

SHAFT ALIGNMENT

GUIDING SOFTWARE

The measurement programs guide you step-by-step through the measurement process. The live values are used to adjust the machine. Horizontal and Vertical directions are shown at the same time. Offset and angular values are colour coded in order to determine the result more quickly: red=outside tolerance, green=inside tolerance.



MEASUREMENT PROGRAM CONFIGURATIONS

E710	E710	E710	E710	E710	E710	E710	E710	E710	E710	E710	E710
E540	E540	E540	E540*	E540	E540						
E530	E530	E530	E530*	E530	E530						
E420	E420	E420									



Limited to 3 machines. *Accessory required.

BELT ALIGNMENT

EASY-LASER® BTA

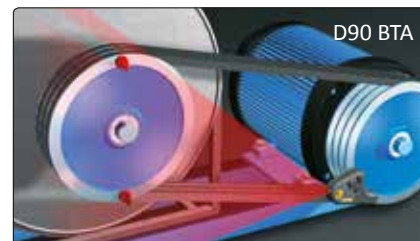
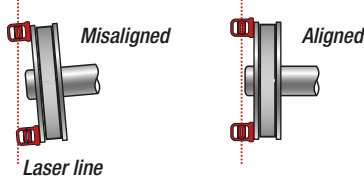
Easy-Laser® offers a wide range of tools for quick and easy alignment of sheaves/pulleys.

- E180 BTA: Digitally displays the parallel and angular misalignment "live". Accessory for the E710/E540/E530 systems, but can also be used as a separate tool thanks to the built-in display.

- D160 BTA: Digitally displays the parallel and angular misalignment "live". With separate detector unit and display unit. This means you can read and follow the alignment from where you are standing and making adjustments.

- D90 BTA: The tool has targets that can be read out "visually" (see below) and which give excellent degrees of accuracy that are sufficient for most users.

- D130 BTA: The ATEX/Ex approved version of D90.



Suitable for most types of drive: V-belt, timing belt, flat belt and chain drives.

VIBRATION MEASUREMENT

EASY-LASER® VIB

Easy-Laser® E710, E540 and E530 Shaft alignment systems, and the geometric systems, includes the Vibrometer program, with which you can measure vibration level (mm/s, inch/s) and bearing condition (g-value). The program guides the user through the points to measure on the machine: vertical, horizontal and axial. The result can be documented as normal.

- Requires the E285 Vibrometer probe accessory.



THE TOTAL ALIGNMENT SOLUTION



ISO9001 CERTIFIED



EXPANDABILITY

Easy-Laser® already offers standard versions of measurement programs and equipment for most types of machines. Moreover, there are a number of accessories to further extend the range of applications. Easy-Laser® offers what is probably the most versatile and cost-effective measurement systems on the market. It is The Total Alignment Solution for your operations!

EASY TO USE = FAST AND EFFICIENT

Measurement and alignment should be easy! That is the fundamental philosophy behind our measurement systems. When we talk about simplicity we mean several things, for example, simple to position or install the measurement equipment on the measurement object, easy to perform the measurement and easy to interpret the measurement result. Simple to use = quick and easy!

QUICK SERVICE AND SUPPORT

Our service department usually takes care of servicing or calibration within five working days. This makes Easy-Laser® a safer working partner for your operation. As an extra service, we provide a 48 hour express service for when accidents occur and time is of the essence. Contact us for further information about terms and conditions.

LONG WARRANTY PERIOD

The systems come with a generous two year warranty, which can be extended to a total of 3 years by registering the system on the internet. The manufacturing and quality systems are approved according to ISO9001.

WORLD WIDE DISTRIBUTION

There are Easy-Laser® representatives all over the world! You can be assured that both they and we will provide you with the fastest and best possible support. Find your local representative at easy-laser.com.

MORE INFORMATION

NOTE: On the photos of each system only the main parts are shown. For complete information on what is included and technical specifications, please see the system specific brochure.

Download complete product brochures from easy-laser.com!

EASY-LASER®

Authorised distributor:



Easy-Laser® is manufactured by Damalini AB, Alfagatan 6, SE-431 49 Mölndal, Sweden
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Easy-Laser® is a registered trademark of Damalini AB. Other trademarks belong to the relevant copyright holder.
These products comply with: EN60825-1, 21 CFR 1040.10 and 1040.11. Contains FCC ID: PWH0946, IC: 5325A-0946.

05-0619 Rev6



PRODUCT OVERVIEW

MEASUREMENT & ALIGNMENT SYSTEMS

MAKE A CHOICE WITH PRECISION.



EASY-LASER®

www.easy-laser.com

SHAFT ALIGNMENT

SIMPLY EFFICIENT!

The Easy-Laser® E-series shaft alignment systems are very easy to use. Large 5.7" colour display, guiding software and wireless communication are some of the features.



EASY-LASER® E710 SHAFT

Easy-Laser® E710 is the Total Alignment Solution for your operations! This measurement system handles all stages of machine set-up:

- Measure the base flatness
- Measure vibration level*
- Measure bearing play
- Check soft foot
- Measure the machine position
- Align the machine
- Document the results

Also measures straightness and flatness!



12 Programs, 20 m / 66', 2 AXIS PSD

EASY-LASER® E540 SHAFT

Easy-Laser® E540 provides the ideal balance between performance and price allowing you to create the best conditions to operate your machinery economically and problem-free.

- Measure vibration level*
- Measure bearing play
- Check soft foot
- Measure the machine position
- Align the machine
- Document the results

With alignment programs for many machine types!



6 Programs, 10 m / 33', 1 AXIS PSD

EASY-LASER® E420 SHAFT

Easy-Laser® E420 redefines the entry level for shaft alignment systems! Built-in wireless units, large 5.7" colour display and measurement functions like much more advanced systems.

- Check soft foot
- Measure the machine position
- Align the machine
- Document the results

All wireless entry level system!



3 Programs, 3 m / 10', 1 AXIS PSD

MORE SHAFT SYSTEMS

Also available, but not described in this brochure, are Easy-Laser® E530, Easy-Laser® D550 Ex/ATEX and Easy-Laser® Wind turbine systems designed for alignment of generator and gearbox where the rotor is locked for operator safety reasons.

*Accessory E285 VIB required

GEOMETRIC MEASUREMENT



MOBILE MEASUREMENT
The Easy-Laser® Flange flatness systems are really easy to use! You get a True3D graph result and all best fit calculations available directly on site.

EASY-LASER® E915/E910 FLANGE

For flange flatness measurement. See the result as a true 3D image in the display unit directly after measuring. Evaluate the result easily with different calculation settings directly on site without having to stop to go to a PC with separate analysis programs. This makes production much more efficient.

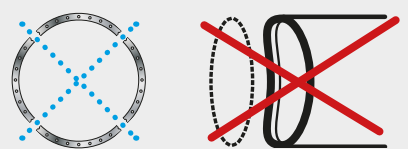
Two Flange systems are available:
Easy-Laser® E915 with Spin Laser.
Easy-Laser® E910 with Swivel Laser.



Bluetooth 20 m / 66' 2 AXIS PSD

Measurement method for offshore tower flanges

Tower sections with diameter over 4 meters are heavy, resulting in flange deformation when manufactured. With the unique flange section measurement program the flatness is measured in four sections which are mathematically merged into a full circle. This solves the flange deformation problem, and makes it possible to perform the complete measurement on ground. No climbing on ladders or skylift is required, making it much safer for the operators.



With the section measurement program, the measurement result is unaffected by the tower deformation. International patent pending.

EASY-LASER® E920 GEOMETRIC

This versatile system can be used to carry out all the most common geometric measurements; straightness, flatness, squareness, plumb and level. Measurement is quick and precise. Displayed resolution is 0.001 mm [0.05 mils]. The system can provide full documentation, with direct generation of PDF reports, and database programs for PC. The laser transmitter is our well known big seller, the D22 with levelling table, strong magnetic feet, and a range of up to 40 m.



Bluetooth 40 m / 132' 2 AXIS PSD

EASY-LASER® E930 EXTRUDER

The Extruder system E930 is designed to measure straightness and pointing direction, primarily on extruder pipes. Another application can be hydraulic pipes for example. The well-thought-out design of the system ensures that the measurement procedure is quick and accurate. Diameters down to 50 mm [1.97"] can be measured. Working range is up to 40 m [130']. The programs guide you through the measuring procedure, which speeds up the work.



Bluetooth 40 m / 132' 2 AXIS PSD

GEOMETRIC MEASUREMENT

EASY-LASER® E950 BORE ALIGNMENT

Easy-Laser® E950 makes measuring and aligning bearings and bearing journals easier thanks to wireless detector and versatile brackets.

- Add, remove and remeasure measurement points
- Measures both full bores and half bores
- Multi-point measurement
- Bore ovality measurement
- Calculate waviness (short and long) and best-fit

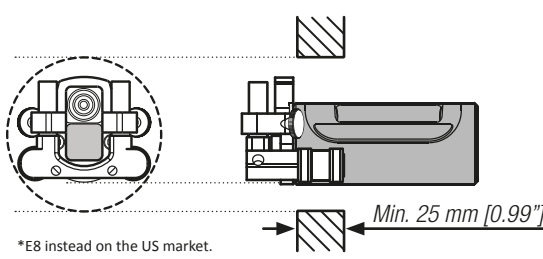
Available configurations:

Easy-Laser® E950-A and E950-C for Diesel engines, Compressors, Gearboxes etc.

Easy-Laser® E950-B for Propeller shaft drive lines with sterntube.

High precision wireless detector:

System E950-C includes the E9* detector. Allows for measurement of bores down to \varnothing 80 mm [3.15"] and a width of 25 mm [0.99"]. With customized brackets down to \varnothing 50 mm [2.00"].



*E8 instead on the US market.



Bluetooth 40 m / 132'



EASY-LASER® E960 TURBINE

Easy-Laser® E960 Turbine alignment systems make the measurement and adjustment work of diaphragms and bearings easier thanks to the wireless detector unit and measurement programs that guide you through the measurement process.

- Add, remove and remeasure measurement points
- Measures both full bores and half bores
- Multi-point measurement
- Bore ovality measurement
- Calculate waviness (short and long) and best-fit

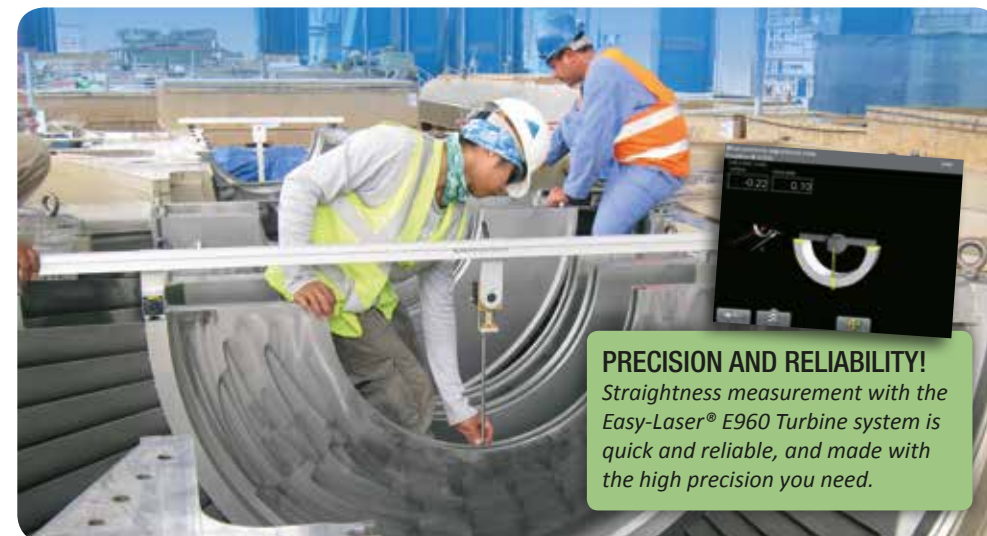
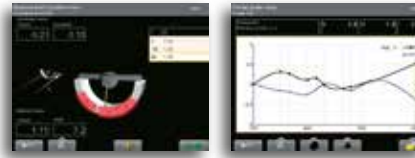
Available configurations:

Easy-Laser® E960-A: Suitable for gas turbines and smaller steam turbines.

Easy-Laser® E960-B: Suitable for large turbines.



Bluetooth 40 m / 132'



PRECISION AND RELIABILITY!
Straightness measurement with the Easy-Laser® E960 Turbine system is quick and reliable, and made with the high precision you need.

GEOMETRIC MEASUREMENT

EASY-LASER® E975 ROLL ALIGNMENT

Designed mainly for roll alignment. The system is well suited when just one or two rolls are to be replaced or adjusted at the same time. The E975 use a new revolutionary detector, and a digital precision level. Quick to set up on the machine!

- Keep the maintenance and service work in-house
- Even short stoppages can be utilized
- Easier to use than traditional methods



Bluetooth 20 m / 66' 2 AXIS PSD



EASY-LASER® E970 PARALLELISM

For parallelism measurement of rolls and other objects in numerous applications. The E970 is especially suitable when many objects are to be measured and aligned, and when the distances are long (40+40 m). Also measures level, straightness and flatness on wire sections (suction boxes), flatness on bases and straightness on rolls.

- For parallelism measurement of most kind of objects
- Versatile system – also for flatness and level



Bluetooth 40 m / 132' 2 AXIS PSD



EASY-LASER® E980 SAWMILL

The Easy-Laser® E980 Sawmill system will help you increase efficiency and save money in your sawmill. The system measures straightness, flatness and squareness. Saw blades, band wheels, reducers and steerings are aligned and positioned. It can be used equally well for circular saws and band saws.



Bluetooth 20 m / 66' 2 AXIS PSD



EASY-LASER® E30 LONG RANGE LASER

For measuring straightness on long distances. Measurement distance 100 m [328'] when using a detector with a 20 mm PSD, and over 200 m [656'] with 30 mm PSD. M6 threads on front and bottom offer alternative mounting options. Built-in rechargeable battery and Oled display. Shown with tilt table which can be used with magnets or mounted on tripod.



200 m / 656'

Straightness measurement on very long distances!

GEOMETRIC MEASUREMENT



TOTAL CONTROL
All measurements with the E940 system will compare results with ISO10791-1 or 10791-2, which are the standard used for machine tool measurement.

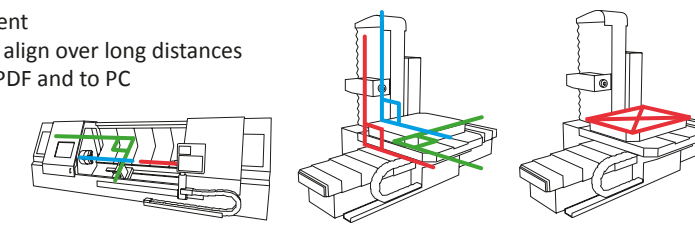
EASY-LASER® E940 MACHINE TOOL

Easy-Laser® E940 Machine tool system is a complete measurement system for measuring and aligning machine tools. The most important thing to check is the geometry of the machine; straightness, spindle direction, flatness and squareness, because not even a precisely calibrated linear motion can compensate for a crooked movement or uneven surface. Compared to conventional methods, such as dial gauges, mandrels and stones, work can be carried out much more accurate and quickly with the use of a laser measurement system. And do not forget, the results can be documented.

- Light and handy equipment
- Possible to measure and align over long distances
- Document the result as PDF and to PC

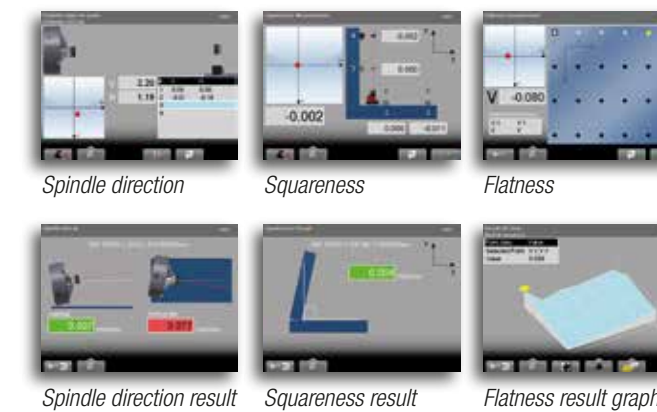


Bluetooth 40 m / 132'



HyperPSD™

Makes it possible to display a resolution of 0.0001 mm [0.00005"/0.005 mils].



Spindle direction Squareness Flatness
Spindle direction result Squareness result Flatness result graph

EASY-LASER® E290 DIGITAL LEVEL

Digital levels are extremely useful tools for setting-up and aligning most types of machine, for example, levelling machine tables, rolls, bases, etc. Other areas of use include checking straightness, flatness and parallelism. Easy-Laser® E290 now also offers the possibility of documenting the work, by wirelessly connecting to your Easy-Laser® alignment system. E290 is the perfect addition to laser based alignment systems and is an investment that can be recouped quickly thanks to the broad areas of use.



Bluetooth 0.03 mm/m