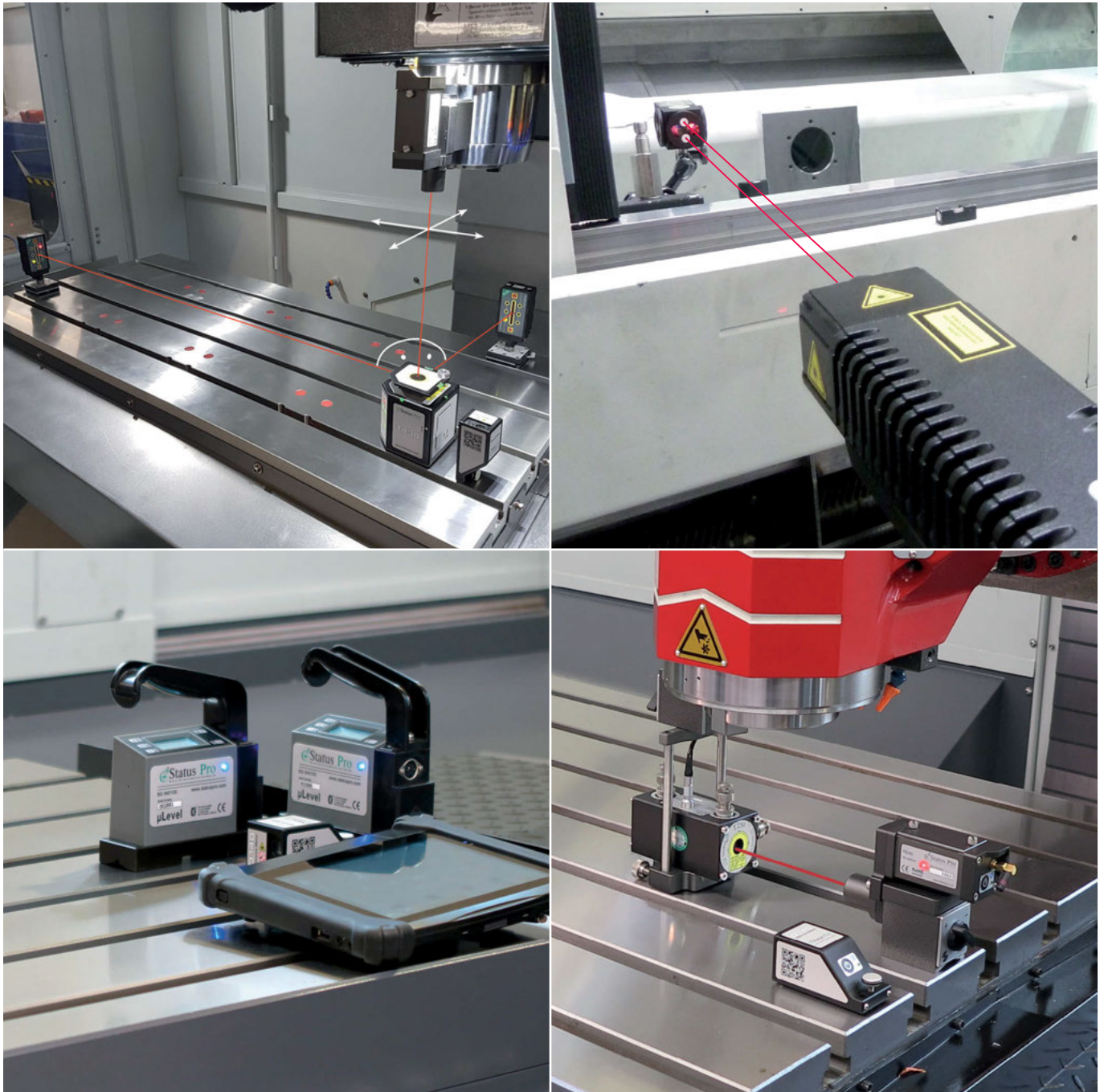


Methods and Instrumentation for the Measurement of Machine Tools

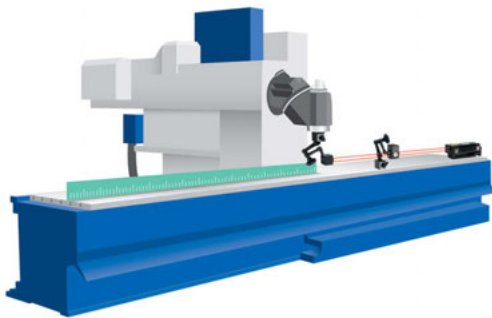
(according to ISO 230 and ISO 1101)



Measurement Instrumentation for Machine Tools

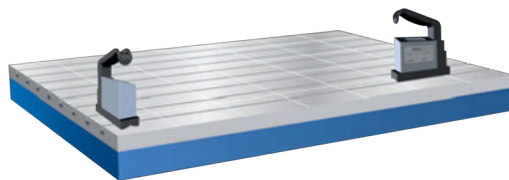
Interferometer

for position and calibration



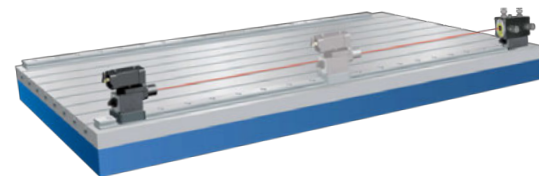
Precision Spirit Level

for assembly and calibration



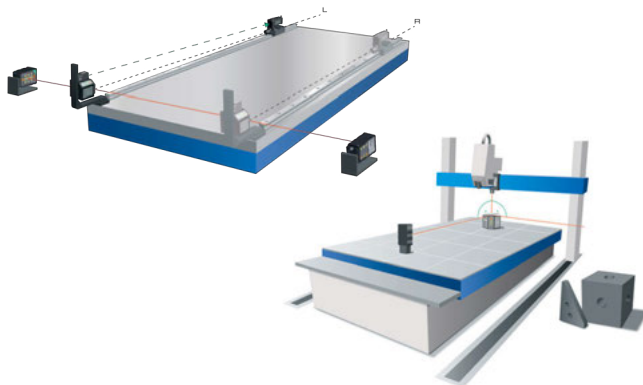
Straightness Measuring Instruments

for assembly and alignment



Precision self-levelling Sweep Laser

for levelling, flatness, straightness, right angles and parallelism



... turnkey solutions from Status Pro!

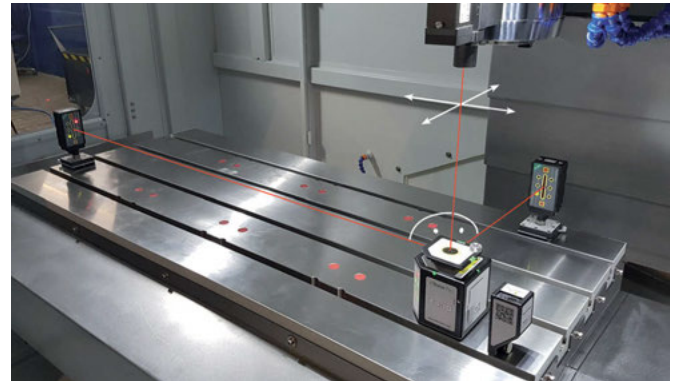
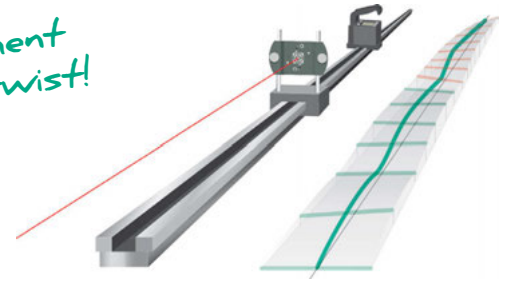
Measuring Equipment for Linear Guides



ProLine[®]

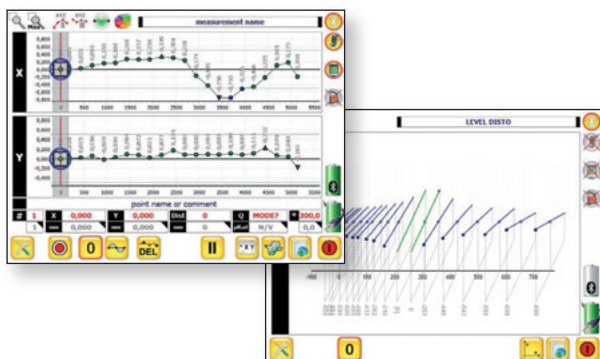
The most practical Straightness Software

Measurement of roll / twist!



Laser Alignment Package for Linear Guides:

- Straightness in two axes simultaneously
- Automated point capture
- Automated distance measurement with our distance laser D-140
- Display of perpendicularity and parallelism
- Measurement of perpendicularity in two axes at the same time
- Intelligent value evaluation ensures reliable measurements
- Continuous measurement possible with documentation
- Resolution 0.1 μm
- Rugged Tablet-PC
- Valuation switchable between Endpoint / ISO 1101 / Least squares
- PDF-Report
- Export as *.csv for EXCEL-Import
- Extended comment and report functions
- Transfer data by USB, W-LAN, Bluetooth
- Extended adaptor set for all possible mountings available (Toolkit)

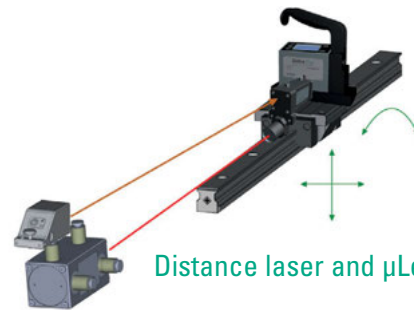
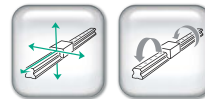


ProLine[®] 100

Straightness Starter Package

Content:

- T250 Laser-package with power supply and mountig adaptor (SP T250-P)
- R540 two-axis laserposition detector with BT (BG 830440)
- ProLine v4 software license (SW 200103)
- System case with foam inlays (BG 990107)
- Optional: D140 (BG 832200), μ Level for detecting roll errors (SP μ Level 20), DU420 Display Unit (IT 200410)



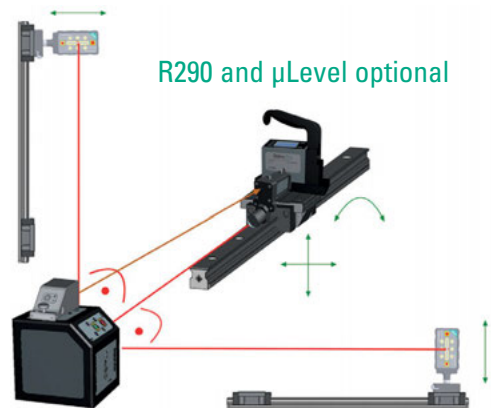
Distance laser and μ Level optional

ProLine[®] 200

Professional Package for Straightness, expandable for Perpendicularity and Parallelism

Content:

- T430 self levelling, self calibrating laser source (BG 832500)
- R540 two-axis laserposition detector with BT (BG 830440)
- D140 distance laser (BG 832200)
- ProLine v4 software license (SW 200103)
- System case with foam inlays (BG 990114)
- Optional: R290 Receiver for Perpendicularity (BG 831550), Display Unit (IT 200410), μ Level for detecting roll errors (SP μ Level 20)



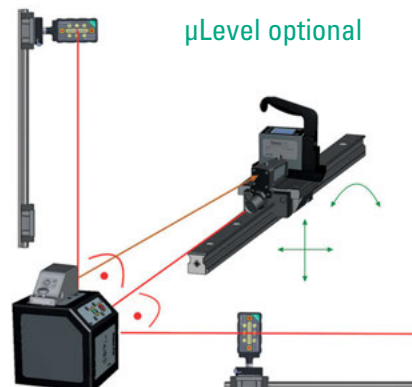
R290 and μ Level optional

ProLine[®] 300

Professional Package for Straightness, Perpendicularity and Parallelism

Content:

- T430 self levelling, self calibrating laser source (BG 832500)
- 2x R290 laser receiver (BG 831750)
- R540 two-axis laserposition detector with BT (BG 830440)
- D140 distance laser (BG 832200)
- ProLine v4 software license (SW 200103)
- DU420 Display Unit with touch screen (IT 200410)
- System case with foam inlays (BG 990105)
- Optional: μ Level for detecting roll errors (SP μ Level 20)



μ Level optional

Adapter and Tripods

Tripod and adapter kits for T430



Precise and effective Measurements require an appropriate mechanical adaptation.
You need to have the right kit in the right place at the right time.

This adapter package is a must for professional alignment people.
Naturally all the individual elements are separately available.

Basis mounting T430

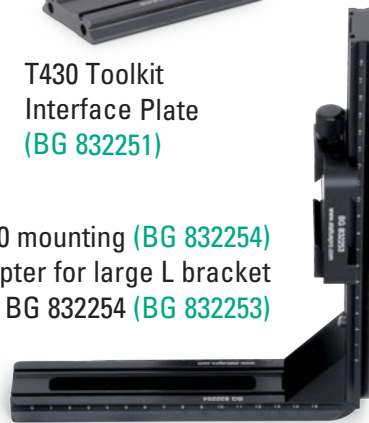


Switch Magnet Base for T430 Interface Plate
BG_832251
(BG 832252)



T430 Toolkit Interface Plate
(BG 832251)

90° Adapter for T430 mounting (BG 832254)
T430 Adapter for large L bracket Interface to BG 832254 (BG 832253)



Tripod and adapter kit for T430



Tischstativ



Turn adapter for T430
(BG 832268)



T430 Tripod Interface for Tripod head BG 832258 (BG 832259)



Short Tripod Leg
(BG 832257)



Tripod head for T430 (BG 832258)

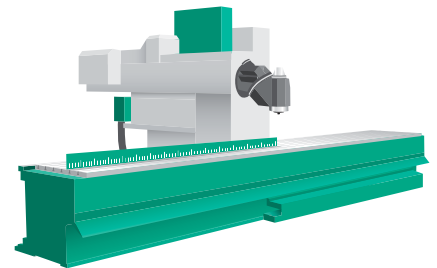
Universal G-Klump for T430 (BG 832255/1)

Measurement and Compensation of Machines

Laser-Interferometer

μ Line
Made by Lasertex

- cable-free
- incl. compensation unit!
- ultra compact
- dynamic measurement



The state-of-the-art Interferometer μ Line offers a the best accuracy and highest speed of machine-zoop-optimized interferometers in the world.

- Position measurement for CNC and CMM Machines
- Position Measurements during movement!
- Machine Geometry Measurements
- Measurement of turn-tables (optional)
- Vibration Measurements
- Straightness Measurements
- Perpendicularity Measurements (optional)
- Dynamic Measurements

μ Line F1 features:

- Wireless communication
- Extended packages with 3D measurements
- Integrated compensation unit in the laser
- Wireless sensors!
- Highest precision by using a 2-frequency-laser up to 1nm!
- 90° element for small machines in every package
- Electronic beam alignment for higher precision
- Fast alignment

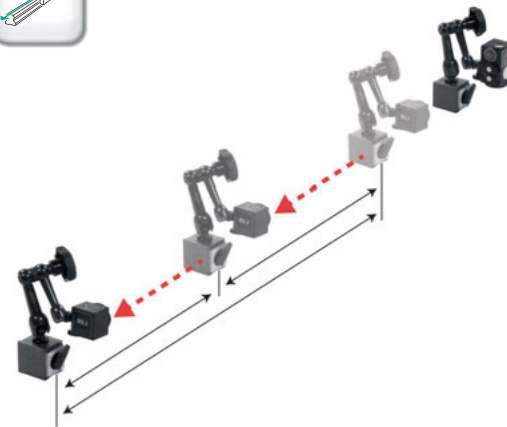


μ Line 10

Starter Package

Content:

- μ Line – Laser 1D (BT 840205)
- Compensation unit with wireless temperature sensors (BT 840290 + BT 840295)
- Interferometer element IL1 (BT 840270)
- Retro-Reflector element RL1 (BT 840280)
- μ Line PC Software base (SW 840200)

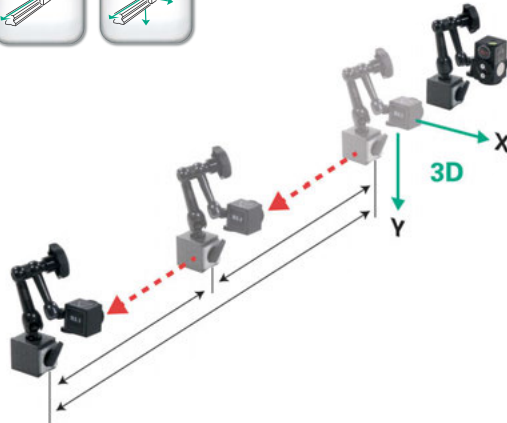
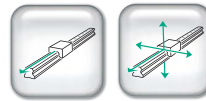


μ Line 20

Professional package with Straightness Measurement

Content:

- μ Line – Laser 3D (BT 840205 + BT 840410)
- Compensation unit with wireless temperature sensors (BT 840290 + BT 840295)
- Interferometer-Element IL1 (BT 840270)
- Retro-Reflector element RL1 (BT 840280)
- 3D Laser Head with Straightness Measurement
- μ Line PC Software complete with module 1-5 (SW 840200/1/2/3/4/5)
- Tripod complete with alignment head (BG 840231)

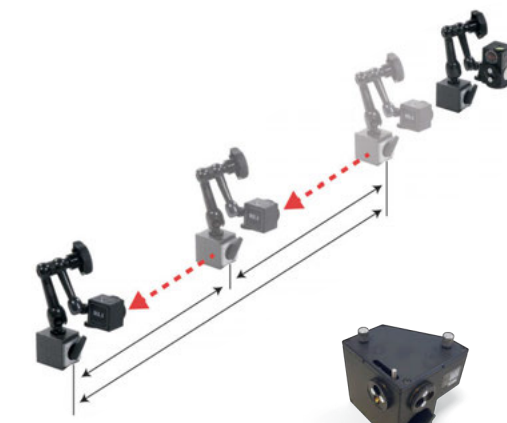
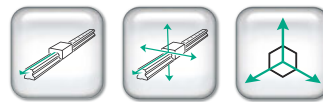


μ Line 30

Combination of μ Line 20 and Perpendicularity

Content:

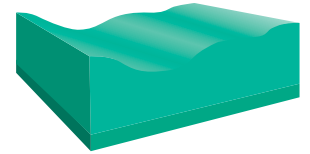
- μ Line – Laser 3D (BT 840205 + BT 840410)
- Compensation unit with wireless temperature sensors (BT 840290 + BT 840295)
- Interferometer element IL1 (BT 840270)
- Retro-Reflector element RL1 (BT 840280)
- 3D Laser Head with Straightness Measurement
- μ Line PC Software complete with module 1-5 (SW 840200/1/2/3/4/5)
- Tripod complete with alignment head (BG 840231)
- 3D Pentaprism for Perpendicularity (BG 840261)



System for Precision Flatness Measurements

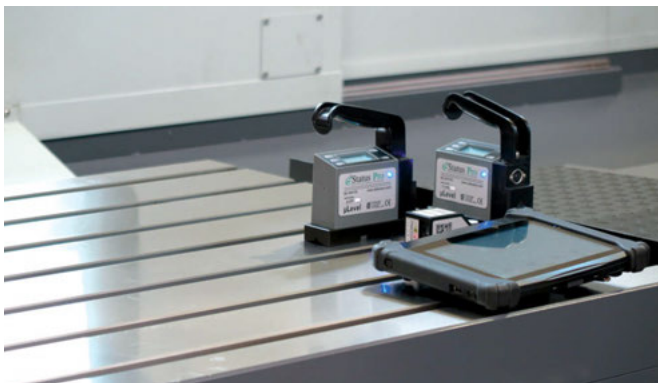
μ Level

Displays the values on your Android mobile phone!



μ Level is a precision Level system for measurements up to DIN 876/000.

According to your requirements we can offer a wide range from a simple handheld system up to a differential system with software.



Features of the system:

- 1 $\mu\text{m}/\text{m}$ accuracy!
- Easy handling of system and software
- Lit up display
- Connection to PC and mobile phone via Bluetooth
- Displays the values on your mobile phone
- Fast on-site calibration
- Measurement of Straightness and Flatness
- Measurement of Roll and Pitch errors
- Quick calibration/repair in Germany (< 1 week)
- Combination with ProLine systems possible
- Fully automatic measurement with optional distance meter D140
- Expandable

... accurate, rugged, cheap and easy!



μ Level 20

Levelling Starter Package with external display

Content:

- μ Level Spirit Level with Bluetooth (BT 840100/1)
- External Display (Android-System) (IT 200612)
- Software for remote indication (SW 200190)
- Case for μ Level differetial measurement system (BG 990119)



μ Level 40

Professional Package for Differential Measurements

Content:

- 2x μ Level Spirit Level with Bluetooth (BT 840100/1)
- External Display (Android-System) (IT 200612)
- Software for remote indication (SW 200190)
- Case for μ Level differetial measurement system (BG 990119)



μ Level 80

Professional Package for Differential Measurements at both axes

Content:

- 4x μ Level Spirit Level with Bluetooth (BT 840100/1)
- DU425 Display unit (IT 200425)
- Software for remote indication (SW 200190)
- ProLine v5 Software (SW 200106)
- Laser Distance Meter D140 (BG 832200)
- Case for μ Level differetial measurement system (BG 990125)

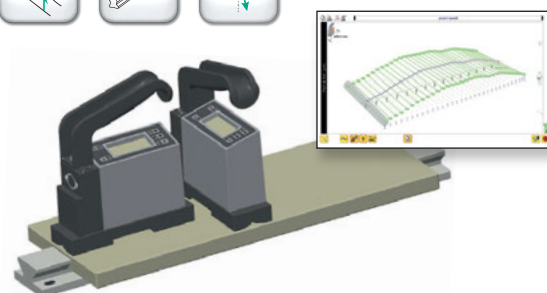


ProTwist

Professional Levelling Package with IT

Content:

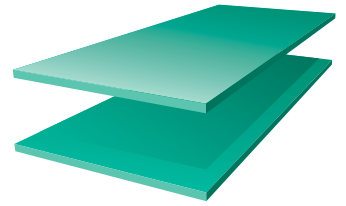
- 2x μ Level Spirit Level with Bluetooth (BT 840100/1)
- External Display (Android-System) (IT 200612)
- Software for remote indication (SW 200190)
- Case for μ Level differetial measurement system (BG 990108)
- ProLine V4 Software (SW 200103)



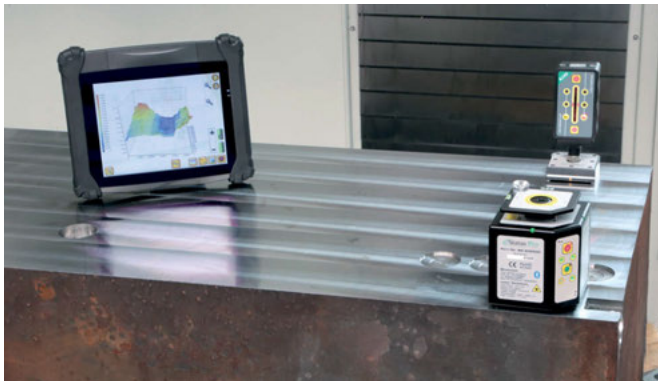
Equipment for Surface Measurement

ProLevel®

Measurement up to DIN 876/1

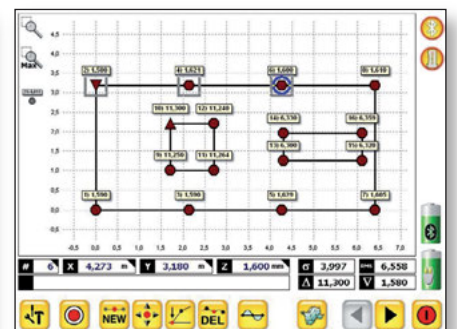
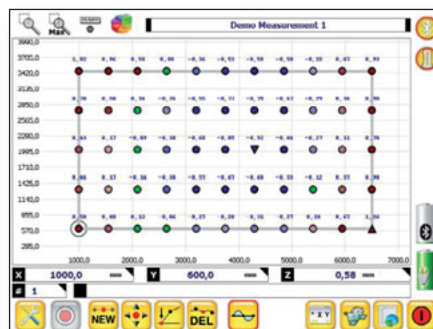
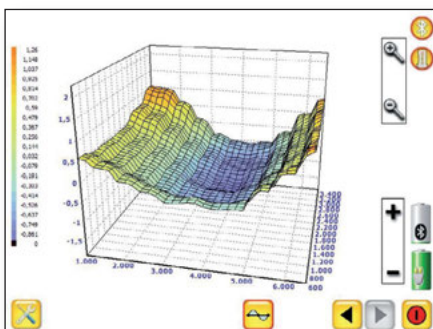


ProLevel is a first class alignment system for measuring the flatness of surfaces in level or relative to one another.



Laser alignment package:

- Precision < 5 µm/m
- Flatness on rectangular, circular or more complex surfaces
- Rapid template definition
- Detector with up to 100 mm range and possibility to measure outdoor
- Receiver also with small size and µm accuracy available
- Direct evaluation of flatness in 3D and in colour
- Superb user interface: practical and ergonomic
- Colour touch screen UMPC, rugged and lightweight
- Automatic connection management
- Completely wireless
- True level, three point reference or use the best fit feature
- Export possibility as *.csv for use in Excel
- Complete control over the 3D image
- PDF report with comments



ProLevel® 50

Starter Package for Flatness and Level



Content:

- T410 self levelling, self calibrating laser source (BG 832500)
- R260 laser receiver with display and BT (BG 832600/2)
- Small case with foam inlays (BG 990114)
- Mounting Accessory



ProLevel® 100

Package for Flatness and Level

Content:

- T430 self levelling, self calibrating laser source (BG 832500)
- R260 laser receiver with display and BT (BG 832600/2)
- Launchpad Software (SW 400010)
- Rugged case with foam inlays (BG 990120)
- Mounting Accessory



ProLevel® 200

Professional Package with IT for Precision Flatness and Level

Content:

- T430 self levelling, self calibrating laser source (BG 832500)
- R260 laser receiver with display and BT (BG 832600/2)
- DU420 rugged UMPC with touch screen (IT 200420)
- ProLevel v2 software license (SW 200030)
- Launchpad Software (SW 400010)
- Rugged case with foam inlays (BG 990114)
- Mounting Accessory

