

TIGO SF

3D coordinate measuring machine
for the shop floor





ONE FLOW WITH TIGO SF

In production you are aiming at a constant flow from milling, drilling, threading, and grinding, all the way to final inspection. A smooth flow from A to... T!

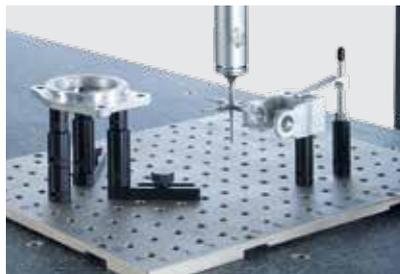
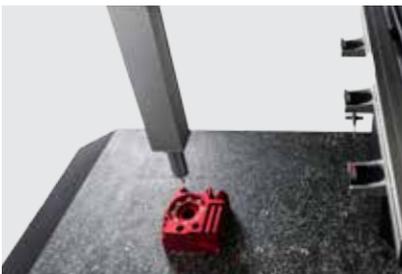
TIGO SF is the most accurate measurement tool to include quality assurance seamlessly in your production line. A robust design combats challenges coordinate measuring machine (CMMs) are faced with on the shop floor.

And the best part of it all: everyone can measure with TIGO SF. The intuitive operating system opens up the world of metrology to everyone. No matter how familiar you are with measurement tools or if you are in uncharted waters – TIGO SF is for you.

With TIGO SF you are fully equipped to measure your workpieces - easy and efficient, directly on the shop floor.

Key characteristics

- Revolutionary operating concept for intuitive use
- Best accuracy in its class
- High-speed scanning or touch-trigger measurements with fixed or indexable probe heads
- Extremely robust against dust and dirt, vibrations, humidity and temperature changes on the shop floor
- Fully functional from day one, minimal servicing required
- Minimum footprint, measurement range 500 x 580 x 500mm (X/Y/Z)



MEASURE THE TIGO SF-WAY

TIGO SF is revolutionizing the way you interact with a measurement tool. With TIGO SF, operating a shop-floor CMM is more ergonomic, easier to understand and faster than ever.

Ergonomic Workstation

All interfaces were designed to create an ergonomic and smooth workflow. The touchscreen is placed on a mount and can be positioned exactly where you need it. A standard desk configuration is also available. An additional keyboard still gives you the flexibility to switch to more conventional ways of operating the CMM. The new ergonomic handheld Jogbox is the ideal tool for operations demanding freedom and robustness. An easy-to-reach USB port facilitates data exchange.

Common Icons

“Easy-to-understand” was on top of the list when developing TIGO SF. Common icons are one of the keys. Be it the PC-DMIS TOUCH graphical user interface or the Jogbox – the symbols are the same throughout for straightforward operations.

LED Status Lights

Optional messaging LEDs mounted on the vertical axis allow for a clear view of the machine and program status from anywhere of your factory floor. You can easily see if the part is still being measured or if an operator needs to perform a certain operation.

Compact Size

TIGO SF is the all-in-one measuring machine for production: In the standard version PC, controller and peripherals such as the touchscreen and the keyboard are all mounted to the same base. Thus, TIGO SF requires minimal space and can be placed anywhere on the shop floor. Compressed air is not needed. If the shop-floor configuration changes, the TIGO SF can easily be relocated to fit the new design.

Scanning and point-to-point

In its standard configuration, TIGO SF is equipped with the fixed LSP-X1c sensor for maximum performance in scanning and point-to-point probing. For enhanced flexibility the automatic indexable TESASTAR-m probe head is also compatible with this CMM.





IN TOUCH WITH TIGO SF



The new PC-DMIS TOUCH software guides you safely through the measuring process with guided workflows. Each step of the process is shown in full-screen mode, and each process is marked with a unique color. Graphics of the measured elements appear in the center of the software interface. The icons at the bottom edge of the screen allow you to quickly switch to other functional areas of PC-DMIS TOUCH.



Measure

With PC-DMIS TOUCH you can check individual characteristics without a measuring program. Automated measuring routines are there to guide you through more complex tasks. Elements that have already been measured can be found in a list or in the graphic display, or a new element can be measured.



Report

While the characteristics are measured, you can select whether the respective data appear in the report or not. Access to the report is available with a swipe of the finger. Graphics clearly indicate whether a part is in or out of tolerance.



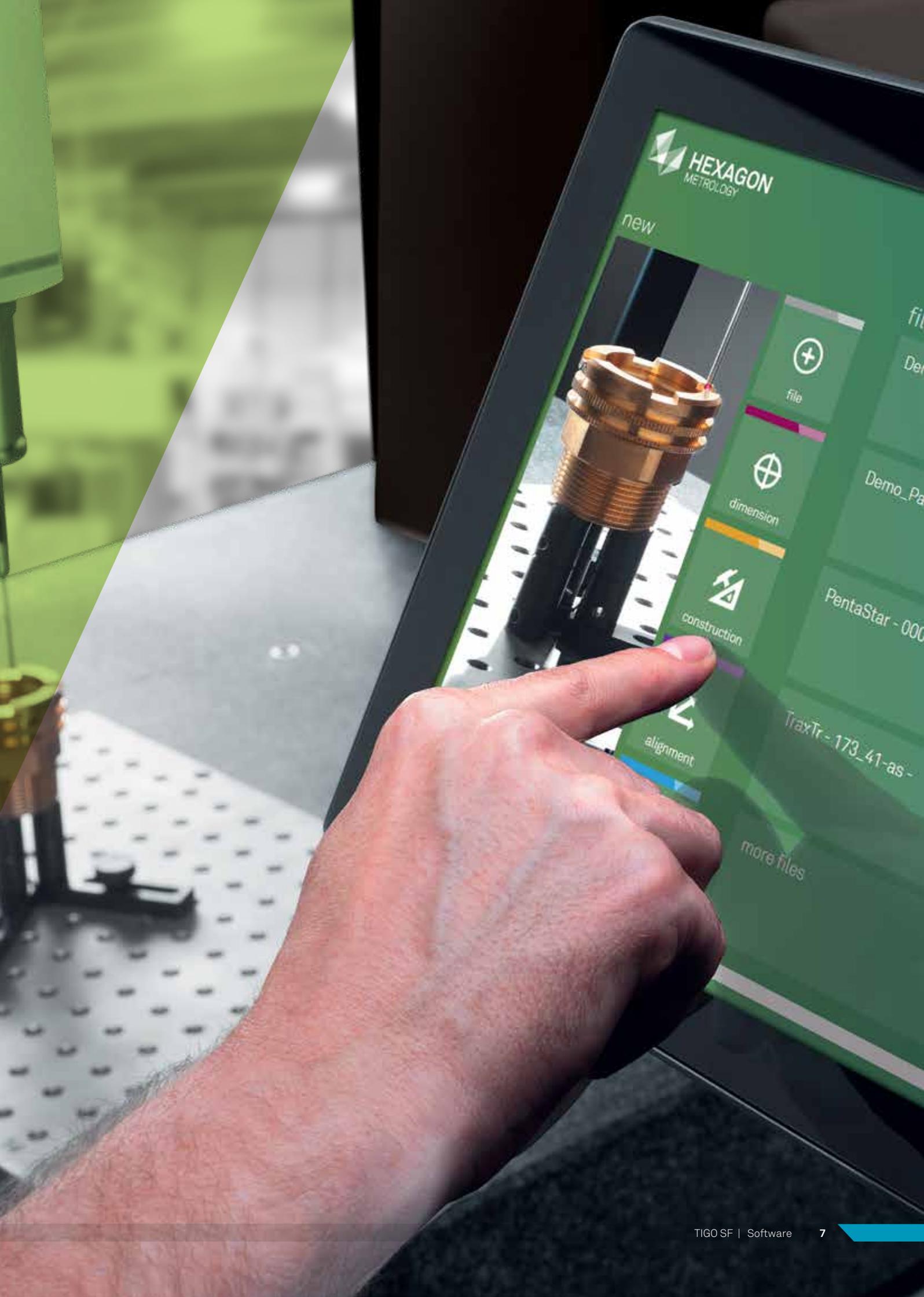
Upgrade

For more demanding applications, the conventional PC-DMIS and QUINDOS versions are available. Still, the unskilled worker on the shop floor is able to execute measurement programs with the intuitive PC-DMIS TOUCH interface.



Connectivity

For a constant information flow, TIGO SF can easily become part of your network – either on a wired or wireless basis. Via your network you can send measuring programs directly to the CMM and receive measurement data.



HEXAGON
METROLOGY

new



file



dimension



construction

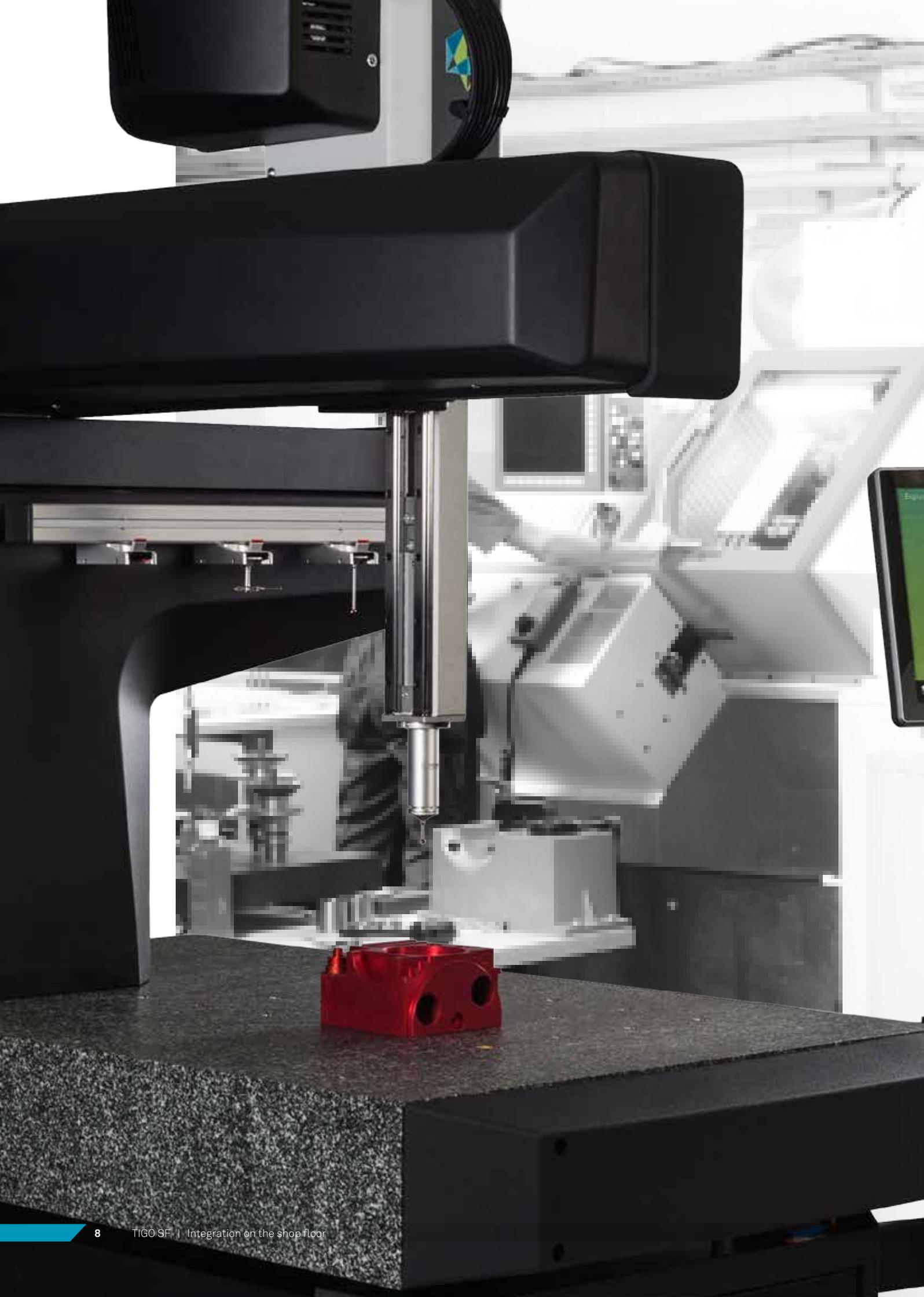


alignment

PentaStar - 000

TraxTr - 173_41-as-

more files



RIGHT IN THE MIDDLE

With TIGO SF you are able to measure accurately where it matters most in terms of quality: directly in production. TIGO SF brings sophisticated measurement technology to the shop floor.

Extended temperature range

- Enhanced structural temperature compensation for accurate measurements in a temperature range from 15 to 30° C.
- Individually re-certified scale bars for maximum measuring reliability and high accuracy even in harsh environments.
- Measuring table made of granite, material known for being thermally-stable.

Vibrations

- Passive dampers protect the machine from common vibrations on the shop floor.
- For added protection, optional active dampers are available.

Dust and Dirt

- Bellows protect against machine-floor contamination.
- An IP54-certified machine base for additional protection against environmental effects is an available option.

Automation

- Open access to the measurement range: loading is possible from three sides – be it manual or automated.

Set-up and Servicing

- As TIGO SF is compact and does not require compressed air it can be placed anywhere in production.
- Due to a robust design, TIGO SF requires minimum servicing.



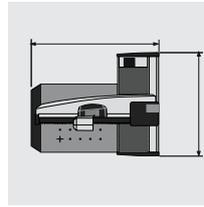


TIGO SF

TIGO SF AT A GLANCE



Probe changer for LSP-X1 integrated in the machine frame. Specifically designed covers protect the LSP-X1 styli from dust and dirt.



Reduced footprint requires only minimal space on the shop floor, compact set-up containing all components of the CMM.



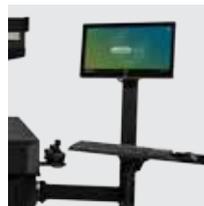
High-speed scanning with LSP-X1 sensor or touch-trigger probing with the indexable TESASTAR-m.



PC and controller integrated in the machine stand.



Touchscreen included in the standard configuration.



Flexible mount for ergonomic operations.



Additional keyboard for conventional interaction with the CMM.



Data transfer via USB port or WiFi connection.



A wide granite workplate with threaded holes for easy fixturing.



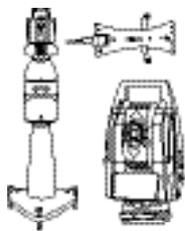
Bellows on the X- and Y-axis protect the machine from dust and dirt.



Open architecture for loading and unloading from three sides.



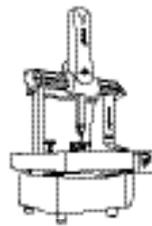
Optional LED lights for visual status of the measurement process.



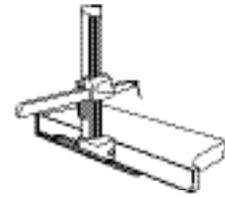
LASER TRACKERS & STATIONS



PORTABLE MEASURING ARMS



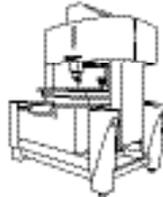
BRIDGE CMMS



HORIZONTAL ARM CMMS



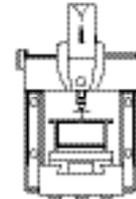
GANTRY CMMS



MULTISENSOR & OPTICAL SYSTEMS



WHITE LIGHT SCANNERS



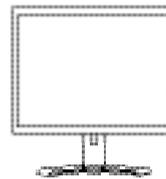
ULTRA HIGH ACCURACY CMMS



SENSORS



PRECISION MEASURING INSTRUMENTS



SOFTWARE SOLUTIONS



HEXAGON
METROLOGY

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Printed in Germany, June 2014