

**EASY-LASER®**

XT660



Alignment system for all important  
steps of machine installation.

**Shaft Alignment**

**XT660**

# MEASUREMENT INDEPENDENCE

## **EASY-LASER® GENERATION XT**

Easy-Laser® XT660 is the second member of our Generation XT alignment systems, built upon our groundbreaking cross-platform technology. You can now display the data on a multitude of different handheld devices, giving you the freedom to work with the gear that suits you the best. Simply download our straightforward XT application for free and you have all the measurement programs you need.

## **SAME INTERFACE**

The XT app interface and basic functionality is identical for all levels of Generation XT systems. Easy to learn and use!

## **NO LICENSE HASSLE**

Your Generation XT measuring units determine what functions are available. No hassle with licenses, just connect the units to the app, on any of your display devices, and start measuring. That is straightforward!

## **MAXIMUM FLEXIBILITY!**

*The XT Alignment app runs on iOS and Android devices\*, as well as on the Easy-Laser® XT11 display unit. The choice is yours.*



*\*Conditions apply*



# HIGHLIGHTS

## MAXIMUM FLEXIBILITY



### ALL XT PROGRAMS IN ONE FREE APP

All XT measurement programs included in one straightforward application available for free.



### DISPLAY DATA ON MULTIPLE PLATFORMS

Functionality for iOS, Android and Easy-Laser® XT display units.



### NO LOCK-INS

Buy with or without the new user-friendly Easy-Laser® display unit.



### MAXIMUM FLEXIBILITY

Combine several measuring units with the display unit of your choice, or use different display units with one set of measuring units. No license hassle!



### RUGGED DESIGN

The XT products are rugged, rated both IP66 and IP67 water and dust proof. For superior durability in harsh environments.



### LONG OPERATING TIMES

The long operating times of up to 16 hours for the display unit and 24 hours for the measuring units means you will now be able to take on and finish the toughest jobs.



### SEND THE REPORTS

Share the reports via email. Possible on all platforms.

# XT660

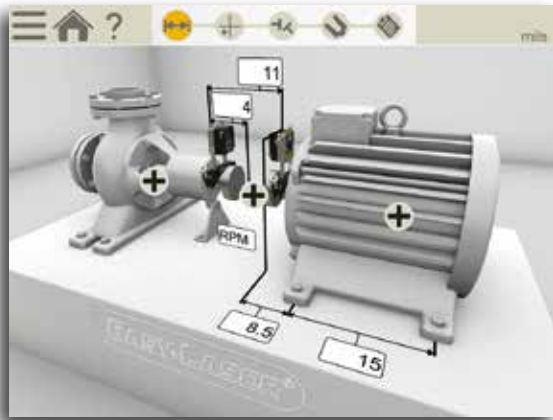
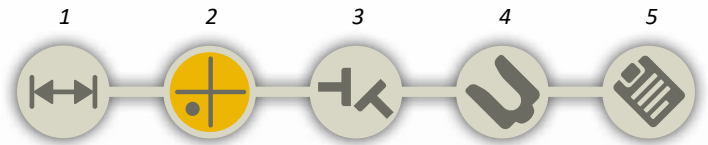
# THIS IS EASY ALIGNMENT

## HORIZONTAL PROGRAM

The user interface is intuitive and guides you through the measurement process. You can save the measurements of a machine for *As found* and *As left* in the same file.



The interactive workflow indicator lets you easily jump to any part in the measurement process.



1. Enter dimensions



2. Measure



3. View result, *As found*

4. Adjust, *As left*



5. Documentation

(Send PDF report to USB or by WiFi)



Soft Foot check on both machines.



Tolerance check. Pre-set or custom.



Quality check view for measurements

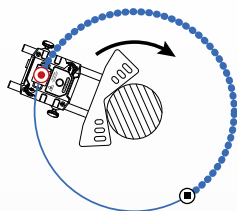


# MEASUREMENT METHODS

● Measuring points

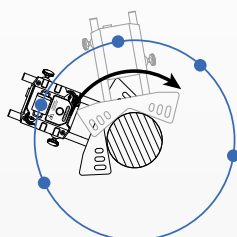
● Start recording

■ Stop recording



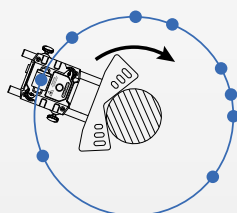
## CONTINUOUS SWEEP

Automatic recording of measurement values during continuous sweeping of the shafts. Hundreds of points are registered. You can start and stop anywhere on the turn.



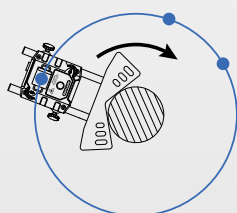
## UNCOUPLED SWEEP

Rotate one shaft/unit at a time to pass with the beam over the other (stationary). Repeat alternately until enough measurement points are recorded. You can start and stop anywhere on the turn.



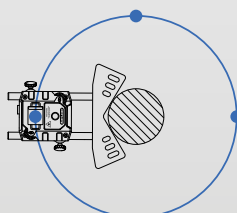
## MULTI POINT

Multi point is basically the same as EasyTurn™, but instead you can record multiple points on the sector rotated. This will provide an optimized calculation basis. Perfect for e.g. turbine and sliding bearing applications.



## EASYTURN

The EasyTurn™ function allows you to begin the measurement process from anywhere on the turn. You can turn the shaft to any three positions to register the measurement values.



## 9-12-3

Measurement points are recorded at fixed points 9, 12 and 3 o'clock. Useful for shafts oriented vertically or wall-mounted machines.

# SMART FUNCTIONS



## THERMAL GROWTH

Automatically compensate for thermal expansion of the machines.



## SWAP VIEW

Understand adjustment directions more intuitively.



## CONTINUE SESSION

Your latest measurement is always available, automatically saved.



## TEMPLATES

Save measurement files as templates, with machine data and settings, to quickly start measurements.



## MEASUREMENT VALUE FILTER

Improve readings when measuring conditions are poor.



## MULTIPLE SETS OF FEET

Align machines with more than two pairs of feet.



## LOCKED FEET

Lock any pair of feet on the machine. Used when aligning base-bound or bolt-bound machines.



## WIDE LIVE ADJUSTMENT

Adjust with live values using expanded sensor position ranges in the H and V position



## SELECT MACHINE IMAGE

Choose from different 3D machines to portray your machinery on either side of coupling.



## SELECT COUPLING TYPE

Choose measurement method depending on coupling type: short flex, spacer shaft.

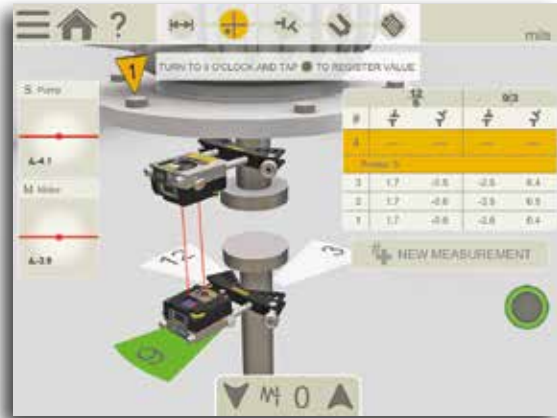


## BUILT-IN HELP

The app includes a searchable *Users Manual* which opens the relevant chapter depending where in the process you are. This makes it quick and easy to find the answers to your questions.

# XT660

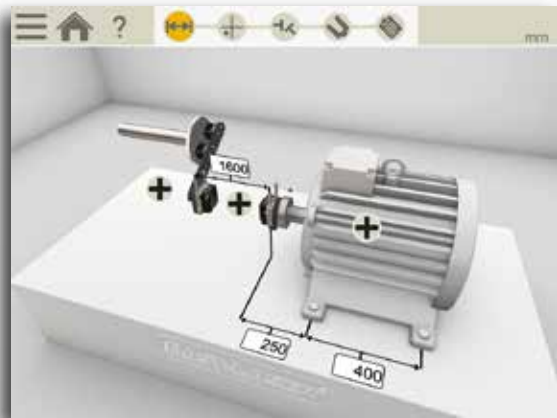
# MORE POSSIBILITIES



## VERTICAL/FLANGE MOUNTED MACHINES



For measurement and alignment of vertically and flange mounted machines.



## CARDAN/OFFSET MOUNTED MACHINES



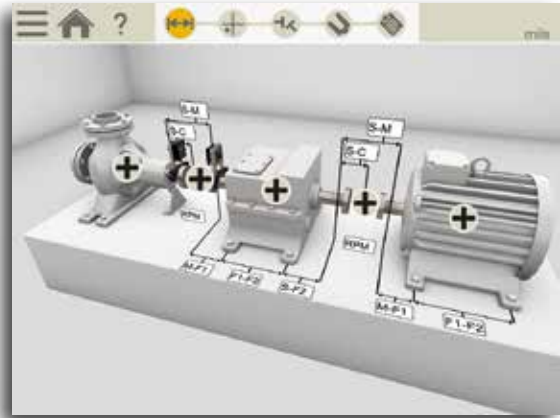
For alignment of cardan/offset mounted machinery. (Requires additional Cardan bracket Kit.)



## TWIST MEASUREMENT OF MACHINE BASE



The twist measurement program allows you to check the flatness or twist of the machine foundation using only the measuring units in the system.

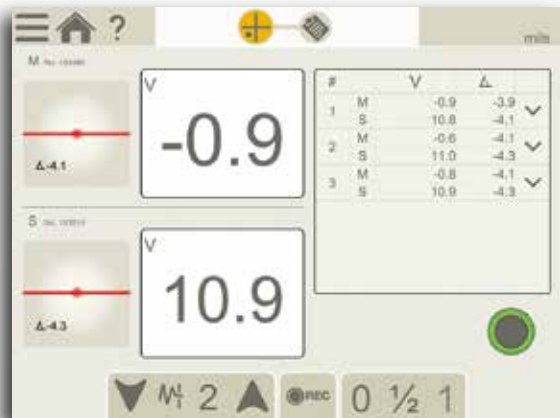


## 3-MACHINE TRAIN



For alignment of three to each other coupled machines (2 couplings). You can pick the reference machine manually, or let the program choose one that will minimize the need for adjustments.

- The easiest and most intuitive machine train interface available.
- See the complete picture of the machine train alignment to quickly determine corrections.
- Instantaneous live movement of your machines during corrections.



## VALUES – DIGITAL DIAL INDICATOR



With the Values program you measure as with dial gauges, but with laser precision and the capability to document the measurement result. Automatic recording is possible (set the interval and duration). You can make individual notes for each measurement point.

## CHECK BEARING CLEARANCE etc.



With the Values program you can check bearing clearance or shaft load.

# DOCUMENTATION

## SAVE!



### INTERNAL MEMORY

Save your measurement files, photos and reports to the internal memory.



### VERSATILE FILE TYPES

Both a PDF and an Excel file are generated.



### READ QR AND BAR CODES

Assign a specific code to a specific machine, then use the built-in camera of your device to open assigned file and settings.

*(Note: camera resolution requirements applicable.)*

TYPE	NAME	DATE	Edit
Folder	Shell_2018-02-14 14_31_08	2018-02-14	[Icon]
File	Values_2018-04-10	2018-04-10	[Icon]
File	IMG_20180410_142801	2018-04-10	[Icon]
Folder	Shell Alignment Water pump 3	2018-04-10	[Icon]
File	Vertical motor ABB	2018-04-14	[Icon]

## SHOW!



### CUSTOM PDF REPORT TEMPLATES

Use one of the two formats included, or design your own.



### ADD NOTES

Add additional details so they appear in the alignment report.



### SIGN REPORTS ELECTRONICALLY

Sign-on screen to verify your job. Signature is saved with the PDF file.



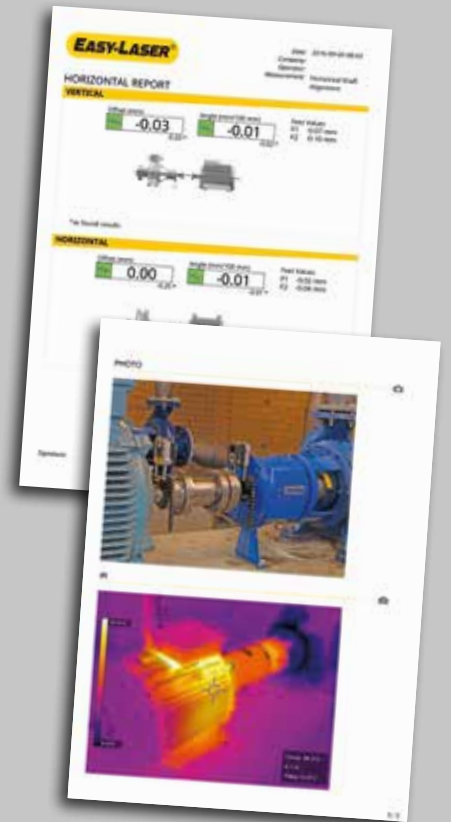
### ADD PHOTO

Show what you mean.



### ADD THERMAL IMAGE

See the difference after alignment.  
*(Note: Add-on to the XT11)*



## SHARE!



### SEND THE REPORTS

Share the reports via WIFI email. Possible on all platforms.



### SAVE TO USB

Save your files to USB stick and copy to other devices.



# SYSTEM PARTS



## XT11 DISPLAY UNIT

Rugged, robust, with wear resistant rubberized protective coating. IP66 and 67, dust- water- and shockproof. As standard a 13 MP camera for documentation is built-in, and you can also choose to add an IR camera to the XT11; shoot a thermal image before and after alignment and include with the documentation!

A large 8", glove-enabled touch-screen makes the information clear and the app easy to use. The small OLED display shows battery status of both measuring units and display unit. You can check battery status also when the unit is turned off.

The clever lock-screen button prevents unintentional clicks, for instance when moving around on the job.

Four fastening points for shoulder strap or customized solutions. Heavy-duty battery for very long operating times; up to 16 hours. The camera can be removed if security reasons require it.



## GLOVE-ENABLED TOUCH SCREEN

Navigate the screen with or without work gloves.



## FLIR® IR CAMERA (A)

Shoot a thermal image before and after alignment and include with the documentation! (Optional)



## 13 MP CAMERA (B)

Take pictures to identify your machines and include with your report.



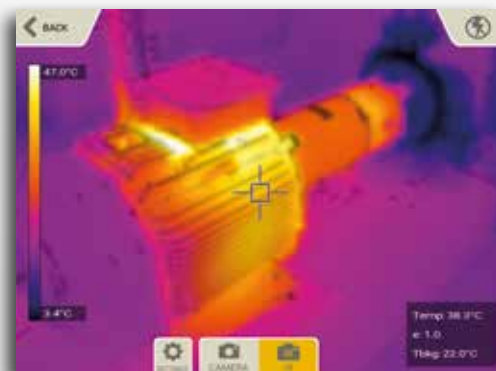
## LED LIGHT (C)

Light up the work area when ambient light is not enough.



## HDMI VIDEO OUTPUT

Interface with an external video display — ideal to train or present to large groups.





### XT60-M/S MEASURING UNITS

The XT60 measuring units have dot-type laser and 1-axis square PSD surfaces. A state-of-the-art OLED display shows the angle of the unit, making it easier to position it on the shaft.

The diagonally positioned locking knobs securely lock the unit on the rods. Rigid aluminum housing provide maximum stability. IP66 and 67, dust- water- and shockproof. Built-in wireless technology.

### SHAFT BRACKET

The V-bracket is light yet rigid, with two rods for maximum stability in all directions. Pre-mounted chain for quick setup on the machine.



### LONG OPERATING TIMES

Heavy-duty battery for very long operating times; up to 24 hours.



### DOT-TYPE LASER TECHNOLOGY

The dot laser technology makes it possible to measure larger machines and longer spans than line laser systems. It also provides higher accuracy when backlash in the coupling is present. In addition, dot laser allows you to check more things when installing a machine, e.g. twist of foundation and bearing clearance.



### DUAL LASERS, PSD, INCLINOMETERS

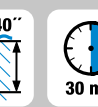
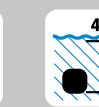
With electronic inclinometers in both measuring units the system knows exactly how they are positioned. This also makes it very easy to align uncoupled shafts. The so called reversed measurement method with two laser beams and two PSD makes it possible to also measure very misaligned machines. This is particularly good for new installations, where the machines are not yet in the correct position. Compared to many other methods, the Dual Technology will retain the measurement accuracy also when distances increase.

## RUGGED DESIGN



### IP66 AND IP67 APPROVED

Easy-Laser® XT measuring units and display unit are waterproof, dustproof and shockproof. The units have been tested and approved to an Ingress Protection rating of IP66 and IP67, which means that they are dustproof and waterproof to a depth of 1 meter, and also protected against powerful water jets.



(Note: Photo shows XT40 measuring units.)

# BELT ALIGNMENT TOOL



## FOR PULLEY ALIGNMENT

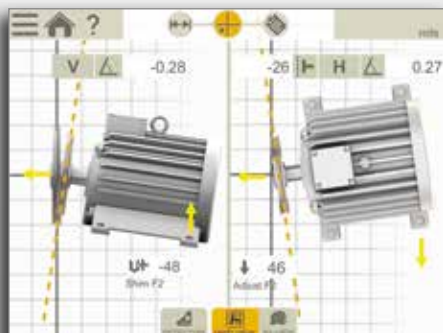


With the Belt alignment tool XT190 BTA you can align most types of radially mounted drives. The transmitter and detector attach magnetically to the sheave edge. A digital display unit gives the advantage of checking against belt manufacturer tolerances.

When connected to the *XT Alignment App* on your iOS or Android device\*, or the XT11, you can also read off the alignment “live” at the position on the machine where the actual alignment is made. You get adjustment values for both horizontal and vertical direction (shim value), resulting in a more accurate alignment in a shorter time. The XT190 is the perfect addition to your XT660 system, but you can also use it as a separate tool, with or without a separate display device.



SYSTEM XT190 BTA, PART NO. 12-1053



**0.15 " V**  
**0.35 ° H**  
**0.45 ° V**

*OLED display on detector unit. Live values.*

*Align machine in live mode, document result with PDF. (XT Alignment app Belt application.)*

*\*Conditions apply*



# VIBROMETER TOOL



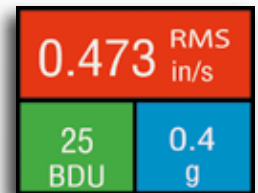
## FOR QUICK VIBRATION ANALYSIS



Easy-to-use vibration analyzer that quickly diagnoses vibration level, unbalance, misalignment and looseness. The direct readout of 1x, 2x, 3x RPM, total level as well as bearing condition provide necessary information during installation and alignment.

The XT280 connects to the *XT Alignment App*, making it possible to document the result as PDF.

*Note: On left picture accessory magnet probe is used.*



*Display on vibrometer unit. Live values.*

## SYSTEM XT280 VIB PART NO. 12-1090

*Register values with notes for each point, add photo of machine, document result with PDF.*

# PRECISION LEVEL

## FOR GENERAL MACHINERY SET-UP



XT290 Digital Precision Level is the must-have addition to your shaft system. Installing machinery level is very often a requirement for them to work as intended.

Use the XT290 as a separate tool, or with the *XT Alignment App*. When connected to the *XT Alignment App* on your iOS or Android device, or the XT11 display unit, you can read off the alignment "live" at the position on the machine where the actual alignment is made, and make PDF reports.



*Display on Precision Level unit. Live values and graphics.*

*Align in live mode, document result with PDF. (XT Alignment app Values/Level application.)*

## SYSTEM XT290 LEVEL PART NO. 12-1244



# EASY-LASER® GENERATION XT

*The age of measurement independence is here!*



**Android**



**iOS**



XT11



XT70



XT60



XT40

**NO LOCK-INS**

With Generation XT you decide if you want the rugged and user-friendly Easy-Laser® XT11 display unit to be included or not. The app also runs on your iOS or Android device\*, be it a tablet or a phone, meaning you are never locked in to a specific way of working.

**SAME INTERFACE**

Purchase multiple systems with various capabilities, train once! The training costs are minimized significantly since the app interface and basic functionality is identical for all systems.

\*Conditions apply

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Keep it running.

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