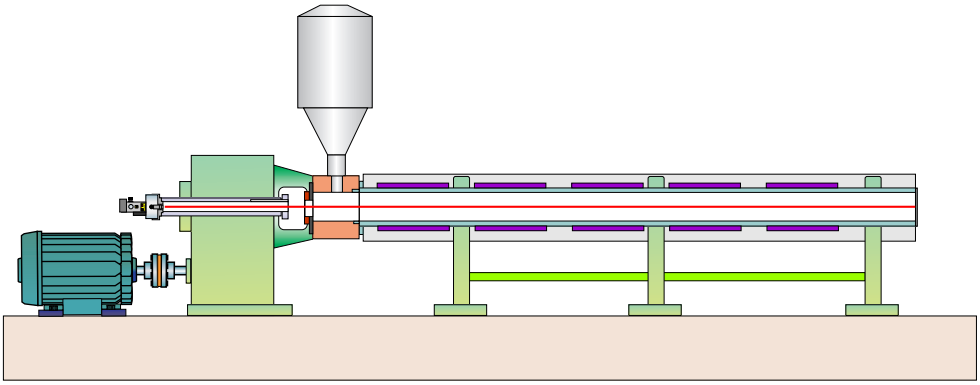
FIXTURLASER®

Extruder



The Fixturlaser® Extruder in short:

- Reduces screw wear and increases production time between service stops
- High precision measurement and alignment with full documentation
- Measures straightness in up to 99 points in two axis
- Measurement resolution down to 0,01 mm
- Printer included

Extruder Alignment System

for Precision Measurement and Alignment of Barrel and Screw Spindle

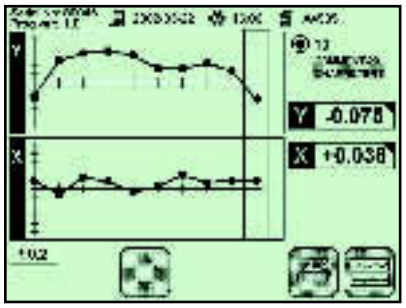
The Fixturlaser® Extruder is a measurement system entirely dedicated to the alignment of extruder barrels. Providing a quick, easy and precise way of measuring perhaps the most sensitive mechanical machine components in the extruder process.

Optimized package

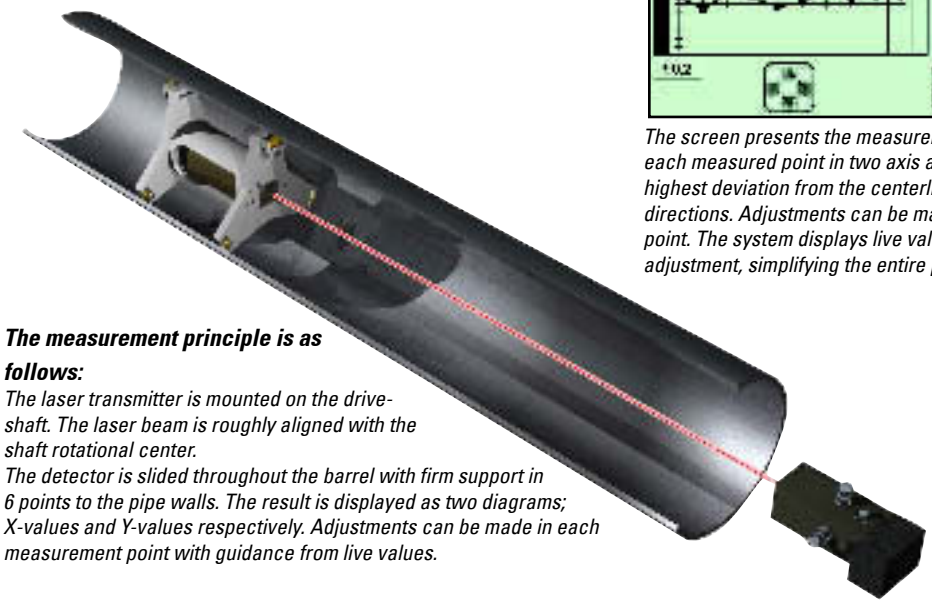
The Fixturlaser® Extruder measures the straightness of the barrel in two axis simultaneously in a certain number of points, defined by the user. It also, and maybe most importantly, measures the barrel centerline position in relation to the rotational center of the screw spindle.

The procedure

Measurements are accomplished by using the rotational center of the extruder screw as a reference. The laser beam aligns roughly with the screw centerline and measurements are taken at specific intervals inside the barrel, in its full length. Each measurement is precisely calculated by rotating the gearbox output shaft, with the laser transmitter attached, a half turn - 180°. The result is presented on the screen with all measurements in two axis.



The screen presents the measurement with each measured point in two axis and the highest deviation from the centerline in both directions. Adjustments can be made in each point. The system displays live values during adjustment, simplifying the entire process.



The measurement principle is as follows:

The laser transmitter is mounted on the driveshaft. The laser beam is roughly aligned with the shaft rotational center.
The detector is slided throughout the barrel with firm support in 6 points to the pipe walls. The result is displayed as two diagrams; X-values and Y-values respectively. Adjustments can be made in each measurement point with guidance from live values.

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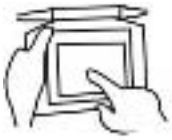
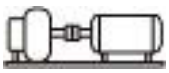
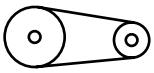

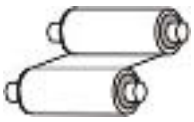


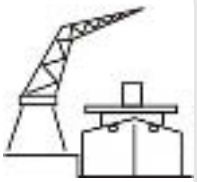
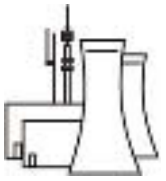

straight to the point

The Fixturlaser® Extruder

1 Carrying case
1 Dual axes detector unit R210
1 Display unit with software
1 Laser transmitter T110
Brackets and fixtures (user defined sizes)
1 Cable 10 m
1 Measuring tape
1 Tool
1 System printer
1 Manual

Accessories

- Fixturlaser® Documenter measurement database software
- Cable 25 m, 10 m and/or 1 m
- Cable for PC communication
- Measurement probe
- T111 laser transmitter
- T220 laser transmitter
- T210 laser transmitter
- Battery pack for T111
- AC adapter for the display unit
- Leatherette: Protection cover for the display unit.

DU20, Display unit
Handheld battery operated display unit with backlit icon based touch screen interface.

R210, Detector unit
Precision machined, hard anodized, housing with high resolution, 0,001 mm, 2-axis detector.

T110, Laser transmitter
Precision machined, hard anodized, housing with micrometer screws for fine adjustments of laser beam. Battery powered.

The receiver is mounted in a fixture with perfect, springloaded, fit inside the barrel. The fixture is slided through the barrel resting on six wheels providing linear movement.

The laser transmitter T110 is mounted on the gearbox output shaft, shooting the laser beam through the hollow shaft and the barrel.

General facts

Displayed measurement result resolution	0,01 mm (0,1 mils)
Operating temperature range	0-40°C (32- 122°F)
Power supply	All units run on standard batteries.
Operating time	Depending on operation cycle 10 - 20 hrs.

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

FIXTUR LASER

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Specifications are subject to change without notice.

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