EASY-LASER®

www.easylaser.com
XT550

Intrinsically safe for potentially explosive environments.

Shaft Alignment

XT550

IECEx

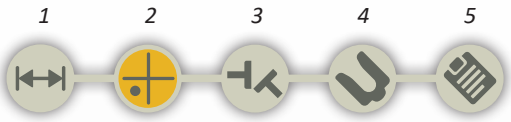
CLOUD CONNECTED

IP66
IP67

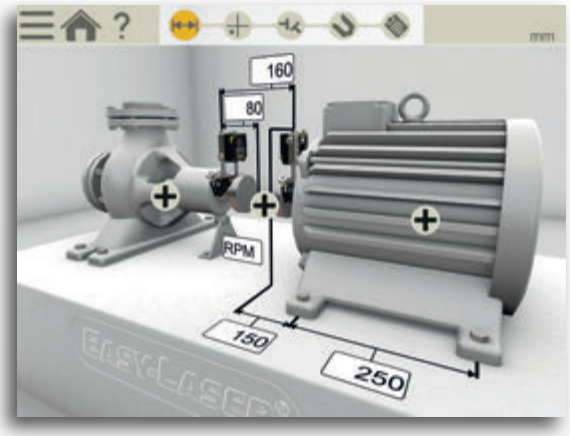
THIS IS EASY ALIGNMENT

HORIZONTAL PROGRAM

The user interface is intuitive and guides you through the measurement process. It is animated and zooms in to the relevant element for each step. You can save the measurements of a machine for *As found* and *As left* in the same file. The procedure for the other alignment programs in the XT app is equally intuitive and guided.

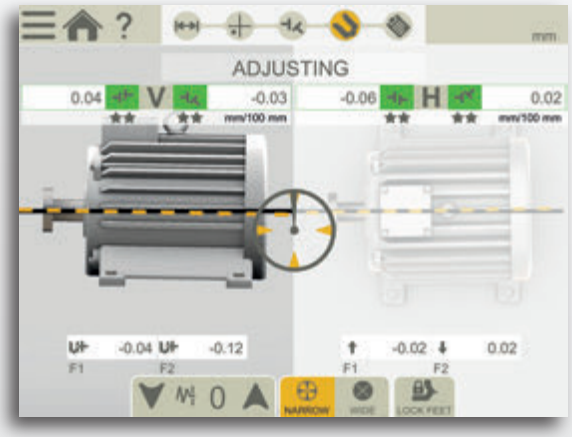


The interactive workflow indicator lets you easily jump to any part in the measurement process.



1. Enter dimensions

2. Measure (Five methods available, explained to the right)

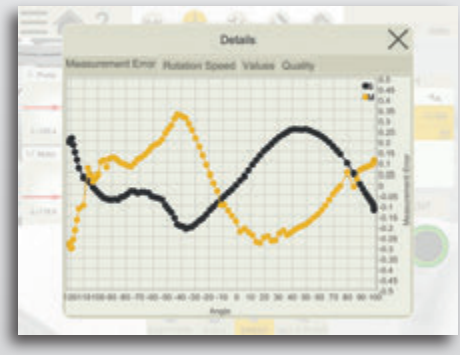


3. View result, As found
4. Adjust

5. View report as it will look

Soft Foot check on both machines

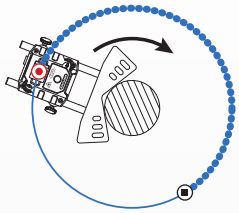
Tolerance check (pre-set or custom)



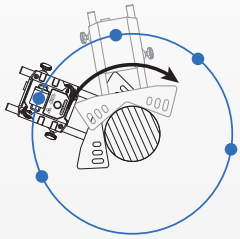
Quality check view for measurements

MEASUREMENT METHODS

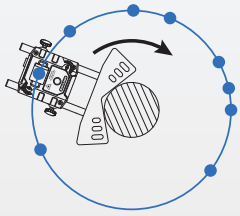
- *Measuring points*
- *Start recording*
- *Stop recording*



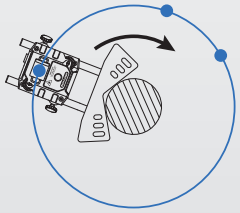
CONTINUOUS SWEEP
Automatic recording of measurement values during continuous sweeping of the shaft. Hundreds of points are registered. You can start anywhere on the turn. Quality check of measurement is provided (see example down left).



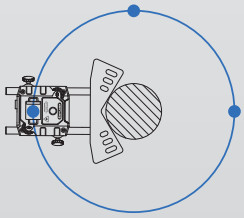
UNCOUPLED SWEEP
Rotate one shaft/unit at a time to pass with the beam over the other (stationary). Repeat alternately until enough measurement points are recorded. You can start and stop anywhere on the turn.



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 with as little as 20° between each position to register the measurement values. An easier-to-use version of the three-point method (see 9–12–3).



9–12–3
Measurement points are recorded at fixed points 9, 12 and 3 o'clock. This is the classic three-point method which can be used in most cases.

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.

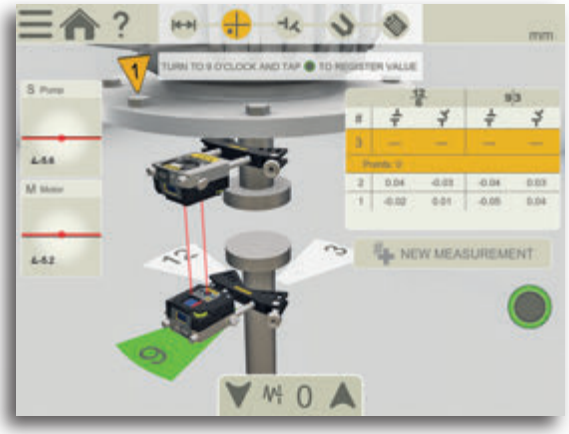
SELECT COUPLING TYPE
Choose measurement method depending on coupling type: short flex, spacer shaft.

ADJUSTMENT GUIDE
The adjustment guide helps you decide optimum adjustment by simulating shimming and move. For programs Horizontal and Machine train.

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 answer to your questions.

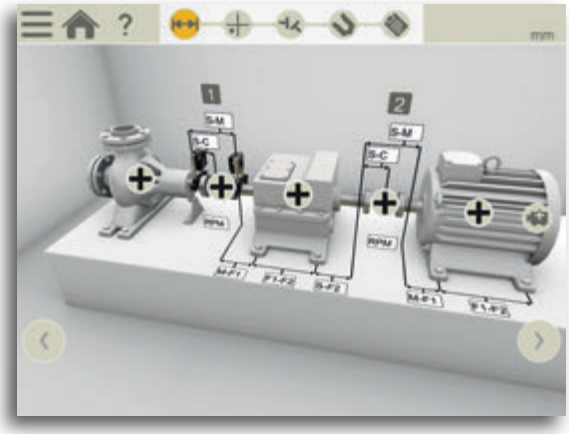
XT550

MORE POSSIBILITIES



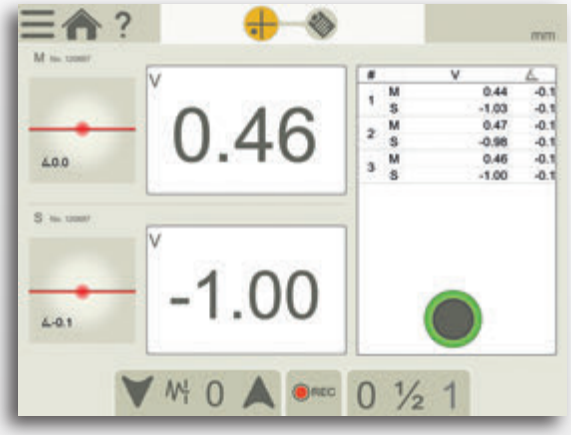
VERTICAL/FLANGE MOUNTED MACHINES

For measurement and alignment of vertically and flange mounted machines. Handles machines with 4, 6, 8 and 10 bolts.



MACHINE TRAIN

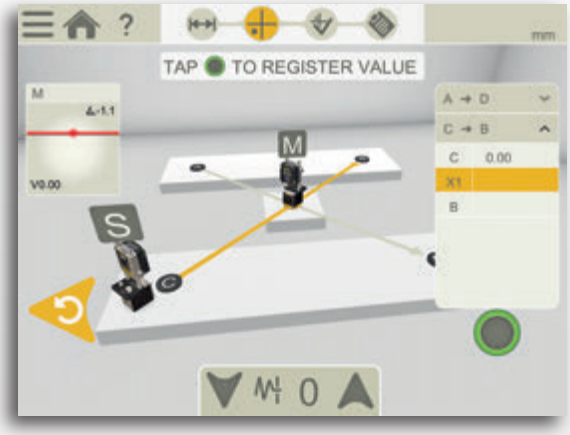
Build your own machine train without limits. You can pick the reference machine manually, or let the program choose one that will minimize the need for adjustments.



VALUES – DIGITAL DIAL INDICATOR

V 0.00
H 0.00

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

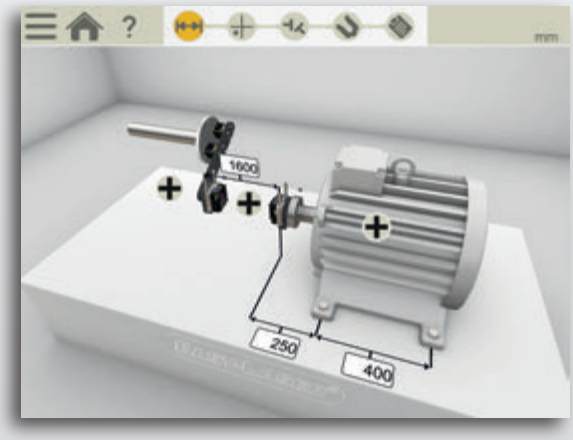


TWIST MEASUREMENT OF MACHINE BASE

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

CHECK BEARING CLEARANCE etc.

With the Values program you can check bearing clearance or shaft load. It can also be used to ”manually” calculate straightness, flatness and dynamic movements of machine components.

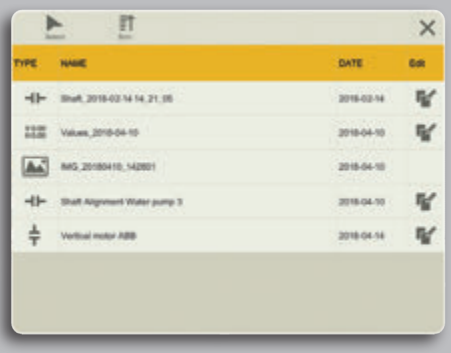


CARDAN/OFFSET MOUNTED MACHINES

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

DOCUMENTATION

SAVE!

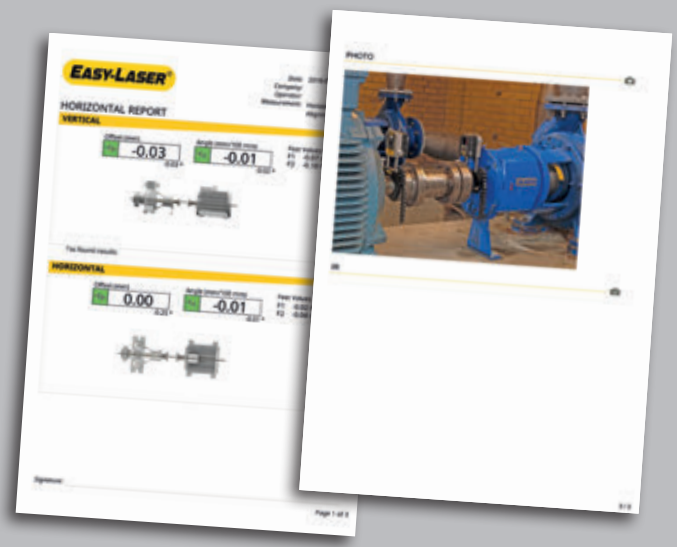


INTERNAL MEMORY
Save your measurement files, photos and reports to the internal memory.

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 program.
(Note: camera resolution requirements applicable.)

SHOW!



PDF REPORT TEMPLATES
Use one of the two formats included.

ADD NOTES
Explain it a little more.

ADD PHOTO
Show what you mean.

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

SHARE!

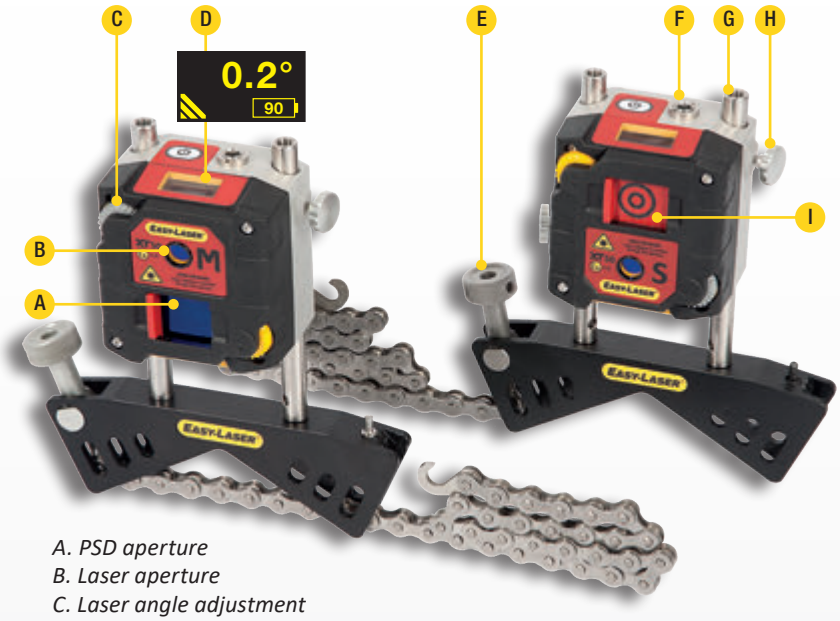
SEND THE REPORTS
Share the reports via email.
Possible on all platforms.

XT550

SYSTEM PARTS

XT50-M/S MEASURING UNITS
The XT50 measuring units utilize dot-type laser and 1-axis square PSD surfaces. A state-of-the-art OLED display (D) 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 aluminium housing provide maximum stability. IP66 and 67, dust- water- and shockproof. Heavy-duty battery for very long operating times; up to 20 hours. Built-in wireless technology.

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



A. PSD aperture
B. Laser aperture
C. Laser angle adjustment
D. OLED display: battery status/unit angle
E. Chain tightening knob
F. Charger connector
G. Extendable stainless steel rods
H. Locking knob
I. Slidable target/dust cover

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 incorrectly set 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.

ECOM Tab-Ex® DISPLAY UNIT
Based on Samsung GALAXY Tab Active, ecom´s hazardous area tablet is certified for use in Zone 1/ 21 & DIV 1 hazardous areas. The app runs on most iOS and Android units, as well as our own display unit XT12. However, those are not allowed in potentially explosive areas, but makes for a perfect complement for use in other places.

A. Rubber coated housing
B. Large and clear 8" TFT display, glove-enabled

RUGGED DESIGN

IP66 AND IP67 APPROVED

Easy-Laser® XT50 is 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 metre, and also protected against powerful water jets.

EX APPROVED

The EX ratings are valid for the XT50 measuring units, Part No. 12-1026 and 12-1027, and the ecom Tab-Ex® tablet only, as stated for each in the technical data. Brackets, fixturing equipment, case, and other accessories are not subject to any EX classification, and must be assessed by the user before use in EX environment. Easy-Laser does not take responsibility for the EX safety of accessories.

**Note: Display unit is added separately*

TECHNICAL DATA

Measuring units XT50-M / XT50-S	
Type of detector	1 axis TruePSD 20x20 mm [0.79x0.79"]
Communication	BT wireless technology
Battery type	Heavy duty Li Ion chargeable
Operating time	Up to 20 h continuously
Resolution	0.001 mm [0.05 mils]
Measurement accuracy	±1µm ±1%
Measurement range	Up to 20 m [66 feet]
Type of laser	Diode laser
Laser wavelength	630–680 nm
Laser class	Safety class 2
Laser output	<1 mW
Electronic inclinometer	0.1° resolution
Environmental protection	IP class 66 and 67
Operating temperature	-10–50 °C
Storage temperature	-20–50 °C
Relative humidity	10–95%
OLED display	128x64 pixels
Housing material	Anodized aluminium + PC/ABS + TPE
Dimensions	WxHxD: 76x76.5x50.9 mm [3.0x3.0x2.0"]
Weight	316 g [11.1 oz]
Ex classification	Ⓔx II 2 G Ex ib op is IIC T4 Gb, -10°C ≤ Ta ≤ +50°C
	Ⓔx II 2 D Ex ib op is IIIC T135°C Db, -10°C ≤ Ta ≤ +50°C
Ex certificate number	Presafe 17 ATEX 10552X, IECEx PRE 17.0049X
Software (XT Alignment App)	
Languages	en / de / sv / es / pt / ru / ja / ko / zh / it / fr / pl / fi / tr
Display unit ecom Tab-Ex® (For full technical specification, see www.ecom-ex.com)	
Type of display/size	TFT 8" colour screen
Operating system	Android™
Operating time	Up to 11 h continuously
Communication	Bluetooth® 5.0 Wireless technology, WiFi
Camera	13 Mp with flash (rear), 5 Mp (front)
Operating temperature	-20–55 °C
Dimensions	WxHxD: 263x162x26 mm [10.3x6.4x1.0"]
Weight	1100 g [2.42 lbs]
ATEX/UKCA Ex classification	Ⓔx II 2G Ex db ia IIC T6 Gb IP64
	Ⓔx II 2D Ex ia tb IIIC T80°C Db
	-20°C ≤ Ta ≤ +55 °C
IECEx classification	Ex db ia IIC T6 Gb IP64
	Ex ia tb IIIC T80°C Db
	-20°C ≤ Ta ≤ +55°C
Ex certificate number	EPS 22 ATEX 1055X, IECEx EPS 22.0014X, EPS 22 UKEX 1055X
Cable	
Charging cable (splitter cable)	Length 1 m [39.4"]
Brackets etc.	
Type	V-bracket for chain, width 18 mm [0.7"].
Shaft diameters	20–150 mm [0.8–6.0"]
	With extension chain, diameters up to 450 mm [17.7"]
Bracket material	Anodised aluminium
Chain material	Stainless steel
Rod length	120 mm, 75 mm [4.72", 2.95"] (extendable)
Rod material	Stainless steel

Easy-Laser® XT550 Shaft system (12-1031) includes:	
1	Measuring unit XT50-M
1	Measuring unit XT50-S
2	Shaft brackets with chains and rods
4	Rods 75 mm [2.95"]
2	Rods 120 mm [4.72"]
2	Extension chains 900 mm [35.4"]
1	Measuring tape 5 m [16.4']
1	Rod tool
1	Charger (100–240 V AC)
1	DC split cable for charging
1	Quick reference manual
1	Cleaning cloth for optics
1	USB memory with manuals
1	Carrying case
	Weight: 6.9 kg [15.2 lbs]
	Dimension WxHxD: 450x300x180 mm [17.7x11.8x7.1"]

Add Ex/ATEX certified display unit:
Part No. 12-1327 ecom TabEx03
Weight: 1.1 kg [2.42 lbs]

EASY-LASER® GENERATION XT

The age of measurement independence is here!

GET IT ON Google Play

RUN IT ON EASY-LASER XT 11 12

Download on the App Store

Android

XT12

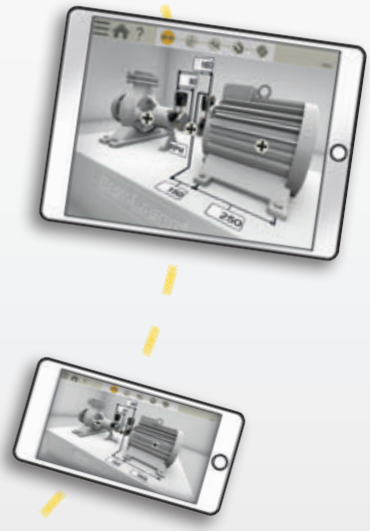
XT70

XT60

XT50

XT40

iOS



FLEXIBILITY

The Generation XT app runs on iOS or Android devices*, be it a tablet or a phone. For use in potentially explosive environments the unit has to be designed, approved and certified for that area**. But for non-hazardous areas you have full freedom!

**Conditions apply*
***Please note that the XT12 and standard iOS/ Android devices normally are not EX approved.*

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.

Easy-Laser® is manufactured by Easy-Laser AB, Alfagatan 6, SE-431 49 Mölndal, Sweden
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LASER 2 | CE | ISO 9001 CERTIFIED COMPANY | 3 YEAR WARRANTY * | GLOBAL SUPPORT

MEDIR INTERNATIONAL BV
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