Geometrical Products and Services





Geometrical Alignment Product Services



Geometrical measurement techniques and alignment have been an issue since the pyramids.

Today the measurement and alignment of machinery components is an integral part of the assembly and quality control process. Be it linear guides, presses, flange connections, drive shafts or cylinder rolls, the precision of the alignment has a significant effect on the functionality of the component. The alignment of these machinery components will often affect the quality of the manufactured product and also the life-time of the machine components themselves.

The use of a laser beam reference together with tradition industrial measurement techniques has made it possible to build tools which simplify these alignment procedures.

Status Pro develops and manufactures laser alignment equipment and we are committed to this process.

Most of our customers are machine builders, assembly and quality control people. Typically our customers require a complete solution package including on-site training and support. When a customised solution is required, modifications are often necessary, be it in software, mechanical adaptations or the sensor housing itself in order to meet customer requirements. We are interested in long-term customer relationships and therefore this is also part of our service.

We and our partner companies all over the world also provide alignment and industrial surveying services.

The following is a short overview of our standard alignment products.

We invite you to visit our web site www.statuspro.com for more information or just call us at +49 2327 9881-0.



Measuring Equipment for Linear Guides

ProLine®

The most practical Straightness Software: Laser Alignment Package for Linear Guides

- Straightness in X and Y simultaneously
- Automatic Z-Axis log with Disto Com
 - → fast and easy measurement
- Superb user interface : Practical and ergonomic colour Touchscreen UMPC, rugged and light
 intuitive usage and flexibility
- Automatic Connection management;
- No Bluetooth problems
- Automatic Sensor recognition
 - ➔ no mess with cables
- Raw data, Zeroed or use the Best-fit feature
- Export possibility as *.csv for use in Excel
- Extensive commenting and reporting facility
- Export the report using your USB memory stick
 - \rightarrow invest in the future











More informations at www.statuspro.com/machine_geometry/straightness/

System for the measurement and compensation of machines



The package offers the following possibilities:

- Positioning of CNC and CMM machines
- Geometrical measurements
- Positioning of turn tables
- Vibration measurements
- Straightness measurements
- Squareness measurements
- Dynamic measurements

Features of the system:

- Wireless communication
 - ➔ no mess with cables!
- Small size, all in one case
 - → easy to transport and helpful in small areas
- 90° Element for small machines included
- Integrated PSD
 - → 3D measurements
- Electronic beam alignment and optical targets
 - ➔ fast and easy alignment!
 - → save time and money
- Easy to use software in German / English
- Generation of G-codes and compensation tables
 - ➔ automatic generation of compensation tables
 - ➔ no long winded conversion
- Extensive base package
 - ➔ no additional components needed
- Fast support, service and calibration
 - → we offer you a fast and capable service









For further informations please visit us at www.laser-interferometers.com/mueLine.html



System for Precision Flatness measurements



µLevel is a precision Level system for the measurement of machines.

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:

- Fast on site calibration
 - traceable and fast results
- Easy handling of system and software
 - → No time consuming training
- Saves up to 999 measurements directly in the system
 - ➔ No PC connection necessary
- Connection to PC via Bluetooth
 - ➔ no mess with cables
 - ➔ no time consuming setup
 - ➔ no extra devices needed
- Rugged design and signal color
 - → made for harsh environments
- Resolution and Repeatability 1µm/m
 - → 1µ/m means a resolution of 0,1µm by a base length of 100mm
- Software and reference sensor can be added optionally
 - → small Investment
- Cheap and cheerful
 - → why spend more money than necessary?









Part No. BG 840100

Differential measurement system 8 Bluetooth

Part No. BG 840180



For further informations please visit us at www.laser-interferometers.com/mueLevel.html

Equipment for Surface Measurement



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

Laser alignment package:

- Fast and easy setup and measurement
 - → You save time and money!
- Flatness on rectangular, circular or more complex surfaces
 - → absolute flexible
- Rapid template definition
 - → prepared measurements
- Detector with 80mm range and possibility to measure outside
 - → measurement in the sunlight is possible
- Direct evaluation Flatness in 3D and in colour
 - → faults can be corrected directly
- Superb user interface : Practical and ergonomic
- Color Touchscreen UMPC, rugged and light
 intuitive usage and flexibility
- Automatic Connection management
- No Bluetooth problems
 - → no mess with cables
- 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











Part No. BG 830140/1

optional Magnet with Probe-tip for R310 Part No. BG 830175

More informations at www.statuspro.com/machine_geometry/flatness_and_level/



Equipment for Flange Measurement



ProFlange is a professional Flange Flatness Measurement Software. Laser Alignment Package for flanges and flange parallelism.



This laser alignment package offers:

- Fast and easy setup and measurement (e.g. flange with 72 points within 30min!)
 - → You save time and money!
- Detector with 80mm range and possibility to measure outside
 - → measurement in the sunlight is possible
- Direct evaluation of flange Flatness in 3D and in colour
 - → faults can be corrected directly
- Superb user interface : Practical and ergonomic
- colour Touchscreen UMPC, rugged and light
 → intuitive usage and flexibility
- Automatic Connection management;
- No Bluetooth problems
 - ➔ no mess with cables
- Raw data, Zeroed or use the Best-fit feature
- Export possibility as *.csv for use in Excel
- Connected flange parallelism in 3D and in colour
- Complete control over the 3D image
- Extensive commenting and reporting facility









More informations at www.statuspro.com/machine_geometry/flange_measurement/

Flange measurement at its best with



Pro Flange offers you the the best in flange measurement software, allowing in-depth analysis as well as full documenting capability.

The software was developed hand in hand with leading players in the wind power industry.



Cable-free environment

Using either the R310BT or the R280 Receivers you are able to carry out all flange measurements ...alone! Communication



PC or Display Unit is extremely robust and ease of use is ensured thanks to the touch screen.



Complete freedom of movement

Using the new R280 Receiver, you are now able to trigger measurements using the Receiver, allowing greater ease of use.

The PC can now be placed

out of hand, at a convenient distance. All relevant measurement information is visible in "XL format" on the PC screen. After measuring a point, the software moves automatically to the next point.

Automised laser plane adjustment

The Status Pro Receivers are also capable of controlling the T330 Laser. The laser plane can automatically adjusted parallel to the flange.

This feature saves large amounts of time when setting up for a measurement!

Two user interfaces:

On-site measurement mode or full Analysis mode. Simply choose the method to suit your task.



Immediate measurement and results

Set up for a quick measurement on site or prepare templates beforehand, enabling immediate measuring. Alternatively you can use one of the "pre-supplied" templates.

2D and 3D result graphics

Simple and clear visualisation and analysis of the gathered results either in 3D form or "unwrapped" in 2D form. Details of each measured point freely available.

Short waviness

Define short waviness parameters to meet your needs, showing in detail where the local problems are.





Taper and tilt

This feature allows instant recognition of taper and tilt, showing the direction (outer or inner) and showing the severity.

Project Management

All peripheral information concerning the meaurement, the object being measured as well as the Surveyor can be edited, stored, and easily recalled for analysis and reporting.

Extensive reporting capability

Simply press the appropriate icon to generate a report in .pdf form. The report contains the results in chart form as well as all the graphics and details concerning the measurement.

Complete analysis feature

Best- fit views as well as a three-point modus for evenness, allow quick and easy assessment as well as supplying data for use when setting up for corrective measures. Taper and short-waviness analysis as well as freely definable parameters ensure complete freedom of judgement.

Database Management

All measurement results are stored centrally using clear menu structures. There is also a feature enabling direct upload into the Internet allowing potential assessment worldwide.

Safety

Data security is maximised using digital signatures and proof of originality. All measurement data is stored as raw data and only available using the SP software.

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The parallelism of two flanges relative to each other, can be measured very accurately using

one of the patented Status Pro measurement techniques. Evaluation is quick and easy, graphics as well as values are displayed using the software.





More informations at www.statuspro.com/machine_geometry/flange_measurement/



Measuring Equipment for Bearing Ways and Bores

ProOrbit®

ProOrbit is a first class alignment software for measuring the relative position of bore or bearing pocket centres

- Wireless transmission of x, y and rotation angle from the receiver
 - → complete handling flexibility
- Automatic measuring precision and plausibility test
- Automatic connection management, wireless via Bluetooth
 - → no mess with cables
- Two-point, three point bore-centre detection for circular fits
- Absolutely precise measurements due to n-point
 ability to detect ovality
- Flexible Delta FIXTUR from 59mm 2000mm
 - → different mounting solutions fit to every bore or half shell!
- T250 laser adjustable in offset and angle!
 - → laser can easily be mounted in the centreline if needed
- Superb user interface : Practical and ergonomic
- Color Touchscreen UMPC, rugged and light
 intuitive usage and flexibility
- Reports and measured data can be stored on USB stick.
- Automatic calculation of the best reference









More informations at www.statuspro.com/machine_geometry/bore_alignment/

Status Pro

Measuring Equipment for Roll Alignment

ProRoll®

ProRoll is an alignment software for the measurement and alignment of roll parallelism

This laser alignment package offers:

- Superb user interface: Practical and ergonomic Color Touchscreen UMPC, rugged and light
 intuitive usage and flexibility
- Automatic Connection management;
- No Bluetooth problems
- Automatic Sensor recognition
 - ightarrow no mess with cables
- A new reference roll or line can be chosen during the measurement
- 100s of rolls can be managed at the same time
- Different methods to measure rolls
- Pick up tool for a given reference line
- Export possibility as *.csv for use in Excel
- Extensive commenting and reporting facility
- Export the report using your USB memory stick
 - → invest in the future







More informations at www.statuspro.com/machine_geometry/roll_parallelism/

Laser Alignment Tool for accurate visual Roll Alignment

ADDICATE Patented Reflected Laser Beam Technology



The RollCheck® laser alignment system for parallel roll

alignment is lightweight, compact and durable. The system can be

magnetically attached to just about any size roll or attached with the supplied straps.

We use our proven reflected laser beam technology for maximum angular resolution, thus providing you with the most reliable and accurate visual reading.

The RollCheck® can measure spans up to 10 ft. (3 m) from roll to roll of any size, large or small. A laser line is projected from the RollCheck® transmitter to the reflector mounted on the roll to be checked or aligned. The laser line projected to the reference line on the reflector indicates immediately if the roll is aligned vertically to the stationary roll. The laser line is then automatically reflected back to the transmitter's reference line indicating if the rolls are parallel to one another. This system is very easy to use; a single person can perform the alignment task in minutes with no training! The RollCheck® comes in its own durable carrying case.

Advantages and features are as follows:

- Reduces down time and product waste due to misalignment of rolls
- Increases production with proper alignment of rolls
- Compact design, fits into small spaces
- Fast and easy
- No training required

- One-person operation
- Facilitates more frequent roll checks
- Uses proven reflected laser beam technology
- Pays for itself quickly
- Used for shots up to 3m (10ft)



For further informations please visit us at www.roll-alignment.com/rollcheck.html



Measuring Equipment for Pulley Maintenance



BeltTension Pro

Pulley driven transmissions perfom best and require a minimum of maintenance when they are well aligned and optimally tensioned. With the BeltTension Pro you can measure the tension quickly and accurately.

This instrument is unique because it not only displays the tension, but it can tell you if the tension is too high or too low. It is fitted with a Pulley type database and allows you to store and report measured values.



The FL PAT has revolutionised the alignment of pulley and belt transmissions!

With the FL PAT, you are never in doubt as to whether your belt transmissions are aligned or not. By using the groove as reference, you will achieve a precise alignment which reduces belt wear,

bearing failures and vibrations.

The Fixturlaser PAT comes with two line laser transmitters, each equipped with two spring loaded guides which fit into the pulley grooves. The Fixturlaser PAT is equipped with various sized removable guides to fit standard sheave sizes A-E (6 mm - 40 mm). Additional guides for alignment of timing belts are avilable as accessories.

The use of two laser transmitters with integrated targets, makes it very easy to find out what kind of alignment is required. Parallel offset, angular error and twist are instantly visible to the operator. Within a few minutes, the operator can determine if the machine requires alignment or not.

The alignment process is as easy as the mounting. Just turn on the lasers and look at the opposite mounted unit. The laser draws a line on the target label as in the illustration below. If necessary, adjust your machine position until the laser lines are aligned with the centre mark on both units.





Service & Training

Our business is about providing practical solutions for machine alignment.

The solution is usually a good mix of service, training and the right equipment. "Practical solutions" comes from plenty of practice. Service work and training is as important to Status Pro as manufacturing and selling good alignment solutions. It is this practice which qualifies us to advise our customers and it is the continuous source of our product development.

Often it is necessary to practically do the alignment job or the measurement together with the customer so that we understand exactly what kit and what training is required. Sometimes it is simply more economical for the customer to out-source the work.

For most geometrical applications and problems we can offer you our services, for example:

- Parallelism on paper mills
- Parallelism on foil machines
- Alignment of Headbox
- Printing presses
- Roll profile measurements
- Flatness on base frames
- Shaft Alignment
- Cardan
- Propeller shaft alignment
- Turbine alignment
- Diesel aggregate aligment

- Flange measurement
- Flange parallelism measurements
- Windmill tower sections
- Windmill generators /gearboxes
- Stern tube and rudder alignment
- Marine shaft alignment
- General engineering i.e.
- Lathes, milling machinery etc.
- Motor bore alignment
- Bearing ways

- Alignment of all kinds of in - situ machinery
- Large compressors (oil and gas plants)
- Alignment of parallel bores
- Rails and wheels on cranes
- Crane gantry measurements
- Woodworking machinery
- Double end profilers, saws, e.g.
- Laminate and other Presses



Practical service work is often the only way to provide real on the job training.



Calibration & Rental Services

Repair and Calibration



Our R&C team repairs and calibrates not only our own equipment manufactured here in Germany but also equipment manufactured by Fixtur Laser AB and SPM Instuments AB from Sweden. Typically such equipment should be calibrated at least every two years. Ideally this is arranged by appointment, however we normally maintain a turn around time of 72 hours. If you need measuring equipment during the repair period we can offer rental systems.

Rental Systems

Status Pro GmbH offers you a range of equipments for rent. Usually those are needed during the time of our inhouse calibration. You are able to rent more than one system, too. Several equipments might be needed at many places at the same time. Please consider that at least one person should be instructed to the use of our precision instruments.

Equipment Rental Services

Most of Status Pro's portable products are available for rent. We calculate the rent on a daily basis. The equipment is also calibrated and checked before each rental. We calculate the rent on a daily basis plus inspection and Calibration after the return of a system. The equipment may be rented with or without training however we recommend our personal delivery services with on the job training for first time users.



More informations at www.statuspro.com/machine_geometry/service_support/

Customized Solutions from Status Pro

In the past years a number of special applications required the development of new equipment. Having our own in-house development allows complete flexibility in tendering to customers specific needs. **Examples of customized solutions are:**



Roll-cutter (Parallelism and position)

Laser receiver with separated detector (measurement X and Y)



Condition Monitoring and Maintenance Solutions



Our Rotating Machinery business unit offers first class equipment and services for condition monitoring and machine diagnosis professionals. Here you will find for example Laser Alignment, Pulley belt tension measurement, rolling element bearing assessment On-line and handheld vibration measurement, equipment. We also offer a wide range of vibration monitoring sensors, connection boxes and cable configurations. Alternatively just call us. You will receive competent English and German speaking advice and assistance under : +49 (0) 2327 / 9881-0. See also www.statuspro.com/shaft_alignment.



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