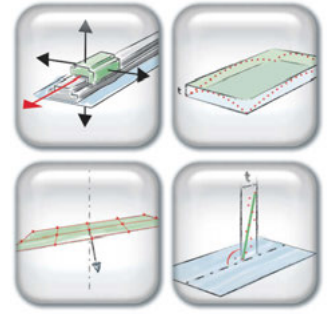


# ProLine®

A new standard  
in Machine Tool Alignment



Straightness,  
Flatness, Parallelism  
and Squareness



# Status Pro

– innovative solutions for the industry

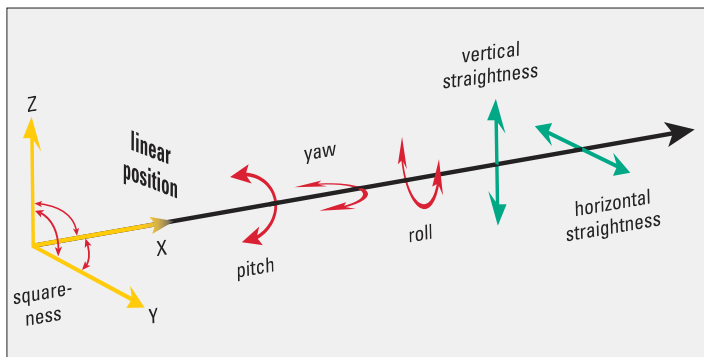


**Status Pro can help you choose between or combine different technologies and measurement methods.**

**For example: Straightness can be measured with a laser or an interferometer or a spirit level or even a photo, but which method or combination is best for you?**

**We have been developing measurement methods and Instruments for 20 years.**

Status pro offers Instruments and methods required for the measurement and corrections of all 21 machine errors. A characteristic of every system is that Live Values are displayed to help you check your plausibility and make corrections on-line as required.



We offer both conventional and newer Instruments and methods for solving many measurement issues. A spirit level and a granite block have been successfully used for centuries but they have their limitations and they can be very heavy and difficult to manage. Moving from conventional to more modern technologies can be tricky.

Status Pro offers on site workshops and training to help you take advantage of the innovations and avoid the pitfalls when introducing new measurement technologies to your organisation.

## What does the latest ProLine package offer you?



**At the heart of the ProLine Package is the T430 which is a truly unique self-calibrating, completely digital, remote controllable and very high precision rotation laser. The clever little box also keeps an eye on its environment measuring temperature changes and vibration to ensure reliable results. The unit can “Buck-in” to a reference line or plane on command. No more endless pre-adjustment before measurements can begin. All components connect per Bluetooth. ( No cables in the way ) If you’re familiar with conventional alignment systems this will knock your socks off.**

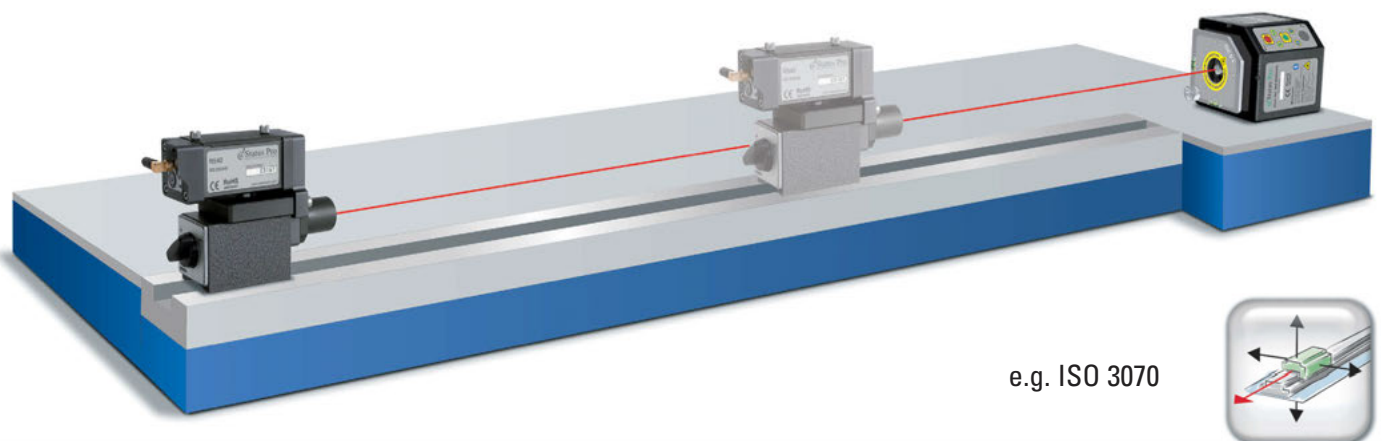
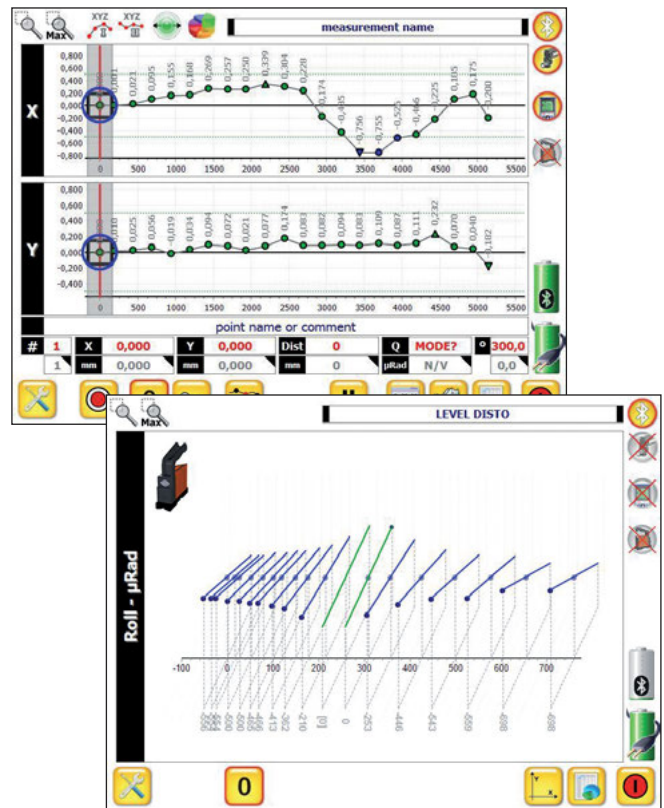
### **Key points:**

- ✓ Measures Straightness Flatness, Level, Squareness and Parallelism with  $\mu$ Rad accuracy.
- ✓ Supports alignment and adjustment on the spot and live.
- ✓ Automatic bucking in to line or plane.
- ✓ Automatic distance measurement.
- ✓ Self-Calibration of the self-leveling mechanism.
- ✓ Everything is wireless.
- ✓ Complete machine setup according to DIN / ISO with documentation.
- ✓ Development, Construction Made in Germany.

# Straightness and Twist Measurement with **ProLine**<sup>®</sup>

**Pro Line – Combines a Rapid Setup, ease of use and great documentation**

- Measures X and Y and Roll
- On the fly measurement  
(for example every 100 mm distance)
- Automatic distance measurement with D140 (Disto)
- Automatic Twist and Roll measurement with  $\mu$ Level
- Right-angles and Parallelism of Best fit Lines
- Continuous assessment of point quality and variance
- Very high Resolution down to 0,1  $\mu$ m or  $\mu$ Rad
- Very ergonomic and easy to use
- Color coding
- Tolerances
- Touch screen UMPC: Rugged and light
- ISO Compliant reporting
- All data is exportable \*.csv or Excel

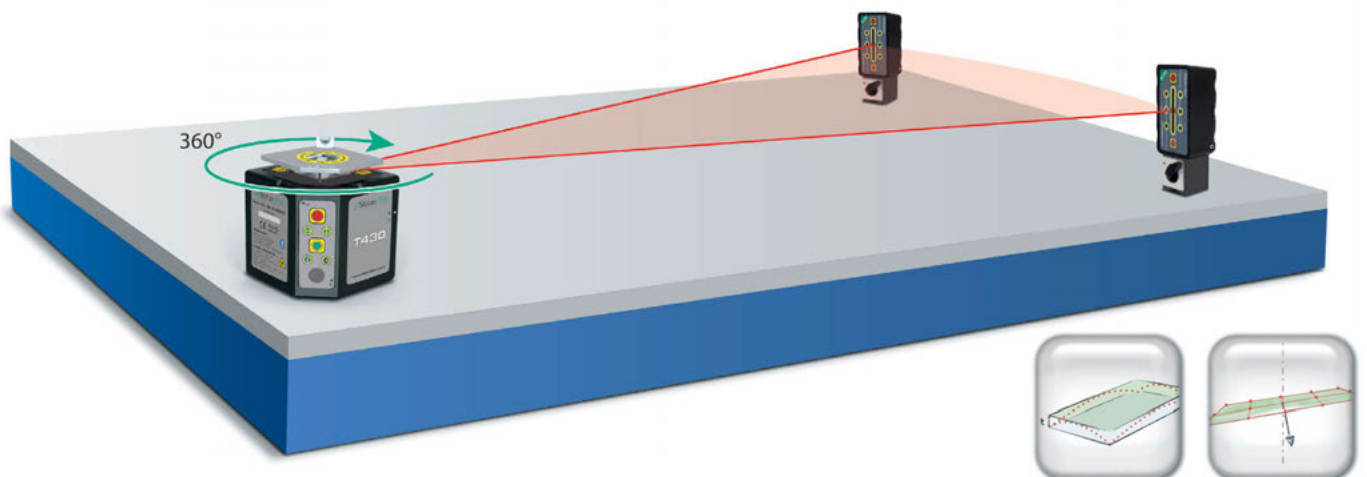
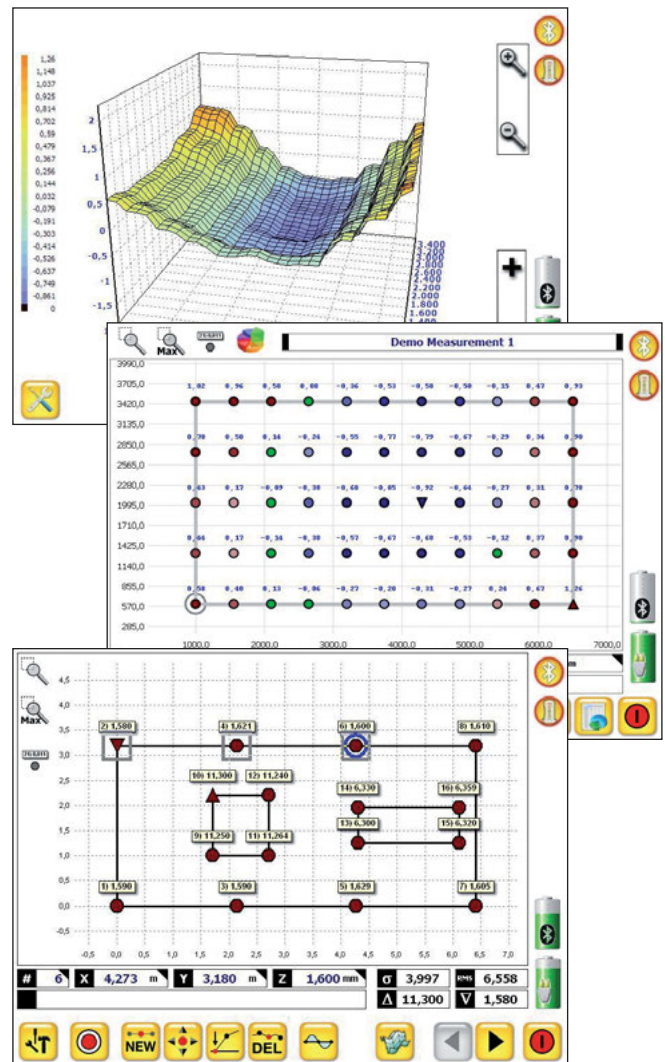


# Flatness and Level measurement with **ProLevel**<sup>®</sup>

**ProLevel is a professional measurement package for Machine builders**

**It supports the Flatness and level measurements of machine surfaces with a precision of up to 1µm/m.**

- Flatness measurement of rectangular round or more complex surfaces are supported
- Rapid preadjustment of Bucking in through Sensor-Laser interaction
- Detector range of up to 35 mm, 1 µm Resolution
- Indoor and outdoor measurement supported
- 3D Colour surface illustration for rapid interpretation and plausibility check
- Very Ergonomic and Practical user guide
- Color-Touchscreen UMPC, rugged and light
- Automatic Bluetooth connectivity management
- Automatic Sensor recognition
- No Cables
- Automatic best fit or manual 3 Point Reference
- Export- to database \*.csv or EXCEL
- Very good reporting support

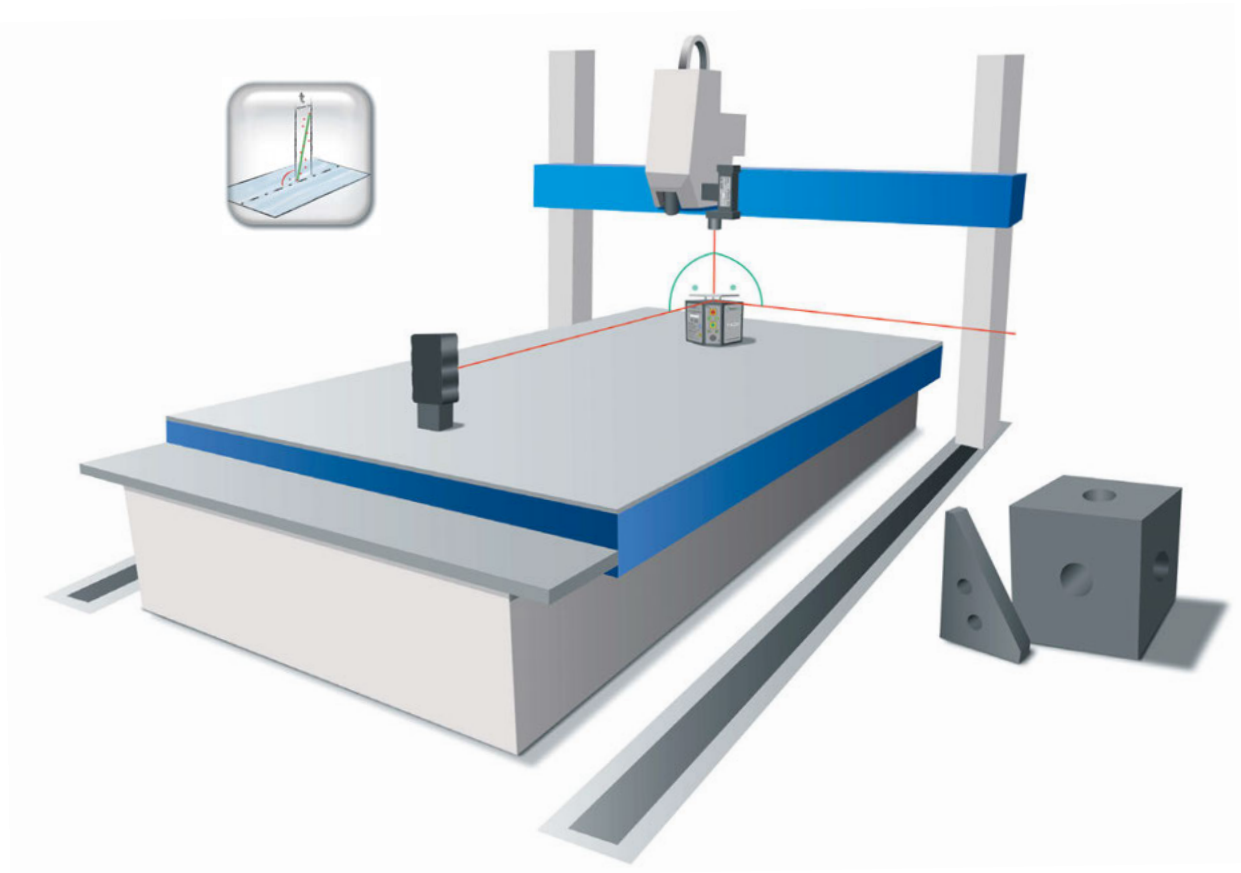


## Right-angles measurement $< 5 \mu\text{m}/\text{m}$

**Master Granite Blocks are somehow always too heavy to transport and too small at the same time. We want to measure the working length of the axis but we don't want to transport tons of granite. The ProLine Package offers an alternative.**

The T430 can automatically "buck-in" to the reference table surface or axis line. Making use of a clever patented method the standing beam can now be used to directly measure the straightness and angularity of the perpendicular axis without concern for a bunch of potential errors which have hindered this method in the past. It truly makes the measurement very simple.

The laser can of course be used to measure the entire working length of the axis. 6-8 Meters are no problem. (Try that with a Granite block) The laser weighs 800 g!



**This unique machine tool alignment package offers some important practical advantages compared to conventional measurement techniques.**

- Very high precision ( $1\mu\text{m}/\text{m}$  is possible)
- Very rapid setup
- Measures X, Y and level simultaneously
- Right-angles at  $< 5\mu\text{m}/\text{m}$  (DIN 875/000)
- Measures up to length of 10 m  
(Accuracy can deteriorate at distances  $> 5-6$  metres depending on environmental conditions)
- Rapid reporting (pdf)
- Light weight

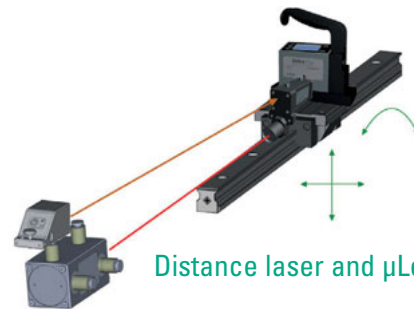
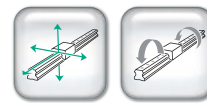
## ProLine Measurement Packages

# ProLine<sup>®</sup> 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),  $\mu$ Level for detecting roll errors (SP  $\mu$ Level 20), DU420 Display Unit (IT 200410)



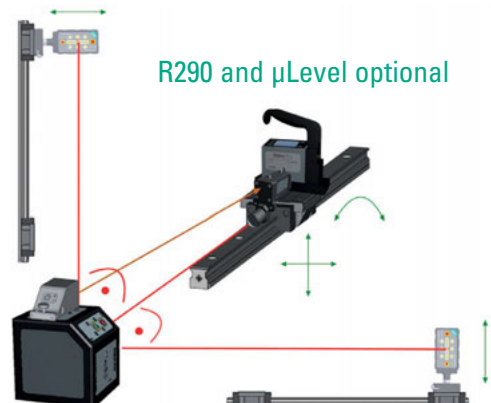
Distance laser and  $\mu$ Level optional

# ProLine<sup>®</sup> 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),  $\mu$ Level for detecting roll errors (SP  $\mu$ Level 20)



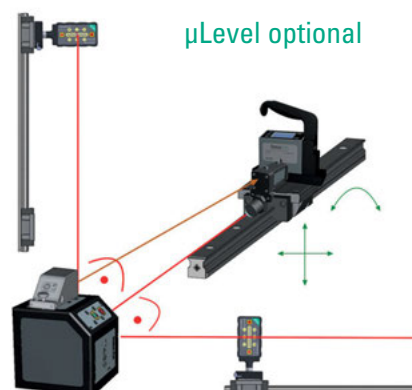
R290 and  $\mu$ Level optional

# ProLine<sup>®</sup> 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)



$\mu$ Level optional



## T430 Rotation laser

Type:	Pig-tail source / 2nd generation digital
Auto-calibration:	Body turn-System
Auto Buck in to Ref:	SAL-System
Environment Monitoring:	Temperature, Vibration
Laser Source Type:	Pig-tail, Gaussian with Modulation
Dimensions:	100 x 126 x 96 mm
Interface:	Bluetooth (Class 2), Infra Red
Laser:	Class 2a, 535 nm
Range:	0 – 50 m and 360°
Battery:	Li-Ion Accum. exchangeable
External Supply:	12 V – 24 V
Weight:	802 g

### Precision T430\*:

Straightness:	$< \sqrt{((0.5 \mu\text{m})^2 + (0.75 \mu\text{m}/\text{m})^2)}$
Flatness:	$< \sqrt{((10 \mu\text{m})^2 + (1.2 \mu\text{m}/\text{m})^2)}$
Flatness with ProLevel SW:	$< \sqrt{((4 \mu\text{m})^2 + (1.5 \mu\text{m}/\text{m})^2)}$
Rectangularity with MRB System:	$< \sqrt{((1.2 \mu\text{m})^2 + (4.5 \mu\text{m}/\text{m})^2)}$
Levelling:	$< \sqrt{((5 \mu\text{m})^2 + (1.5 \mu\text{m}/\text{m})^2)}$

\* **Accuracy of the laser under environmentally ideal conditions:** SAL (self aligning Laser), MRB (Modulated rotating beam), Body turn (Auto-Rotation capacity of the T430 housing (Body turn) enables quick and easy calibration of the laser levelling feature).



## D140 Distance Meter

Measurement range:	0.1 to 30.0 m
Resolution:	0.1 mm
Accuracy:	with target +/- 2 mm over total range
Time of measurement:	approx. 0.2 to 2.0 seconds
Typical laser spot:	4 x 8 mm at 10 meters
Light source:	630 to 640 nm, IEC 60825-1:2014 Class 2, FDA 21CFR 1040.10 and 1040.11, Max Radiant power 1mW
Interface:	RS 485 & Bluetooth Class 2 (Range up to 50 m)
Protection class:	IP 54
ESA:	IEC 61000-4-4:1995 + A1 + A2
EMC:	EN 61000-6-4, EN 61000-6-2
Temperature range:	-10 to +50°C
Dimensions:	98 x 44 x 46.5 mm
Weight without battery:	120 g
Weight with battery:	164 g
Housing:	Aluminium, anodised
Power supply:	7.4 V Li-Ion Accum. exchangeable & 5 – 12 V Power connection
Battery operating time:	> 8 hours
Required accessory:	BT 800071 Li-Ion battery pack, BT 800072 charger



## R540 Laser Receiver

System:	PSD, Digital, 3rd generation
Dimensions (B x H x T):	55 x 95 x 166 mm
Interface:	Bluetooth (Class 2 / 50 m)
Interference suppression:	Modulation analysis, narrow band filtering
Resolution:	0.1 $\mu\text{m}$
Accuracy:	1 $\mu\text{m}$ + 0,5% non linearity
Power supply:	Li-Ion Accum. exchangeable
Sensor area:	20 x 20 mm (2 axis)
Weight:	502 g



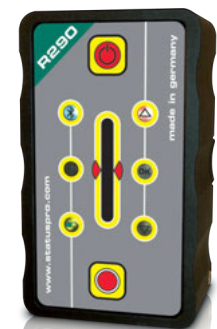
## R260 Laser Receiver

Display:	Adjustable resolution 1 $\mu\text{m}$ – 0.1 mm
Display values:	Battery condition, filter, resolution, laser control for X and Y
System:	CCD, 60 mm
Dimensions (B x H x T):	58 x 100 x 38 mm
Interface:	Bluetooth (Class 2 / 50 m)
Resolution:	1 $\mu\text{m}$
Accuracy:	$\pm 10 \mu\text{m}$ + 1% non linearity
Power supply:	Li-Ion Accum. exchangeable
Weight:	266 g



## R290 Laser Receiver

System:	CCD, Digital, 4th generation
Dimensions (B x H x T):	58 x 100 x 38 mm
Interface:	Bluetooth (Class 2 / 50 m)
Interference suppression:	Modulation analysis, narrow band filtering
Sensor area:	27 mm (1 axis)
Resolution:	1 $\mu\text{m}$
Measurement range:	22 mm
Accuracy:	$\pm 2 \mu\text{m}$ + 0.5% non linearity
Power supply:	Li-Ion Accum. exchangeable
Weight:	343 g



## Status Pro Services

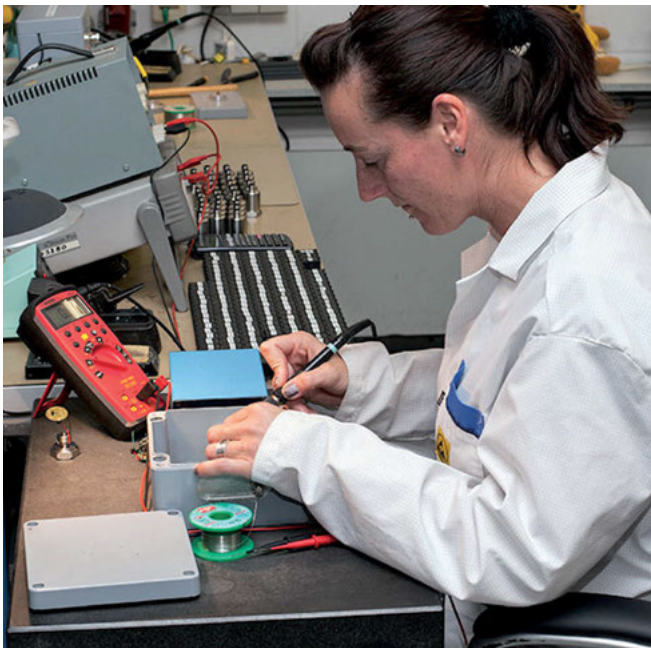


### **On-Site Measurement Services**

Over the past 20 Years Status Pro has been helping clients with machine geometry measurements, machine diagnosis and calibration.

Added together the team has a few hundred years of experience gathered on literally thousands of different machines and applications. Be it training or service or just a bit of advice we are very happy to help.

Please send your application to [speight@statuspro.de](mailto:speight@statuspro.de) or call Chris at +49 (0)2327 / 9881-18.



### **Instrument Maintenance, Repair and calibration**

Status Pro has a repair, maintenance and calibration service for every instrument we make and nearly every instrument we sell. Regular care and maintenance is very important to maintain the integrity and the reliability of most instruments. We recommend that Instruments with moving parts should receive maintenance and calibration annually.

For Instruments and components without moving parts and with maintenance and care every 2 years is normally sufficient. In this process we also update the units according to our QM recommendation and guidelines.

## Rental Services

We maintain a rental park of nearly everything which we make or sell. We recommend that customers rent units if they are unsure of their demand or the suitability of the equipment for their needs. If you are unsure about investing then rent the unit. We will help you at each step of the way. If at the end of the day you decide that it is not for you then you discontinue. If on the other hand you decide to go ahead and buy it then we will discount the price to 50% of the rental cost up to a value of 2000 €. Please be aware that we have a limited amount of rental units.

Please mail to [info@statuspro.de](mailto:info@statuspro.de)  
or call +49 (0)2327 / 9881-0.



## Training

We have our own in-house training facilities in Bochum and Munich. We hold training seminars nearly every quarter subject to demand.

We are happy to provide On-site training at your facility.

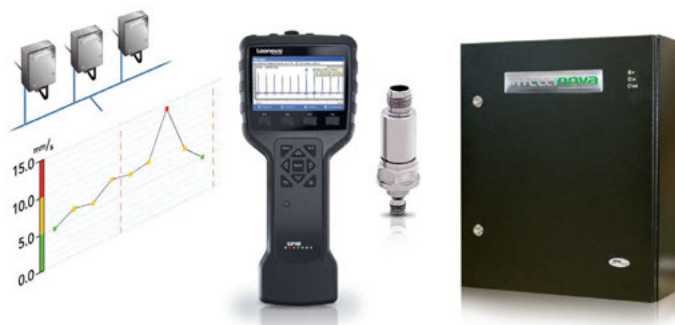
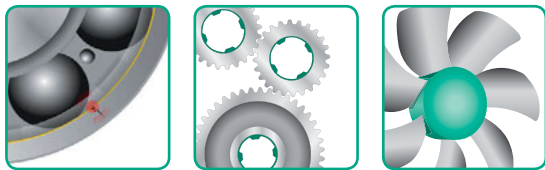
The ideal group size is 6 persons or less.

Training is very important and should be repeated every few years to ensure that you get the best out of your investment.

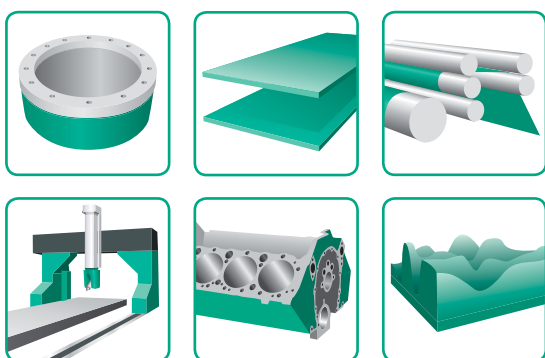
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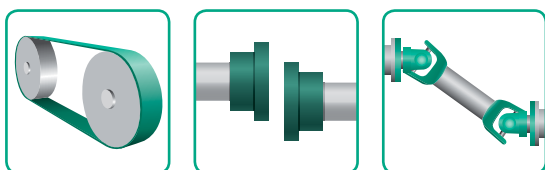
## MASCHINENDIAGNOSTIK CONDITION MONITORING



## MASCHINGEOMETRIE MACHINE GEOMETRY



## WELLENAUSRICHTEN SHAFT ALIGNMENT



**Status Pro**  
maschinenmesstechnik

Status Pro Maschinenmesstechnik GmbH  
Mausegatt 19 · 44866 Bochum · Germany

+ 49 (0) 2327 - 9881 - 0  
+ 49 (0) 2327 - 9881 - 81  
info@statuspro.com  
www.statuspro.com

Distributor



Newton Srl  
Via del Sorgo, 12 - 30173 Mestre - VE  
T. 041 5369164 - Fax. 041 612554  
www.allineamentolaser.com