of 1 (1 records)'.

Figure 1 Sampling Plan example

## 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

✔ Post Data to Data Collection


■ LOT-01 (InProcess) / 🏠 MOSRM8HQ (MOSRM8HQ Product) / ● Inspection / 100 Kg

< Width (Variable)

WIDTH (VARIABLE)	
* Sample 1	999 mm
* Sample 2	999.8 mm
* Sample 3	1000.1 mm
* Sample 4	998.8 mm
* Sample 5	1000.4 mm

Last entered value: Width > Sample 5 > 1000.4 mm

Measure the width of the scalpel at the thinnest point.



Width > Sample 5

999	1,000	1,001	
1000.4   mm			
7	8	9	C
4	5	6	Del
1	2	3	OK
+/-	0	.	

Comments:

Cancel
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Figure 2 Inspection example