



Laser scanning system LS-C-5.8

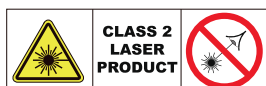
Laser scanning directly on the machine tool

The LS-C-5.8 enhances productivity by using laser scanning technology developed for coordinate measuring machines and portable measuring arms to capture the complete surface data for a part directly on machine tools.

Accurate machine tool measurement typically involves capturing data for a limited number of points on a part. With a metrology-grade laser scanner integrated into the machine tool, users can quickly capture and analyse a complete, data-rich image of a part and act to address flaws while the part is still clamped. The results bring new levels of speed, precision and flexibility to machine tool inspection, while minimising the need for external measurement devices.

Equipped with a blue line laser, the LS-C-5.8 quickly and precisely captures data equally well on shiny or dark surfaces. Its compact design and large field of view make it possible to use on most kinds of parts and machine tools. Its intuitive, highly functional software is compatible with controls from Fanuc, Siemens and Heidenhain.

Specification	
Laser class	2 (EN /IEC 60825-1: 2014) Emitted wavelength Visible blue - 450 nm Maximum average radiant power 1 mW
Standoff and depth (Z)	140 ±40 mm
Lines per second	40 Hz
Daten rate	36,000 Pkt/sek
Ambient light a of the sensor	5.000 lx (diffused, indirect artificial light)
Operating temperature	5 bis 45 °C (41 bis 113°F)
Declared accuracy temperature range	15 bis 40 °C (59 bis 104°F)
Ambient humidity	90% non-condensing
Warm-up time for declared accuracy	30 minutes
Dimensions	116 mm × 62 mm × 128.5 mm (108.5 mm) (4.57" × 2.44" × 5.06" (4.27"))
Weight	750g
Power supply	DC 18 to 28 V, 170 to 200 mA, , protected against the polarity reversal
Protection against dust and water	IP64 (IEC 60529)
Storage temperature	-25 to +70 °C (-13 bis +158°F)



Laser radiation
Do not stare into beam
 450nm / 1 mW cw
 applied standard: IEC 60825-1:2014

Features & Benefits

Creation of clear colour maps

Users can quickly capture complete surface data and compare it to the CAD model, with a laser scanner. With the LS-C-5.8 solution users can visualise a part's surface data, assess whether it is in tolerance, and display the results as a colour map super-imposed on the digital CAD model of the part, all while it is clamped on the machine tool.

Measuring freeform surfaces

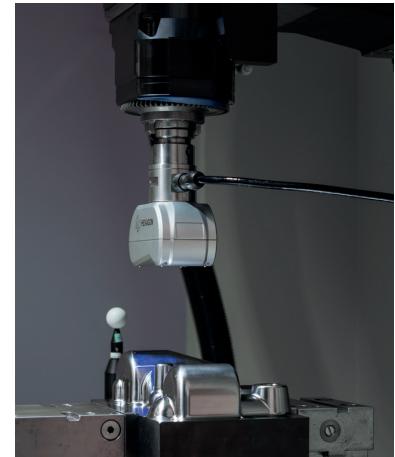
The LS-C-5.8 is able to capture up to thousand measurement points per second and is supported by software that makes information easy to digest and use. Measuring freeform surfaces on the machine tool typically involves creating and analysing many single measurement points.

Exact alignment before reworking

Having a full picture of the surface makes it easier to identify and errors that arise during manufacturing, such as incorrect clamping, and use precise alignment to address.

Reverse engineering

Not all parts have 3D models. The LS-C-5.8 creates them by scanning a part while it is on the machine tool, allowing the resulting data to be exported as an stp-file and integrated into a CAD-program.



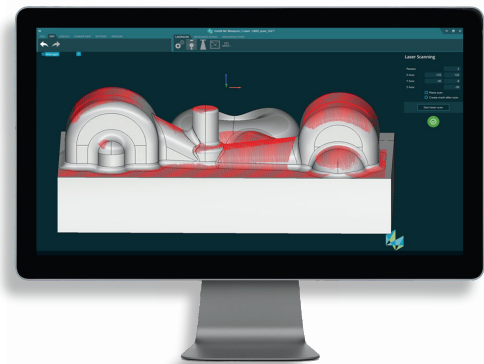
Laser scanning directly on the machine tool

HxGN NC Measure | Laser Software

The key to highly effective machine tool measurement

The NC Measure | Laser software is compatible with controls from Fanuc, Siemens and Heidenhain and combines market-leading functionality with an intuitive user interface. Scan paths can be programmed directly on the screen and clear colour maps or measurement reports can be created.

- Intuitive, modern user interface
- Adjustable tolerances
- Best-fit on the machine
- Inherently compatible
- Reporting and exporting



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