



Aligning Long Work Pieces Requiring Use Of A Steady Rest In Lathes

- 1) Mount workpiece in lathe as usual, levelling workpiece as closely as possible in the steady rest and zeroing the end in the chuck carefully.
- 2) Mount Laser on the chuck (not the workpiece).
- 3) Mount Receiver on the workpiece just in front of the steady rest. (See Figure 1).



Figure 1

- 4) Turn ROTALIGN® PRO on ON OFF.
- 5) In Program Manager, select the Align Shafts application () with the  softkey.

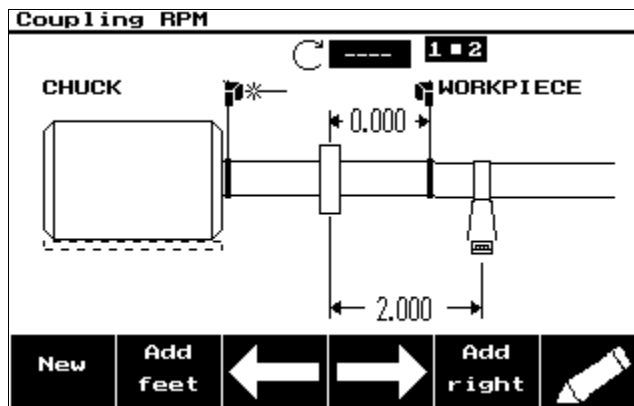




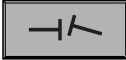



Figure 2

- 6) Create a 2-machine setup with left machine stationary (the chuck), right machine with two footed support (the workpiece), and single plane coupling with “angle” selected as the display format. See Figure 2.
- 7) Clear any diameter, enter distance Receiver to coupling center as zero, and enter distance coupling center to foot equals receiver to location of steady rest adjustment screws.
- 8) Turn on the laser, press the  key, and center the beam.
- 9) Now rotate the chuck and workpiece to take readings, and press .
- 10) Now press  and rotate chuck and workpiece again to retake readings. Press  and compare the repeatability of your readings. You may now average both (or more) readings together if you wish.
- 11) Press the  key. (“Coupling” results will display the angle in mrad (mils per inch) of the workpiece with respect to the chuck’s centerline of rotation.)
- 12) Press the  softkey (if necessary) to display both vertical and horizontal foot position results.) See Figure 3.

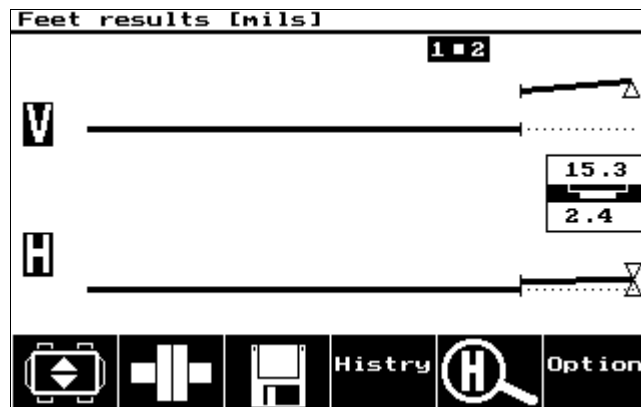



Figure 3

- 13) Press  soft key to initiate the Move function, and wait until move monitoring begins. (If the unit switches to the XY View screen, center the beam, press the OK softkey and wait until move monitoring begins.)
- 14) Turn both lower adjusting screws on the steady rest as needed to move workpiece until vertical and horizontal foot result values show zero. (Remember to loosen upper adjustment screw to raise workpiece!) Tighten upper adjustment screw. (See Figure 4).

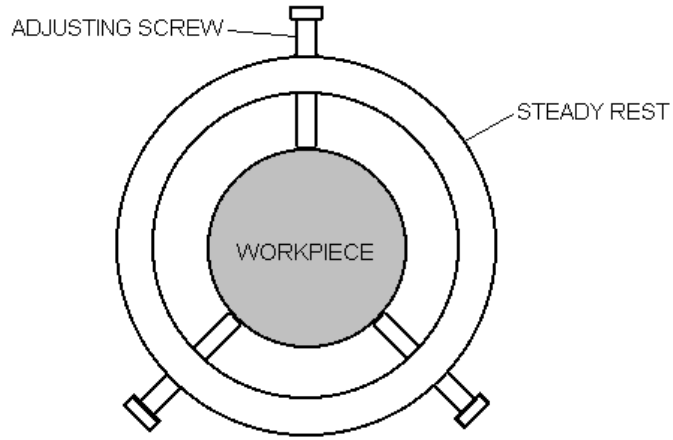


Figure 4

15) Now recheck the alignment and fine tune as necessary, repeating steps 7 through 15. ☐

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