

BORALIGN[®] Ultra

Bore alignment in turbines, gearboxes,
diesel engines, compressors and pumps



Number 1 in laser precision alignment

Proficiency in bore alignment

BORALIGN Ultra®

Proper repair and reconditioning of combustion engines, compressors and pumps requires exact measurement of the alignment of crankshaft and camshaft bores, cylinder bores and crosshead guides. This is usually accomplished by optical or wire-based methods. BORALIGN® Ultra is a precision laser alignment system designed to replace those older and more time-consuming technologies. It is much faster, very precise, and provides a clear measurement protocol. Measurements are carried out using a laser beam and patented universal pointer brackets, and therefore eliminating mechanical and sag errors. In addition to the alignment of bores, bearing pedestals and other circular machine elements, BORALIGN® Ultra also includes a measurement procedure for the alignment of workpieces to boring heads. The system utilises the proven ROTALIGN® Ultra Shaft components, and is consequently extendable to shaft alignment, flatness and straightness applications.



Precise, intuitive and straightforward bore alignment



For demanding industrial applications



- Shipyards & marine service
- Stern tube alignment
 - Rudderstock alignment
 - Diesel Engines



- Energy sector
- Turbine alignment & overhauling
 - Diesel Engines



- Oil & Gas
- Compressors
 - Engines
 - Pumps
 - Manufacturers & service companies

Advantages at a glance

- ▶ True bore center measurement the eccentricity error is determined
- ▶ Universal pointer and customized brackets for bore diameters ranging from 45 mm to 4000 mm
- ▶ Measurement of both magnetic and nonmagnetic bores
- ▶ Ease of handling, lightweight components and laser technology make equipment setup simple
- ▶ Precise user independent measurement and results
- ▶ View the minimum corrections required
- ▶ Bluetooth® for stable and wireless data transmission

Precision alignment in three steps

Quick and straightforward



Bore set-up

- Create machine using the new set-up wizard
- Choice of different bore types including narrow, long and complex bores for evaluating bore position and angles
- Input of compensation values for thermal growth or shaft sag
- Add bores to new or existing set-ups



Measurement

- On-screen guidance for laser set-up – no need to center laser before starting measurement
- Graphics lead you through the measurement procedure
- Measurement table to review measurement repeatability
- Measurement table and standard deviation table confirm accuracy of measurement and shape of bore.



Results

- Results traceable to national standards
- Set the centerline relative to any fixed bores
- Results displayed in colour graphics providing a clearer understanding

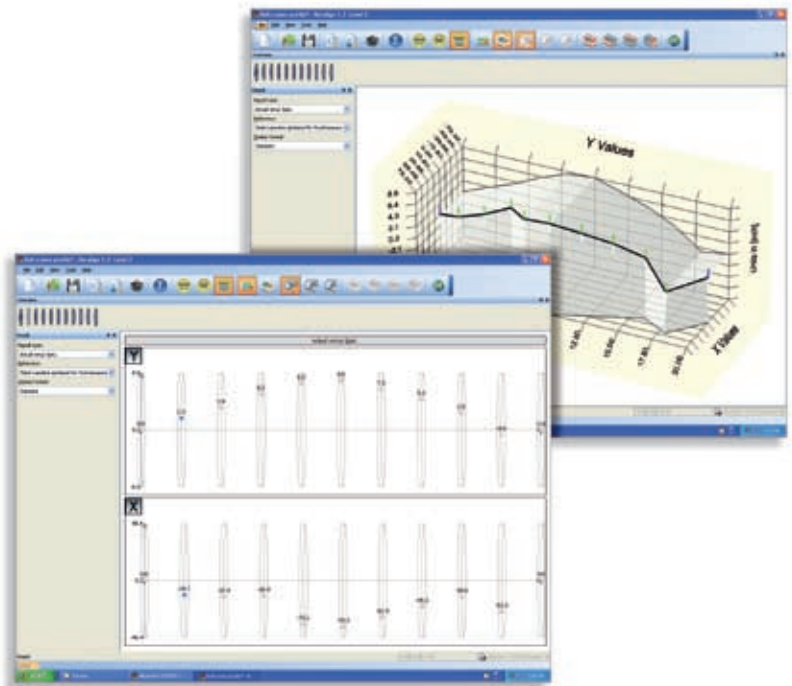


Bores and more



One software for all PRÜFTECHNIK products and applications

ALIGNMENT CENTER is a Windows™ based software platform for all shaft and geometrical alignment applications. It is compatible with all previous and current PRÜFTECHNIK products! Take advantage of exclusive features like measurement job preparation, advanced result analysis and professional customizable colourful reports.



Patented brackets

BORALIGN® Ultra system brackets are specifically designed for ease of use and extremely high accuracy. They can be inserted in bores from as small as 45 mm (1.77") in diameter to 4000 mm (157.5"). An integrated magnetic base keeps the bracket frame in place within the bore. These universal pointer brackets can be used in measuring both magnetic and non-magnetic bores.

A rotating sensor holder enables the sensor to be quickly centered and rotated within the bore. Measurement readings may also be transmitted to the ROTALIGN® Ultra computer via the RF Bluetooth® module – increasing measurement flexibility. Brackets come with all listed components in their own carrying case. (U.S. Patent 5,717,491)



Further modular ROTALIGN® Ultra applications

Shaft alignment



The ultimate shaft alignment system for any kind of machine or coupling

Straightness measurement



Measurement of vertical and horizontal straightness in response to industry demands

Flatness measurement



Measurement of surface flatness and levelness to improve productivity

PRÜFTECHNIK
Alignment Systems GmbH
Oskar-Messter-Straße 15
85737 Ismaning
Deutschland
Tel. +49 8999616-0
Fax +49 8999616-100
info@pruftechnik.com
www.pruftechnik.com

A company of the PRÜFTECHNIK group