

## APPLICATIONS



HORIZONTAL



VERTICAL



MACHINE TRAIN<sup>XA</sup>



SOFTCHECK<sup>TM</sup>



FEETLOCK



HOT CHECK



TARGET VALUES



MEMORY MANAGER



MACHINE DEFINED DATA



CIRCULAR FLATNESS



RECTANGULAR FLATNESS



STRAIGHTNESS



## Fixturlaser XA Ultimate – The Ultimate Measurement Instrument

### Alignment + Geometric Measurements = The Perfect Fit

The alignment and geometric applications programs that are included in the Fixturlaser XA Ultimate, compliment each other. Having a properly aligned machine starts already at the time of its installation, e.g. with checking that the machine foundation is flat before the machine is installed upon it. If the machine foundation is skewed or warped in any way, that will influence the machine's capability to work under optimal conditions. In these times with tight tolerances and increasingly optimized machine designs and foundations, it is even more important to focus on the root cause of outages in preventive maintenance.

### Straightness with Fixturlaser XA Ultimate

The application programs for straightness include:

- Standard Straightness: used for measuring machine guides, machine beds, machine ways, and guide rails.
- Straightness with the Clock Method or the Arc Angle Method: useful for bore and half bore measurements, such as bearing journals in compressors and diesel engines, and turbines with split casings.

### Flatness with Fixturlaser XA Ultimate

The flatness application programs include:

- Rectangular flatness: used for measurements of e.g. machine beds and machine foundations.
- Circular flatness: useful for measurement of flanges.

### The Graphic User Interface

Our alignment programs are entirely based on color coded icons, symbols, measurement values, and 3D animated screen pictures; the geometrical programs have the same design of the graphical user interface. It will guide you throughout the entire configuration, measurement and adjustment process, where e.g. the green arrows will show you in which direction you need to move the machine or the measurement object. During this entire process, the Fixturlaser XA Ultimate shows live values and there is no need for remeasurements in between adjustments; the Fixturlaser XA Ultimate delivers the machine's true position.

The Fixturlaser XA Ultimate's display unit is one of a kind in the market as it is fitted out with the largest color touch screen available, a whole 6,4" in size.

Machine Defined Data



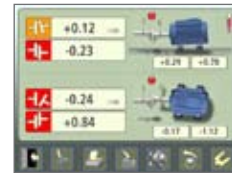
Measurement



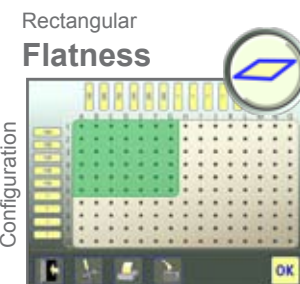
Result



Compound Moves



Configuration



Measurement



Adjustment



Express Alignment Through Real Innovation

**Weight (incl. all standard parts): 15,3 kg (33,73 lbs)**  
**Storage Temperature: -20 to 70°C (-4 to 158°F)**

Material:	High Impact ABS Plastic
Sealing:	Dust, water (5m/16 feet), and air tight with air pressure compensation valve
Drop Test:	3 m (10 feet) onto concrete floor
Dimensions:	505 mm x 420 mm x 230 mm (19,9 in x 16,5 in x 9,1 in)

Housing Material:	Anodized aluminum and high impact ABS plastic over molded with TPE rubber
Operating Temp:	0 to 40°C (32 to 104°F)
Relative Humidity:	10 – 90%
Weight:	1,5 kg (3,31 lbs) with batteries
Dimensions:	244 mm x 188 mm x 55 mm (9,6 in x 7,4 in x 2,1 in)
Environmental Protection:	IP 65
Processor:	Intel X-Scale, 400 MHz
RAM:	64 Mb
Flash Storage Memory:	128 Mb
Display:	Color TFT-LCD backlit with wide angle viewing technology
Display Size:	6,4” diagonal (131 x 98 mm)
Display Resolution:	Full VGA 640x480 pixels
Color Depth:	262 000 colors
Interface:	6,4” polyester laminated touch screen with enhanced transmission
External Interface:	2 RS-485 1 USB host port, 1.5 / 12 Mbps, OHCI v1.0 compliant 1 USB slave port, 12 Mbps 1 Ethernet 10/100BaseT RJ45
Wireless Communication:	Class I Bluetooth transmitter with multi-drop capability
Power Supply:	Dual high performance rechargeable Li-Ion batteries and external power supply
Operating Time:	20 hours typical use
LED Indicators:	Unit status and battery status indicators

<b>Housing Material:</b>	Anodized aluminum and high impact ABS plastic over molded with TPE rubber
<b>Operating Temp:</b>	-10 to 60°C (14 to 140°F)
<b>Relative Humidity:</b>	10 – 90%
<b>Weight:</b>	186 g (6,6 oz)
<b>Dimensions:</b>	79 mm x 77 mm x 33 mm (3,1 in x 3,0 in x 1,3 in)
<b>Environmental Protection:</b>	IP 65
<b>Laser:</b>	650 nm class II diode laser
<b>Laser Line Fan Angle:</b>	6°
<b>Laser Power:</b>	< 1 mW
<b>Measurement Distance:</b>	Up to 10 m (33 feet)
<b>Detector:</b>	CCD
<b>Detector Length:</b>	30 mm (1,2 in )
<b>Detector Resolution:</b>	1 µm (0,04 mils)
<b>Measurement Accuracy:</b>	0,3% ± 7 µm (0,3% ± 0,27 mils)
<b>Ambient Light Protection:</b>	Optical filtering and sunlight signal suppression
<b>Inclinometer Resolution:</b>	0,1°
<b>Inclinometer Accuracy:</b>	±0,5°
<b>LED Indicators:</b>	Laser transmission and status indicators
<b>Laser Safety:</b>	See yellow label below

Fixture:	V-fixture for chain, width 20 mm (0,79 in)
Material:	Anodized aluminum
Shaft Diameter:	Ø 20-450 mm (3/4 in - 18 in)
Rods:	4 pcs 150 mm (5,9 in) extendable to 250 mm (9,8 in)

Length: 2 pcs 3 m (10 feet)

Housing Material:	PC/ABS plastic
Operating Temp:	-10 to 60°C (14 to 140°F)
Weight:	60 g (2,1 oz ) without batteries
Dimensions:	97 mm x 47 mm x 36 mm (3,8 in x 1,85 in x 1,4 in)
Wireless Communication:	Class II Bluetooth transmitter
Power Supply:	3 AA (LR6) batteries
Operating Time:	10 hours continuously
LED Indicators:	Transmitter and battery status indicators

<b>Housing Material:</b>	Anodized aluminium
<b>Operating Temp:</b>	-10 to 60°C (14 to 140°F)
<b>Storage Temp:</b>	-20 to 70°C (-4 to 158°F)
<b>Relative humidity:</b>	10 – 90%
<b>Weight:</b>	1030 g
<b>Dimensions:</b>	100 x 103 x 100 mm (3.9 x 4.1 x 3.9 in)
<b>Laser class:</b>	Class 2
<b>Measuring distance:</b>	Up to 20 meters (66 feet)
<b>Laser sweep flatness:</b>	±0,02mm
<b>Angular prism accuracy:</b>	±0,02 mm/m
<b>Spirit level resolution:</b>	0,3 mm/m
<b>Power supply:</b>	2 batteries type LR6
<b>Operating time:</b>	15 hours continuously
<b>Warming up time:</b>	10 min



Units for wireless transmission  
Fixturlaser M1  
Fixturlaser S1

Laser T210

Connector 300 mm  
cable XAR

Magnet Base,  
detector holder XL

Tape measure

USB stick XL

2 pcs Magnetic V-bracket

Shaft brackets  
complete incl. 4 rods,  
150 mm  
Chain, 470 mm

Power supply XL  
Ext. power cable US

Cable 3 m XL

6 pcs Battery LR6 1,5V (AA)

Rod 150 mm

2 pcs Rod Tool

Extension chain, 970 mm

Display Unit XL

Rod Kit 4 pcs 100 mm

Manual Fixturlaser XL  
Manual Fixturlaser XL Geometry  
Manual CD Fixturlaser XL (FR, RUS, SE, ESP, GB, IT)  
Manual CD Fixturlaser XL Geometry (FR, RUS, SE, ESP, GB, IT)

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