



APPLICATIONS



HORIZONTAL



VERTICAL



MACHINE TRAIN^{XA}



SOFTCHECK™



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:

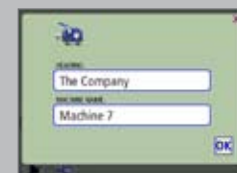
- Rectangular flatness: used for measurements of e.g. machine beds and machine foundations.
- Circular flatness: useful for measurement of flanges.

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



Rectangular Flatness

Configuration



Measurement



Adjustment



FIXTURLASER XA ULTIMATE 1-0883

FIXTURLASER XA ULTIMATE - COMPLETE SYSTEM

Weight (incl. all standard parts): 15,3 kg (33,73 lbs)

Storage Temperature: -20 to 70°C (-4 to 158°F)

CASE

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)

DISPLAY UNIT

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 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

MEASURING UNITS

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

V-BRACKETS

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)

CABLES

Length:	2 pcs 3 m (10 feet)
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WIRELESS PACKAGE

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

TRANSMITTER T210

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



**ALIGNMENT
INTELLIGENCE**

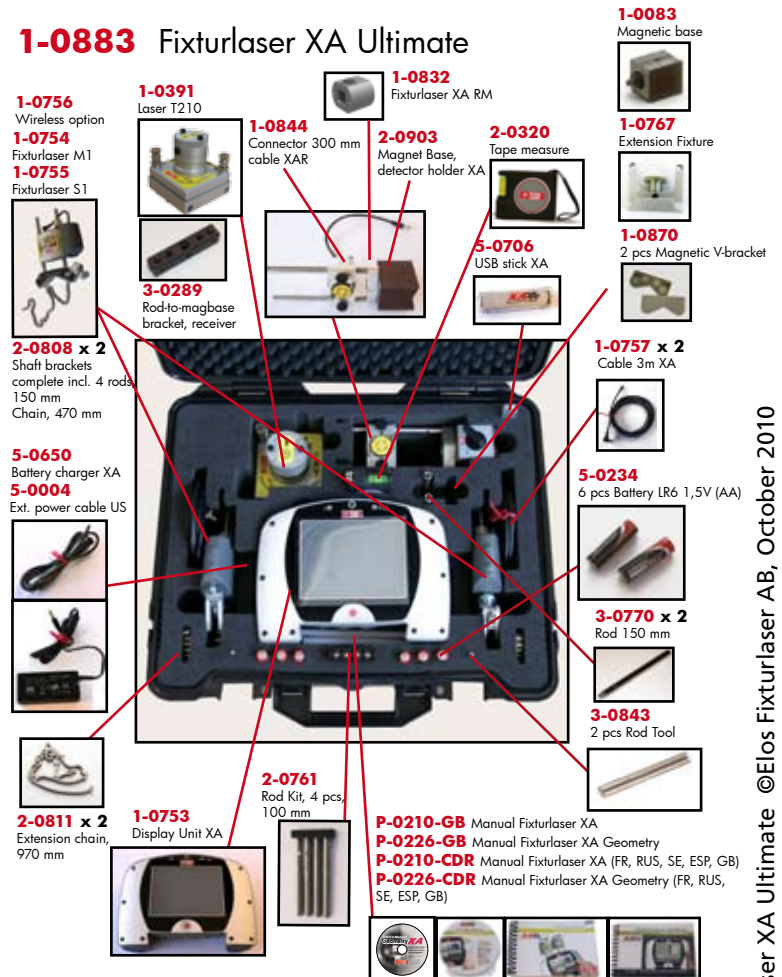


**GRAPHIC USER
INTERFACE**



**TRUE POSITION
SENSING**

1-0883 Fixturlaser XA Ultimate



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