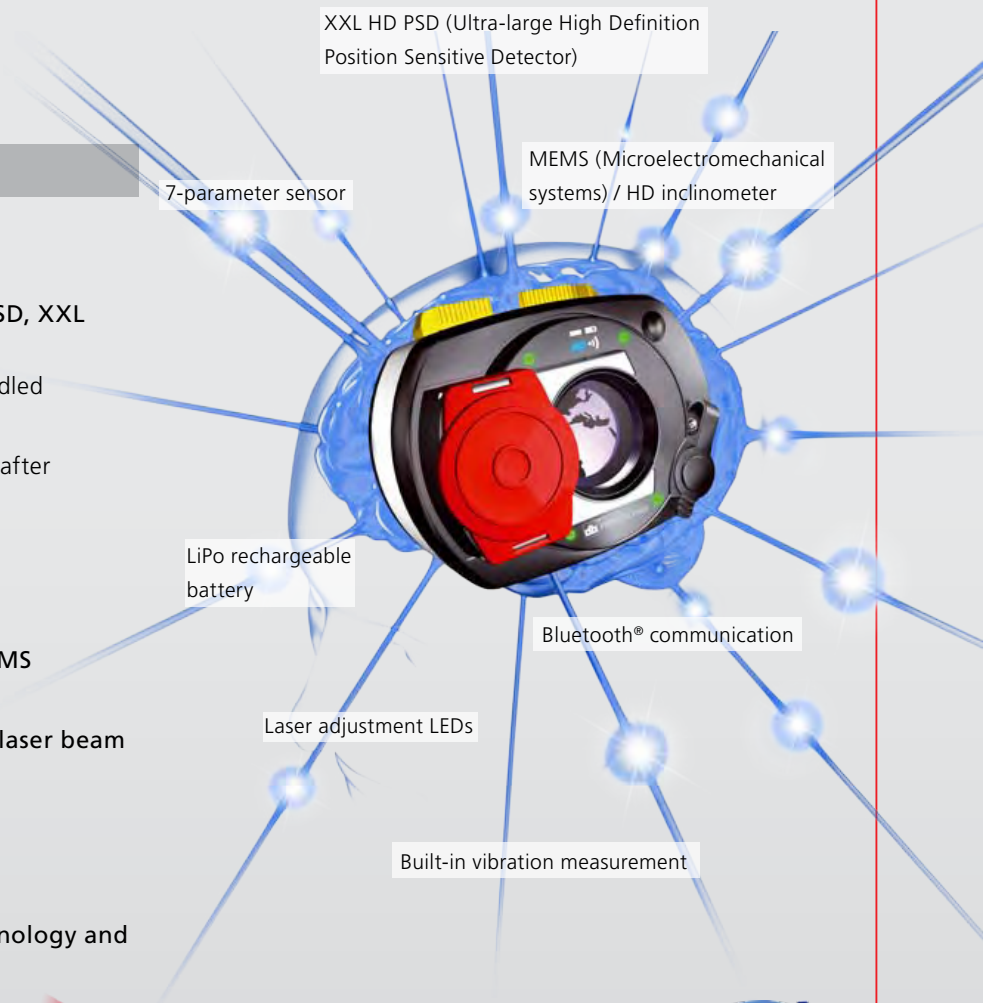
PRÜFTECHNIK

ROTALIGN® Ultra iS

The intelligent System for Machinery Alignment

sensALIGN® improves the quality of your alignment



At a glance

- **Real time quality by intelliSWEEP™**
  Always precise, accurate and repeatable
- **7-parameter sensor with High Definition PSD, XXL detector**
  Any amount of misalignment can be easily handled
- **Built-in vibration measurement**
  Measure machine vibration before, during and after alignment, no need for additional hardware
- **Environmental vibration monitoring**
  Accurate shaft alignment under vibrating condition
- **Precision built-in inclinometer through MEMS**
  Used for backlash detection
- **Communication to the sensor through the laser beam**
  sensALIGN™ laser information readily available
- **Integrated class 1 Bluetooth®**
  Wireless communication without additional accessories
- **Rechargeable battery with latest LiPo technology and intelligent power management**
  Long runtime without memory effect

intelliSWEEP™

The intelligent intelliSWEEP™ HD measure mode actively supports the user by detecting error influences such as coupling play, rotational angle discrepancies or vibration, and automatically eliminating them.
As shafts rotate, a large amount of measurement data is automatically and continuously recorded. This is much more accurate when compared to measurement methods where measurement is taken at only three positions.

*"**intelliSWEEP™**: the new and unique intelligent HD measurement mode that collects and **processes hundreds** of real measurement points"*

Real time quality factor

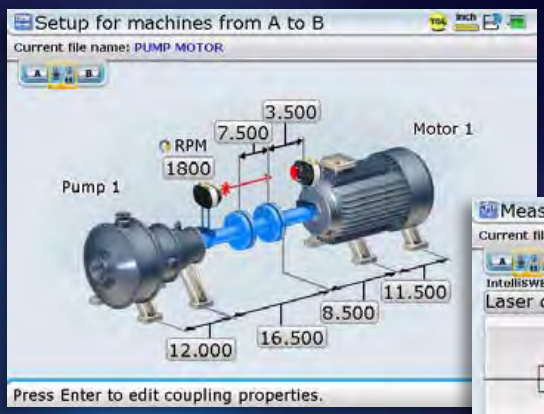
The ROTALIGN computer monitors and displays in real time the quality of each measurement, guaranteeing that better measurement data is collected, continuously evaluating quality factors and providing a quality score for each measurement.

Quality factors

- Rotation angle
- Ellipse standard deviation
- Environment vibration
- Rotation evenness
- Angle rotation inertia
- Rotation direction
- Rotation speed
- Filter output

ROTALIGN® Ultra iS analysis tools

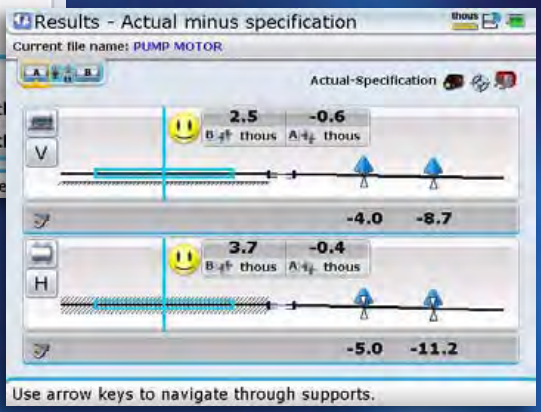
1. Dimensions



Simple, Fast, Accurate

2. Measure

3. Results

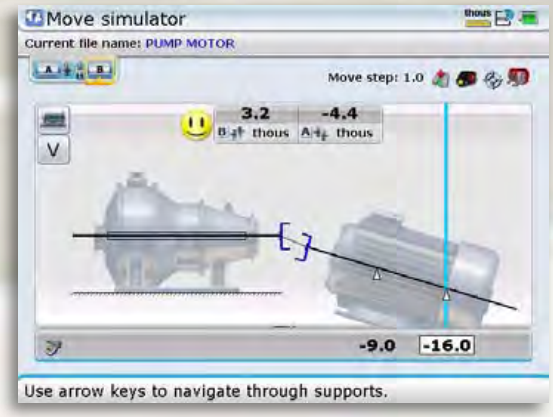


Simultaneous Vertical & Horizontal Live Move
ROTALIGN® Ultra iS is the only system on the market that truly monitors both vertical and horizontal corrections.

Soft Foot Wizard

A soft foot wizard analyzes and diagnoses your soft foot condition and suggests the right solution.

Move Simulator



Are you bolt-bound or base-bound? The Move Simulator lets you explore alternatives to get aligned when optimized move solutions with static feet are impractical.

ROTALIGN® Ultra iS – the only solution for all your measurement ta

Align your shaft with intelliSWEEP™ in three simple steps:

DIM 1. Enter dimensions

M 2. Rotate shafts

RES 3. Display alignment results

Monitor Positional Change

Live Trend is a monitoring function used to analyze thermal or process-related machine positional changes during run-up and coast down phases, at the same time recording machine vibration.

Vibration Acceptance Check

The vibration check following the alignment ensures that the machine can be operated without restrictions.
No additional accessories are required with ROTALIGN® Ultra iS.

ROTALIGN® Ultra iS – stands for 'intelligent System' – is a modular platform for a wide range of applications. ROTALIGN® Ultra iS is a combination of ROTALIGN® Ultra and the intelligent sensALIGN™ sensor and laser.

RFID machine identification

An RFID reader and tag uniquely identify the machine; basic data is read out and written back after the alignment job. Data can be accessed with NFC-enabled smartphones.

Machine train and multiple coupling

Align up to 7 machines simlutaneously and measure the alignment of up to 14 machines. See results graphically and to scale for all machines in the train.

Bore alignment

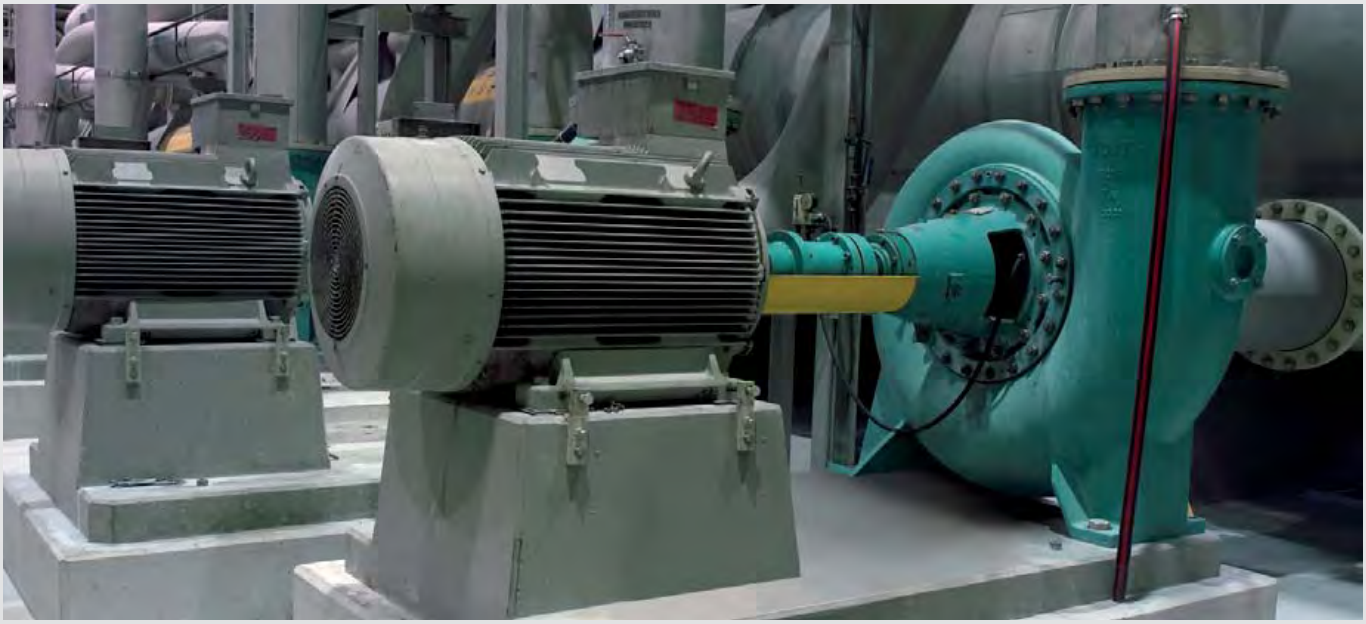
ROTALIGN® Ultra iS can measure the offsets between a train of bores and provide optimized alignment solutions for any configuration. Fix one or more bores or align to a differential profile, lets you use presets and targets. Ideal for internal combustion engines, piston compressors, crosshead guides, pumps, stern tubes and extruder barrels. Align steam and gas turbine internals, bearing rings, diaphragms, inner shells and casings.

Geometric applications

Accurate measurement of straightness, surface flatness, levelness, parallelism and perpendicularity.

We care for your assets. Our precision is your benefit

Over 40 years' experience in making your machines run better



Extend machine availability and efficiency

Precision alignment pays
Good shaft alignment increases the mean time between failures (MTBF) and reduces power consumption. This saves you money. Better alignment also means less vibration and higher product quality.

Precision alignment guarantees

- Reduced energy consumption
- Reduction in bearing, seal, shaft and coupling failures
- Decreased bearing and coupling temperatures
- Reduced vibration
- Improved product quality

Advantages of laser shaft alignment

Easy to use single laser technology with patented continuous sweep measurement from PRÜFTECHNIK lets you take hundreds of readings, with the highest accuracy, under the worst of field conditions, ensuring fast yet easy alignments.

- User-friendly and intuitive
- Accurate and precise
- Take unlimited readings at any desired positions
- Measurement repeatability and documentation through a measurement table offering powerful data analysis capabilities
- Live monitoring of machine corrections in vertical and horizontal directions simultaneously
- Documentation and professional reports in color, with pictures and graphs

Three packages: Lite – Advanced – Expert

Lite

- High resolution color backlit TFT screen – 145 mm/ 5.7 inch diagonal and backlit alphanumeric keyboard
- USB interface for PC and printer
- Heavy-duty lithium-ion rechargeable battery
- Compact rigid chain-type brackets store full assembled in the case so they are ready to use instantly when you take them out
- UniBeam® – patented single laser-sensor technology for quick laser adjustment
- Integrated electronic inclinometer
- Alignment of horizontal and vertical, foot-and-flanged-mounted machines
- Alignment of coupled or uncoupled, rotatable and non-rotatable machines
- Alignment of cardan and spacer shafts
- Machine train alignment up to 6 machines
- Soft foot detection and measurement
- User-defined tolerances
- TolChek® – automatic evaluation of alignment condition with 'Smiley' and LEDs
- Variety of measurement modes: SWEEP, Static, Multipoint and Dial gauge inputs
- InfiniRange® extends detector measurement range to handle gross misalignment
- Live monitoring of horizontal and vertical corrections – Live Move
- Move simulator
- Static feet selection to resolve base-bound and bolt-bound problems
- Realistic machine graphics which can be designated
- Save thousands of measurement files in the device
- Save reports as PDFs directly to memory stick
- Data protection – auto save and resume capability
- Compliant with IP 65 classifications
- PC display software for presentations and training
- Accepts other alignment applications such as Straightness, Flatness and Bore alignment

ROTALIGN® Ultra iS is based on a three-level system. The basic Lite version is packed with powerful features that include the Move Simulator and user-defined tolerances. This version is easily upgradable to the Advanced version to include the intelligent features and the powerful analysis tools. The system can be extended to the Expert level by adding 'Live Trend' and/ or the multiple coupling application.

Advanced

- Intelligence features
- Vibration acceptance check without extra accessories
- Live simultaneous Move in both horizontal and vertical directions
- Soft foot wizard
- Machine trains up to 14 machines
- Pass mode measurement for uncoupled shafts
- Standard Deviation
- Edit point capability
- Thermal growth calculator
- Under/over-constrained feet
- User-configurable Machine templates
- Vector tolerances
- History table
- RFID Machine Identification

Expert

- 'Live Trend' machine positional monitoring with magnetic or hard mount brackets
- Simultaneous multiple coupling measurement

Optional: shims

Optional: Different mounting brackets for different applications.

ALIGNMENT CENTER PC software

Document your job in every detail

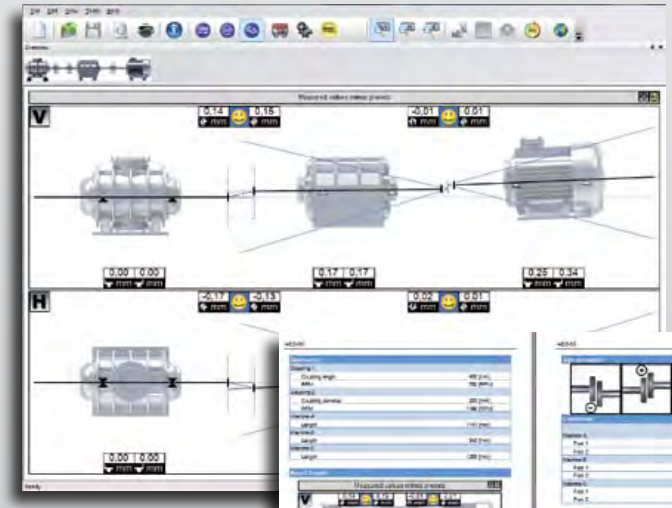
ALIGNMENT CENTER

ALIGNMENT CENTER

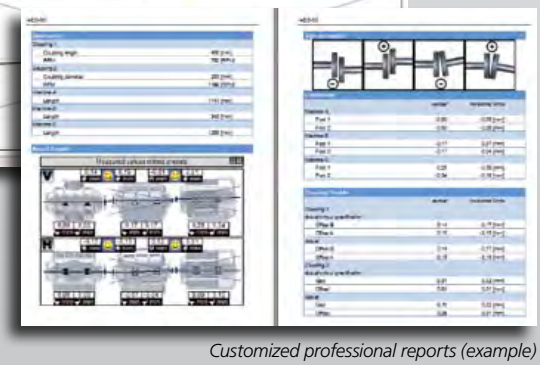
This PC software platform is used for all PRÜFTECHNIK Alignment instruments and applications.

It is the perfect solution for preparing, analyzing, organizing and archiving measurement files. All alignment and measurement specifications including thermal growth compensation, alignment presets and tolerances are saved for future use. The files can be transferred from the PC to the instrument and vice-versa.

The software is also used for professional reporting capabilities.



Graphic display of measurement results.



Customized professional reports (example)

Set-up

- Create user-specific templates to suit the measurement job
- Set up file information to include file and user names, company, plant, area and machine train
- Prepare an alignment job in advance on a PC and transfer to the instrument

Archiving

- Upload files from your backup
- Restore files saved in the backup
- Organize files in a tree structure with an unlimited hierarchy
- Add any type of document to your alignment files
- Comprehensive database search
- Ability to import and export data

Analysis and Reporting

- Display results in either 2D or 3D graphics depending on the application
- Evaluate results using the measurement table
- Customize measurement reports to include company information and logo
- Simulate alignment conditions by entering manual values
- Optimize alignment results by defining fixed feet
- User-defined tolerances
- Conversion of dial gauge readings

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PRÜFTECHNIK
PROVEN QUALITY

- Made in Germany
- Global Presence
- Qualified Support
- Quality Service

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