ZEISS Metrology Expert Tip

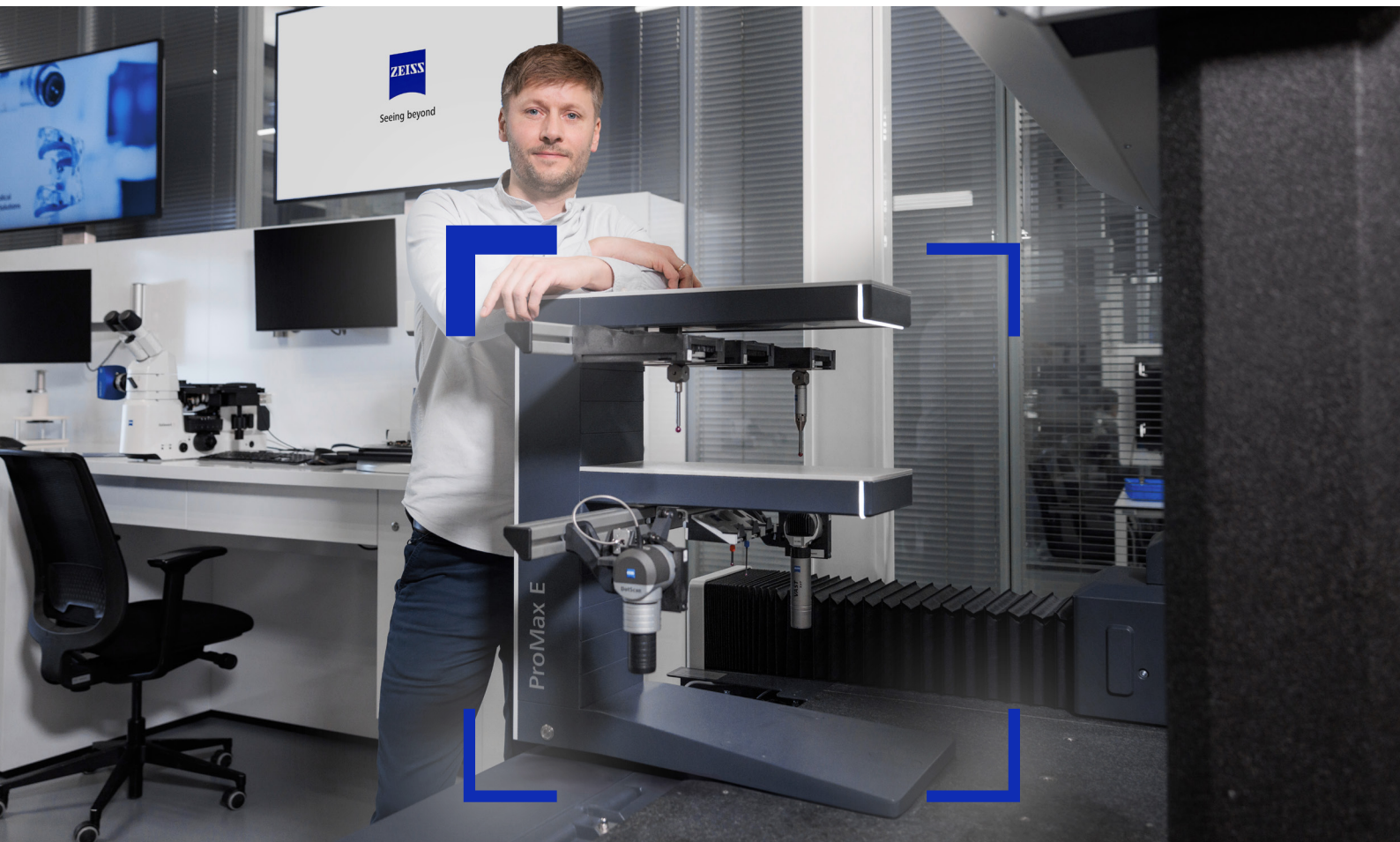Seeing beyond

ZEISS ProMax E

Maximum Utilization of the Measuring Range

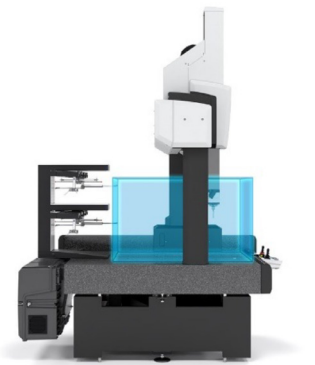# Sensor Racks – Storage for Stylus Systems and Sensors

Sensor racks are used to store stylus systems and sensors on the coordinate measuring machine. System expansions are included – precisely fitting and versatile. The sensor racks are integrated into the metrology software used for the machine, so that the probe change is carried out automatically. All ZEISS configurations are supported by suitable probe sockets.

💡 Small footprint or large measuring range? You will get both with the ProMax E.

Technical Explanation and Example

The automated sensor rack ZEISS ProMax E provides space for up to 27 stylus systems (MT/VAST) outside the measuring range for a fully automatic stylus system and sensor change. This allows an optimum use of measuring volume for the workpiece and the movement path of the measuring probe without the risk of collision.
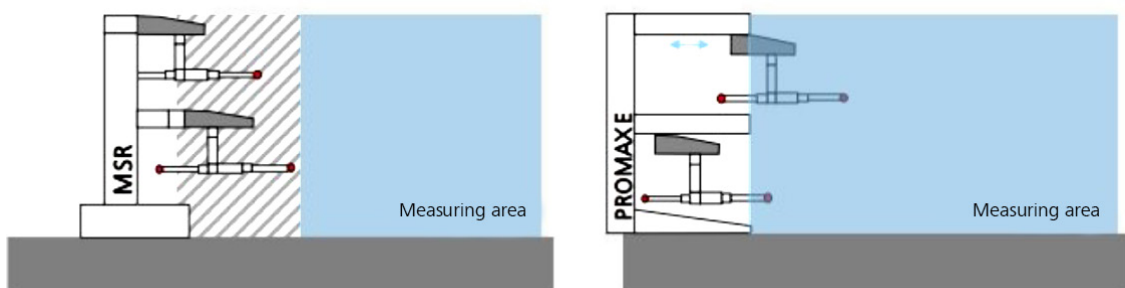
How you benefit:
- Use more: Up to 46 % more available measuring volume (compared to other Multi Sensor Racks).
- Leverage more: For up to 27 probe sockets available for ZEISS MT/VAST and ZEISS XTR).
- Combine more: Multi-Sensor capability can be combined with all ZEISS probe sockets.
- More safety: Improved repeatability by electric drive and status display.
- Optimized UX-experience through modular design: Available in appropriate CMM sizes with up to three levels.

How it works:
As standard, stylus systems are placed on rigid sensor racks within the measuring volume of the coordinate measuring machine. Complex measurements require different stylus systems and sensors for the respective measuring tasks. This often requires a sensor rack with at least two storage levels and requires up to 30 % of the measuring space. The ZEISS ProMax E is positioned on the granite outside the measuring space – if a stylus system change is required, the stylus systems are automatically moved into and out of the measuring space by a linear module. The stylus change is safe and repeatable due to the integration into the metrology software ZEISS CALYPSO.

ZEISS ProMax E Features
- The modules can be retrofitted. The module height can also be adjusted after the initial installation.
- An LED display on the individual modules provides you with information about the current status.
- Variable lengths for the storage bars available in: X=700 X=900 X=1000.
- Probe sockets can be moved on the bar.
- Integration in the metrology software ZEISS CALYPSO makes an automated stylus system change possible.
- No maintenance for ZEISS ProMax E required.

Always observe the maximum permissible angle tolerance when aligning the storage bars. It is also important to ensure that the bar is evenly loaded by the weight. Observe these two points to ensure long-lasting functionality.

Before adding a new storage bar, it is advisable to check the available space on the sensor rack to avoid possible collisions between the stylus systems and sensors that are used.

ZEISS Original Accessories are available in the ZEISS Metrology Shop.