



### *Advantages of the Fixturlaser Roll 200 over Optical Alignment.*

Summary: Almost all web process machinery requires proper parallel alignment of rolls to run a quality product. Rollers must be parallel to one another both vertically and horizontally. The Roll 200 makes these measurements as well as flatness leveling of critical forming tables available to your maintenance team.

Consider the following advantages of the Fixturlaser Roll 200:

1. ***Repeatability and Reproducibility:*** Measurements are repeatable if the user consistently repeats the same results at each measurement point from a common setup. Measurements are reproducible if different users reproduce the same data at each measurement point from completely different setups. The Fixturlaser Roll 200 offers superior repeatability and reproducibility. The overall accuracy of any measurement system is dependent upon its ability to measure consistently. Our laser method replaces the human eye with complete electronic detection and therefore removes errors associated with the opinions of different users.

#### ***The Laser technology enhances data reliability:***

- Average Mode adds precision and repeatability by accurately measuring beam movement, then averaging the values. Optics rely on the user to be “averaging” fluctuating values by eyesight. Precision measuring in an industrial environment will always involve vibration and heat fluctuations, now we have a way to quantify and filter out these effects.
- Digital Inclinator and fixturing of the detector guaranty positioning in the measurement plane: Optic scales must be leveled in two planes to ensure proper location.
- Measurements may be taken on either side of a roll. Digital Inclinator on detector always correctly documents which direction the roll is misaligned. Optics teams must document with proper sign where each roll sits. Confusing signage is a common optical mistake.

2. ***Ease of Use:*** Fixturlaser engineers every system with ease of operation in mind. The Roll 200 system is easy to learn and easy to use, with an intuitive touch screen graphic interface. The importance of the simplest tool for the job is twofold:
  - Roll 200 requires less up front training than optical instruments
  - Technicians retain the ability to use the Roll 200 system at irregular intervals
3. ***Live Measurements:*** When it is time to start moving rolls, the user holds a live readout of the current position of the roll as it is moved. The live measurement is displayed to the mechanic right there at the movement point of the roll. Optics cannot offer this feature. The optical measurement is read by the person looking through the scope, which is located along side the machine.
4. ***Speed:*** The Fixturlaser Roll 200 sets up to take measurements much faster than optical instruments because it “bucks in” to a reference electronically. Laser setup times average less than 15 minutes. Combine faster setup times with live measurements and ease of use, and the overall time to align your rolls is significantly lowered.
5. ***Documentation:*** All roll measurements store directly in the display unit. Documentation is completed when each alignment is downloaded to the Fixturlaser Documenter software. Again, the possible errors associated with paper documentation are eliminated. Electronic documentation also allows the technician to change references in order to determine the most efficient rolls to move.

Many of our customers have always had doubts about optical alignment results, mostly due to the variability of one user to another. Laser technology addresses this doubt, allowing companies to take on roll parallelism with confidence, not with question. Predictive maintenance teams will never go back to dial indicator alignments or listening to a bearing with a screwdriver. Similarly, you will be so pleased with a laser roll alignment purchase, that optics will become a technology of the past.

Fixturlaser offers a wide range of laser alignment systems for shafts, rolls, extruders, turbines, and many other precision alignments. Your Fixturlaser Roll 200 may be upgraded in the future to include these capabilities. Since we build all our systems with common display units and detectors, your cost for upgrading is significantly less than acquiring separate lasers for each measurement.

