Fixturlaser Smart Machine Checker (SMC)

The Fixturlaser SMC machinery analyzer delivers automatic diagnosis of machine faults, with no need for an internet connection.

The innovative Fixturlaser SMC is a handheld machinery diagnostic tool that empowers mechanics and maintenance technicians to check the health of rotating machines, as needed, in just minutes. It requires no special training or certification and generates straightforward, easy-to-understand machine diagnostic reports which specify any faults along with severity level and confidence level.

Accurex™, a breakthrough in machinery diagnosis

Accurex is the patent-pending automatic diagnostic software built into the Fixturlaser Smart Machine Checker. Accurex detects more faults on more machines more accurately and reliably than any previous diagnostic tool:

- Unbalance
- Misalignment
- Bearing Defects - Wear, Lubrication
- Shock Modulation (Mounting, Clearance, Friction)
- Structural Resonance
- Gear Wear
- Shock / Modulation (Gear)
- PumpCavitation

The intelligence built into Accurex is based on a Bayesian network developed by the engineers at ACOEM, the parent company of Fixturlaser and VibrAlign. Accurex is the product of more than 30 years of experience in vibration analysis innovation.

Three axis wireless sensor

The Fixturlaser Smart Machine Checker features a wireless triaxial sensor that takes readings in the vertical, horizontal and axial directions simultaneously, making the measurement process fast, foolproof and easy.

Built-In Accessories

- **Stroboscope**: Pinpoint the machine’s RPM, which is crucial for ensuring an accurate diagnosis.
- **Pyrometer**: Take the temperature of the machine to verify the diagnosis.
- **Camera**: Create a record for easy machine identification, sensor positioning and for report illustration.
Fast, accurate machinery diagnostics in 3 simple steps.

Step 1. Select the machine you want to diagnose

Step 2. Use the triaxial sensor to take readings at each of the automatically designated points

Step 3. View the diagnostic report to learn the machine’s condition as well as any action steps you need to take

Once you’ve completed the diagnosis, use the SMC’s reporting capability to create a customizable MS Word report, which can also be saved as a PDF file.

- Good: No action required
- Fair: Monitor the evolution
- Critical: Schedule corrective action

Optional Accessory Kit: Fixturlaser SMC Balancing
The balancing accessory kit enables the SMC to be used to perform precision 1-channel or 2-channel balancing. The program guides the user throughout the balancing process and automates all calculations. The process starts with measuring the unbalance, which includes defining the machine, configuring the speed counter and selecting test weights. Following measurement, the SMC balancing routine will specify the necessary correction weights.

The Fixturlaser SMC replaces the ONEPROD HAWK
Our customers spoke and we listened. Accurex machinery diagnostics was originally introduced in the HAWK, a tool that required an internet connection for machine building and reporting. Customers told us they prefer a tool with all the functionality available offline, in the box – hence the SMC. Additionally, this tool now comes under the umbrella of Fixturlaser; a brand well-established for delivering easy-to-use precision instruments to machinery maintenance personnel.
ACOEM AB is a global player and leader in developing innovative, user-friendly equipment for shaft alignment. By helping industries worldwide to become perfectly aligned, and eliminating anything that might not be, we minimize unnecessary wear and production stoppages. This will ultimately make our customers more profitable and our environment more sustainable.

FIXTURLASER SMC

**Display Unit**
- Dimensions: 200 x 265 x 650 mm
- Weight: 1.2 kg / 2.65 lbs. including battery and rubber protection
- Operating Temperature: -10 ° to 55 ° C / 14° F to 131° F
- Humidity: 95% no condensation
- Environmental Protection: IP65
- Graphic color touchscreen Resolution: 800 x 480 pixels
- Dimension: 7” diagonal (15 x 9 cm /6 x 3.5 inches)
- Battery Life: 10 hours under intense use, High density Li-ion type

**Built-in Pyrometer with Laser-Sighting**
- Range: 30 to 15,000 RPM
- Accurate to 0.1 RPM

**Built-in Stroboscope**

**What’s included: Fixturlaser SMC**
- 1 pcs Fixturlaser SMC DU, 1 pcs Fixturlaser SMC sensor, 1 pcs USB Cable for the wireless sensor (power supply,firmware update), 6 pcs adapter, 1 pcs Fixturlaser SMC power supply, 1 pcs Wireless sensor power supply, 1 pcs Universal tool.

**Main Menu Screen**
1. Start auto diagnostic
2. Start balancing
3. Connect to computer
4. Access to shortcuts (strobelight, pyrometer, camera, screenshots…) and preferences (license, language, type of sensor…)
5. SMC Battery status
6. Wireless sensor connection status. Note: if no icon appears, you must switch the sensor type from wired to wireless in the settings of the instrument

**What’s included: Fixturlaser SMC Balancer**
- Laser tachometer with cable for connection on channel C, supplied with a 5m extension cable.
- USB cable for connecting the Fixturlaser SMC to a computer (reports)
- Magnet holder
- 2 ASH accelerometers, 2 straight cables for ASH, 2 high-power magnets for ASH

**What is included:**
- 1 pcs Fixturlaser SMC Balancer
- 1 pcs USB Cable for the wireless sensor (power supply, firmware update)
- 6 pcs adapter
- 1 pcs Fixturlaser SMC power supply
- 1 pcs Universal tool
- 5m extension cable
- Magnet holder
- 2 ASH accelerometers
- 2 straight cables for ASH
- 2 high-power magnets for ASH

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