Fixturlaser NXA pro
Quick tips
1. Rough Alignment
   • Vertical: Place scale or straightedge on highest hub and raise or lower the movable shaft to within 0.5 mm of the stationary hub.
   • Horizontal: Place scale or straightedge on hub nearest to you and adjust the movable shaft to within 0.5 mm of the stationary hub.

2. Correct Obvious Soft Foot
   Loosen all the bolts and find any obviously loose shim packs. Add shims as needed to make a snug fit.

3. Follow Tightening Sequence
   Follow the same sequence throughout the alignment process, and tighten in 3 passes: snug first, 50% on second pass, completely tight on the third pass. (View sequence on next page)
4. Make a Final Soft Foot Correction

Loosen one bolt at a time and check for soft foot with a 0,05 mm shim or feeler gauge. Correct any foot with 0,05 mm or more of soft foot, then tighten the bolt before proceeding to the next foot.
Set Up

1. Turn on the Fixturlaser NXA Display Unit.
2. Mount the ‘S’ sensor on the stationary shaft or coupling hub and hand tighten the nut. Turn the sensor on by pressing the power button.
3. Mount the ‘M’ sensor on the movable shaft or coupling hub and hand tighten the nut. Turn the sensor on by pressing the power button.

Start the Horizontal Alignment Program

1. From the main menu on the display unit touch the horizontal alignment icon.
2. The lasers will turn on and the screen graphic will show the orientation of the sensors.

Aim the Lasers

1. Loosen the green clips and slide the sensors up or down until the line laser beams hit the middle of the opposite sensor. Note that the sensors will be at different elevations.
2. The display unit screen will show green lights next to each sensor to confirm that the lasers have been acquired by the sensors.
3. Using the wrench, tighten the nuts another half turn.
**Enter Dimensions**

1. Touch the tape measure icon on the moveable machine image.
2. Measure the indicated dimension to the nearest 1 mm for coupling dimensions or 2 mm for foot dimensions enter using the keypad. Then press the check mark to move to the next dimension. Continue and enter all dimensions.
3. Select the RPM of the equipment to set the alignment tolerances, then press the check mark.

**Measure Misalignment**

The two preferred measurement methods:

Express  
Tripoint (used in this example)

1. Select a measurement method by touching to go to the toolbox.
2. Touch the measurement icon on the stationary machine. The measurement mode screen will open. Select the Tripoint method and touch the check mark.
3. Touch the check mark again to return to the alignment measurement screen.
4. Rotate the sensors to the 9:00 position and press the flashing measurement button.

5. Rotate the sensors to the 12:00 position, being sure they move outside the red portion of the circle on the screen. Press the measurement button again to take the second measurement.

6. Rotate the sensors out of the red portion of the circle towards 3:00.
Press the measurement button again to take the final reading.

The results will be displayed on screen.

Evaluating the Results

1. Vertical results are displayed at the top of the screen, horizontal results at the bottom.
2. Green coupling icons indicate values which are in tolerance.
3. Orange values are within 2x tolerance.
4. Red values are more than 2x the tolerance level.
Using the Verti-Zontal™ Process

**First Correct the Vertical Misalignment**

1. Press the shim icon in the bottom right corner of the screen. Then press it again on the confirmation pop-up screen.
2. Loosen all the bolts on the movable machine.
3. Follow screen instructions for removing or inserting shims.

*Do not re-tighten the bolts.*

**Next Correct the Horizontal Misalignment**

1. First press the ‘live reading’ icon in the bottom right corner of the screen.
2. To ensure the live readings are for the horizontal direction make sure the sensors are at either 3:00 or 9:00.
3. If the sensors are not in proper position, a pop-up will appear showing their position and with narrow green slivers indicating where the sensors must be in order to take live readings.

4. Make the largest adjustment first. The arrows indicate the direction of adjustment.

5. Continue to adjust the movable machine, watching the live readings, until both the angle and offset are within tolerance.

6. Tighten the bolts using the tightening sequence established in Pre-Alignment.

7. Some machines move laterally when tightening the bolts. Make sure that the displayed values remain in tolerance as you tighten the bolts.
Re-Measure

1. Press the re-measure button, then press it again on the confirmation pop-up screen.
2. Re-measure to verify the results are within tolerance. If they are not, repeat the Verti-Zontal™ Correction Process (top of page 7).

Document the Results

1. Press the file save icon.
2. Press the white file name box to open the keypad. Enter a filename and then press the check mark.
3. Press ‘OK’ again to save the file in Measurements folder. You will see the saved image on screen for a few seconds, then return to the results screen.
Welcome to our world

Since the very beginning in 1984, ACOEM AB, (formerly known as ELOS Fixturlaser AB) has helped industries throughout the world to achieve more profitable and sustainable production. We have reached where we are today by having the courage to think beyond the norm and follow slightly unconventional paths. We have had the courage to make mistakes and find new directions. Through our resolve, ambition and knowledge we have become a global player and a leader in innovative, user-friendly shaft alignment.