

INNOVATION

 **sentenso**
Smart Peening Solutions

μ -X360J X-Ray Stress Analyser



Pulstec μ -X360s - Residual Stress Determination Using the Cos-alpha Method
Short measurement times and simple operation enable new applications for intrinsic stress and retained austenite determination.

With the new μ -X360J, our partner Pulstec presents the next evolutionary step in mobile residual stress measurement – replacing the previously established μ -X360s. The new device generation sets standards in precision, speed and ease of use. It has been consistently designed to make measurement processes even more efficient, stable and easier to perform. Thanks to its easy positioning and short measurement times, it is ideal for flexible use both in the laboratory and directly in production.

The new μ -X360J is also compatible with our additional StressEasy software, enabling extensive measurement automation.

Setup and Functions

The new μ-X360J meets the demand for continuous development without changing proven features.

The μ-X360J enables fast and reliable determination of residual stresses and retained austenite in metallic components – important parameters for assessing material condition, fatigue strength and the quality of individual manufacturing steps.



In the new version, the tube module can be easily replaced using a plug-in system after loosening two mounting screws. The integration of the collimator into the new tube unit allows for easy replacement to adjust the measurement spot size. The simplified calibration of the tube-collimator combination is fully automatic without user input between measurements. The larger detector also allows for a greater measuring distance for improved accessibility or improved resolution of the measurement signal.

sentenso is expanding the system with the optional StressEasy software, which allows fully automated analysis of residual stress states – including stress mapping, batch measurements and integrated target value checks for production lines. In the new version, mappings can also be customised and supplemented with oscillation movements at selected positions. Results are clearly visualised, filterable and combinable.



In combination with a six-axis robot, this creates a highly automated system that enables reproducible, economical and fully digitised measurement processes. This means that measurements can be carried out one after the other without user intervention. Thanks to the flexible application of a robot, different measurement directions and beam directions can also be selected for each measurement position.

