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HxGN SmartFixture

Product presentation

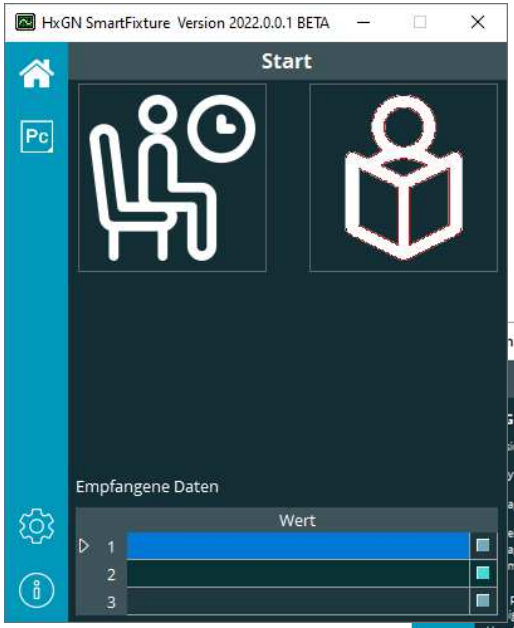
2023-07-14 Customer Solutions Wetzlar

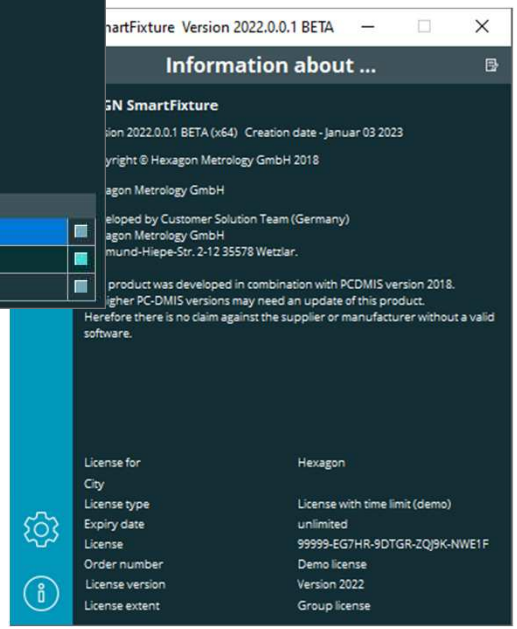
Integration of TESA measuring probes into the PC-DMIS measuring routine

Aim of the software:

Reduction of the cycle time by integrating a flexible number of probes into the clamping device. The deviations from the "master part" should be able to be used in the PC-DMIS measurement routine as if the measurement had been made with the coordinate measuring machine.

TESATRONIC TT100





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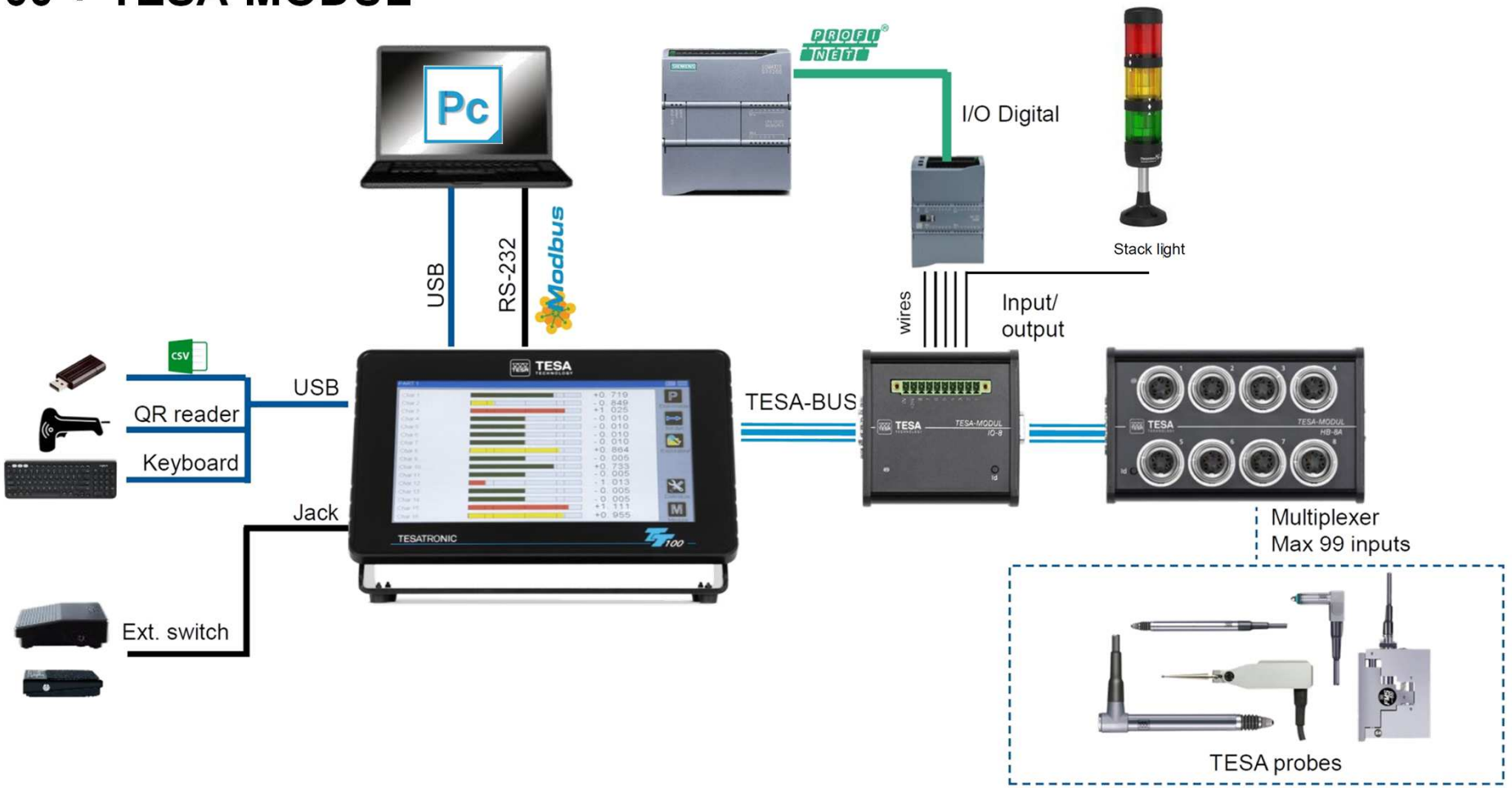
TT100 + TESA-MODUL



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TESA-MODUL IO-8

Automation from the PLC to TESA display

- Go to next sequence
- send data
- Set to Zero
- Calibration

Input mode

Power supply
12-30 VDC

Pin 1 to 8

Assignment
according to
function allocation

Automation from TESA display to PLC

- Sequence OK
- Measurement OK
- Classification

Output mode

- Voltage 24 VDC
- Max 30 mA

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Integration of TESA measuring probes into the PC-DMIS measuring routine

Connection Settings

The connection of the probes and/or display can be done in the software UI. The used port is detected automatically.

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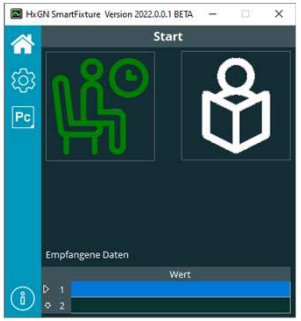
Integration von TESA Messtastern in eine PC-DMIS Messroutine

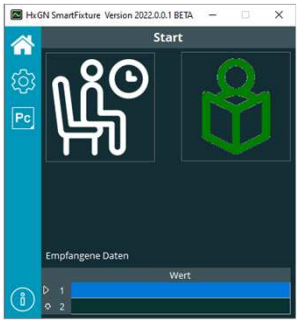
- Two operating modes are supported:
  - Operator triggers the measurement on the device



Handwitch, Jack

Footswitch, Jack

  - Measurement routine reads the data automatically



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Integration of TESA measuring probes into the PC-DMIS measuring routine

- Necessary commands are inserted into the measurement routine in a dialog-based manner.
- Each measured value is available in PC-DMIS as a fully-fledged element and can therefore be used for further operations.
- A dimension command is automatically inserted.
- The measured value of the sensor is regarded as a deviation and offset against the specified nominal value to form the actual measured value.

```
            EXTERNALCOMMAND/NO_DISPLAY, WAIT ; "C:\Program Files\HxGN_SmartFixture\HxGN_SmartFixture.exe P_Z_1:A:1"
P_Z_1       =GENERIC/POINT,DEPENDENT,CARTESIAN,$
            NOM/XYZ,<0,0,100>,$
            MEAS/XYZ,<0,0,100>,$
            NOM/IJK,<0,0,1>,$
            MEAS/IJK,<0,0,1>
DIM DIM_P_Z_1= LOCATION OF POINT P_Z_1  UNITS=MM ,$
GRAPH=OFF  TEXT=OFF  MULT=10.00  OUTPUT=BOTH  HALF ANGLE=NO
AX     NOMINAL        +TOL        -TOL        MEAS         DEV      OUTTOL
Z       100.000       0.100      -0.100     100.000       0.000       0.000 ---------#----------
END OF DIMENSION DIM_P_Z_1
```


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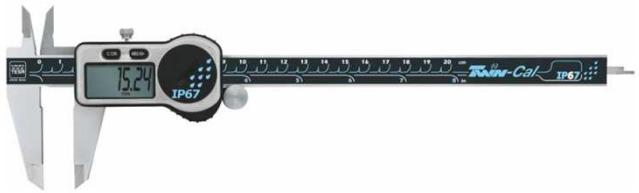
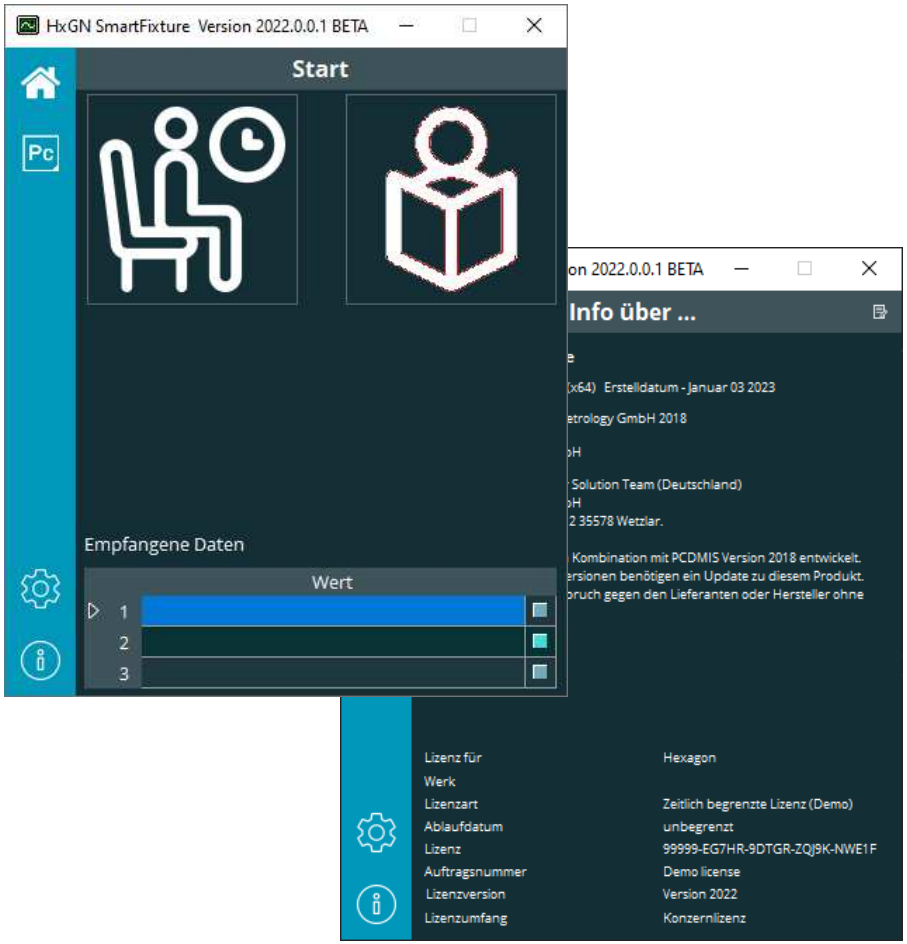
Integration of TESA Micro-Hite and TESA caliper

- TESA height gauges and TESA calipers can also be connected to PC-DMIS via HxGN SmartFixture.



Verbindungskabel TLC-USB für Instrumente mit TLC-Anschluss



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Have we piqued your interest?

Simply download the software from our server and apply for a non-binding demo license.

https://ftp.hexmet.de/CustomerSolutions/HxGN_SmartFixture

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