

VAST Performance



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Lunch and Learn

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1 Introduction to VAST Performance

2 FlyScan

3 Fast Probe Change



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Introduction: VAST Performance (option)

The VAST Performance option of CALYPSO makes it possible to use the FlyScan and quick stylus system change functions.

- FlyScan allows you to measure scanning paths which are interrupted by grooves in one pass without lifting off the stylus.
- For quick stylus system change, CALYPSO uses the maximum travel speed when changing the stylus system. This shortens the measuring time, especially for measurement plans with frequent stylus system changes.

NOTICE

You can only use the VAST Performance option if the **Navigator**, **VAST-PERFORMANCE** and **Calypso_SMA** licenses have been installed and enabled on your system.



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What?

The existing Calypso scanning functionality has been enhanced to allow for scanning over gaps in material without lifting the probe.

Who?

Required by Production

Why?

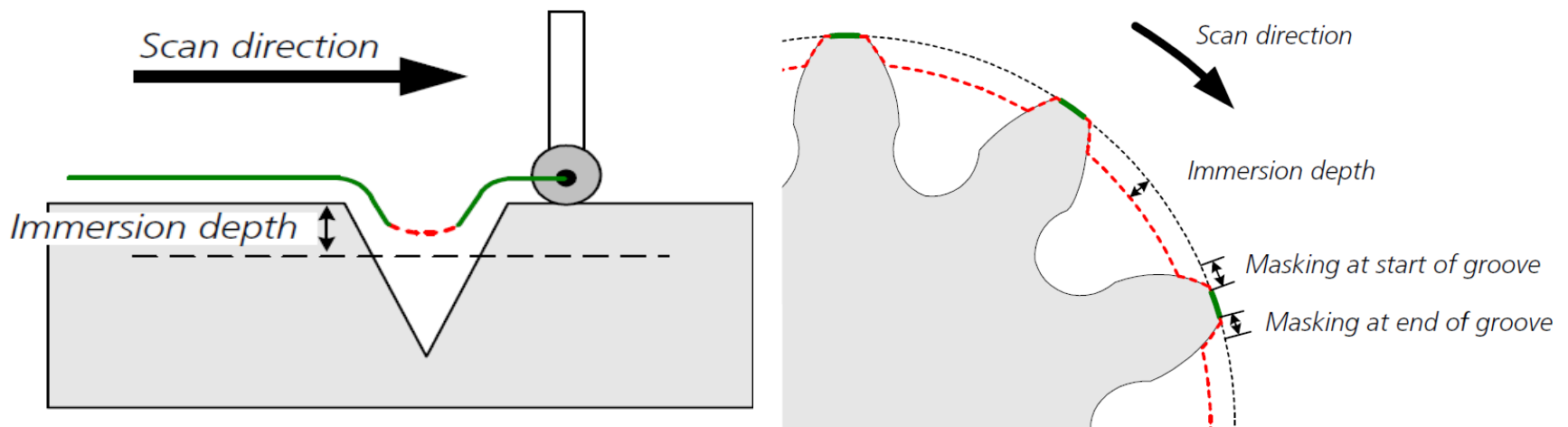
Decrease measurement time by up to 90% and increase productivity and utilization of equipment

Prerequisites for FlyScan

Certain preconditions must be satisfied before you can measure with FlyScan.

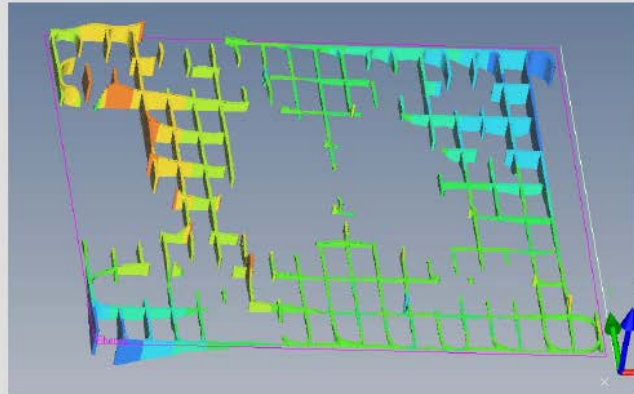
- A probe of the VAST Gold, VAST XT Gold, or VAST XTR Gold type is used.
- CMM control type C99, firmware version 24.0 or higher, is used.
- Only original ZEISS adapter plates with matrix code (see photo) are used.

Calypso defines a “virtual plane” for the measurement of an interrupted scanning path. Once the scanning path is interrupted, the stylus lowers itself to the height of the virtual plane (immersion depth) and remains in this position until it comes into contact again with the material. The measured “air points” are masked out automatically and excluded from the evaluation.



Example : Cylinder Head measurement with a grid

With FlyScan a large number of points can be measured that represents the entire surface without an increase in cycle time.



Areas of use

The “FlyScan” function can be used for the following features and strategies:

Feature	Strategy
Circle	Circle Path
	Helix
Plane	Grid
	Polyline
	Circle path on plane
2D line	Line
Cylinder	Circle Path
	Linear paths
	Helix
	VAST Helix (variable Helix)
Cone	Circle Path
	Helix



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Advantages of the quick stylus system change

The VAST Performance option allows you to activate and use the quick stylus system change in CALYPSO. For quick stylus system change, CALYPSO uses the maximum travel speed when changing the stylus system. This shortens the measuring time, especially for measurement plans with frequent stylus system changes.

For the VAST XTR gold, the VAST Performance option is not required for quick stylus system change.

Requirements for the quick stylus system change

The following conditions must be fulfilled for the quick stylus system change:

- Probe type VAST, VAST gold, VAST XXT, VAST XT gold or VAST XTR gold is used.
- You have a valid license for the VAST Performance option (not necessary for VAST XTR gold).
- CMM control type C99, firmware version 24.0 or higher, is used.
- The control system is configured for quick stylus system change according to your CMM type.
- Only original ZEISS adapter plates with matrix code (see photo) are used.

Fast Probe Change



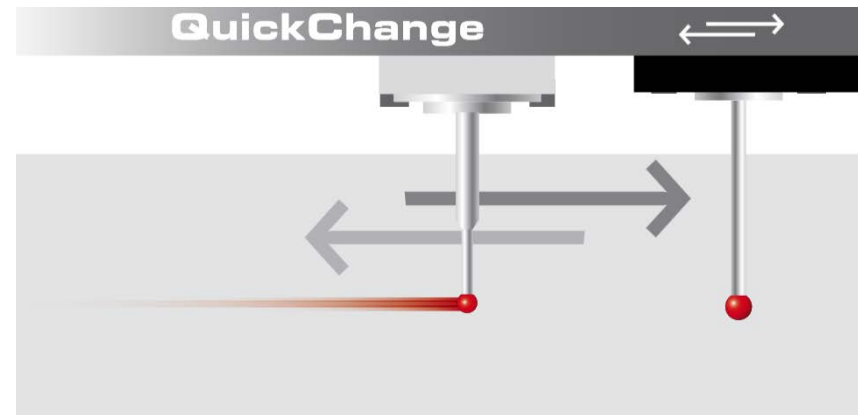
Requires Zeiss Adapter Plate with 3D matrix and Zeiss Logo



ZEISS logo

Matrix code

Fast Probe Change





We make it visible.