

FIXTURLASER®

Patent pending
0201224-3

OL2R

Offline-to-Running Fixtures



Fixturlaser AB develops, manufactures and markets high precision alignment and measurement instruments for industrial purposes.

Your benefits from using the Fixturlaser OL2R fixtures and a shaft alignment system:

- Provides true information on running machine position
- The measurement results require no additional evaluation
- Only two mounting points required
- Results can be printed instantly or stored
- Robust product endurable in tough industrial environment



... about your machine's running position? Rotating machines are easy to align when cold — but are they aligned when running? Like people, machines have individual characteristics requiring individual treatment for optimum performance. Fixturlaser introduces a new and unique product to solve this dilemma: the Fixturlaser OL2R fixtures.

Problem

Machines move from offline to running conditions. How much and in which directions depend on a number of different factors such as work load, machine casing material and thickness, pipe strain, fluid pressure in pumps, draft and more. In order to know how much we have to compensate for this movement, when performing an offline shaft alignment, we need to measure the movement.

Solution

With the OL2R fixture and a Fixturlaser Shaft^{100/200} series alignment system, you can measure the difference of the shaft positions from offline to running condition, *while the machine is running*. The measurement result is then used in the shaft alignment process.

More information

We can provide you with a white paper to expand your knowledge within this field. Visit our web site www.fixturlaser.com for further information.

Example of dynamic movements of "identical" machines

Two identical gas turbines, with sequential serial numbers and installed at the same time, adjacent to each other are performing the same duty, each running a 40 MW generator. Foundations, ducting and connections are identical. However, serious vibrations lead to constant failures.

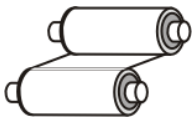
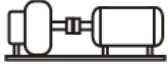
The machines heat up in operation, so the OEM advised a vertical offset between generator and clutch of 1,01 mm for each machine to allow for thermal growth.

However, actual measurements showed that the two "identical" machines do not grow identically as expected.

	Unit #7	Unit #8
Maximum vertical change	0,50 mm	0,76 mm
Steady state change	0,25 mm	0,55 mm

As you can see above, identical machines show a dramatical difference in dynamic movements. This has to be taken into consideration when aligning critical machines with high rpm.

FIXTURLASER®
OL2R



**straight to
the point**

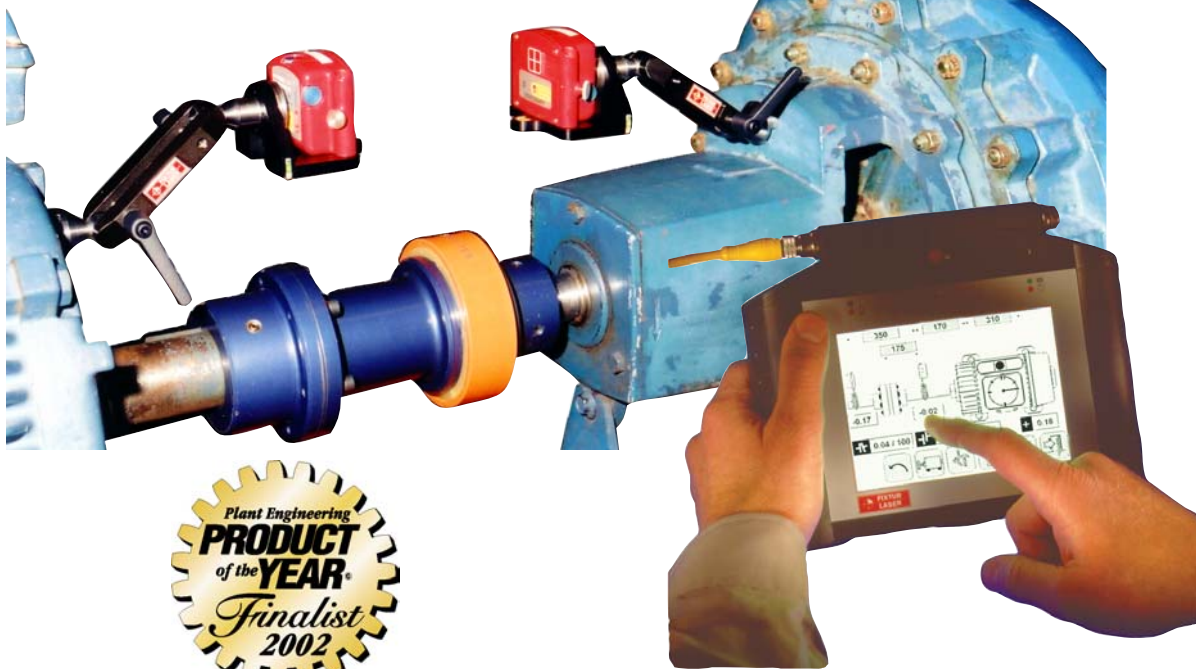
The Fixturlaser OL2R Fixtures

- 1 Robust aluminium case 780x300x140 mm
- 2 Fixtures
- 1 Thread tap
- 1 Drill
- 1 Manual

Weight: Complete case 6 kg

Use of the Fixturlaser OL2R fixtures

To be able to use the fixtures for offline-to-running measurement, alignment and documentation, the fixtures have to be accompanied with a Fixturlaser Shaft¹⁰⁰ or Shaft²⁰⁰ alignment system (see separate brochures).



When and where can the Fixturlaser OL2R be used?

Whenever and wherever you perform precision shaft alignment!

Our representatives are all engineers and technicians with special knowledge and training in the latest measurement and alignment techniques. An extensive service program is provided to support all our customers. It includes telephone assistance, hardware repairs, and software updates as well as training and consultancy regarding measurement applications.



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