LASER CONTOUR CHECK





With the new, innovative Laser Contour Check option, WALTER now offers an intelligent measuring system integrated directly in the tool grinding and eroding machine for the highly accurate, non-contact measurement of various tool parameters on cylindrical tools. Take advantage of the benefits of non-contact measuring in the the machine!

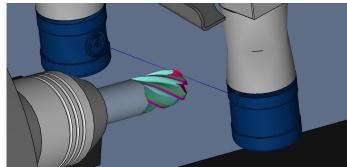
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LASER CONTOUR CHECK IN DETAIL

In addition to tactile measurement in our grinding and eroding machines, we now offer a new and innovative non-contact option: Laser Contour Check. With this intelligent and novel blue laser measuring system for highly accurate measurement of various tool parameters on cylindrical tools, you can now avoid possible damage to cutting edges or measurement errors that can occur due to wear on the probe tip during tactile measurements. The measurements can be carried out quickly in digital and analogue form and the deviations can be scanned and compensated directly in the process. Optimised programme sequences for cleaning and compensation can be programmed and adapted by the operator.





ADVANTAGES LASER CONTOUR CHECK

- Automatic correction of the tool diameter and tool profile in the process
- Ready for unmanned production
- Reduction of the set-up time
- Integrated into the working area of the machine; measuring unit moves into position when required
- Improved accuracy due to blue laser beam compared to conventional red laser
- The measurement takes place directly in the analogue laser beam on the entire tool contour and not only point by point as with the tactile or digital measuring method
- Integrated and adjustable cleaning process of the tool with compressed air before measurement
- Reduction of waste

TECHNICAL DETAILS

- For cylindrical tools from diameter 1 to 52 mm
- Measurement of tool diameter at one or more positions on the tool geometry
- Measurement of face radii of ballnose cutters, corner radius cutters and double radius cutters
- Measurement of tool profiles and contours in length and diameter both as a partial profile and the entire contour
- Short measuring time of approx. 16 seconds for the diameter measurement (depending on tool type) for increased productivity
- Absolute accuracy: +/- 1.5 μm for contour, diameter and radius measurement
- Blue lasers have a shorter wavelength than red lasers, which leads to reduced diffraction effects and an optimised laser beam geometry. This results in improved accuracy.