

Stationary Machine Adjustments

This note is intended for situations when corrections have to be made at the stationary machine (STAT) once it has been determined that the MTBM cannot be shimmed or moved. The required STAT corrections can be obtained from the Optalign without taking new readings.

Overview

After taking alignment readings, from the RUN mode (any depiction that shows feet corrections) press **RCL** twice. Optalign will now display the distance from laser-to-front-foot of MTBM. Press **CLR** to clear that distance and enter the distance laser-to-front-foot of STAT with **negative** sign. Press **ENT** after keying negative number. Press **CLR** to clear the distance from front to back foot of MTBM and enter the distance from front-to-back-foot of stationary with **negative** sign. Press **ENT** after keying in negative number.

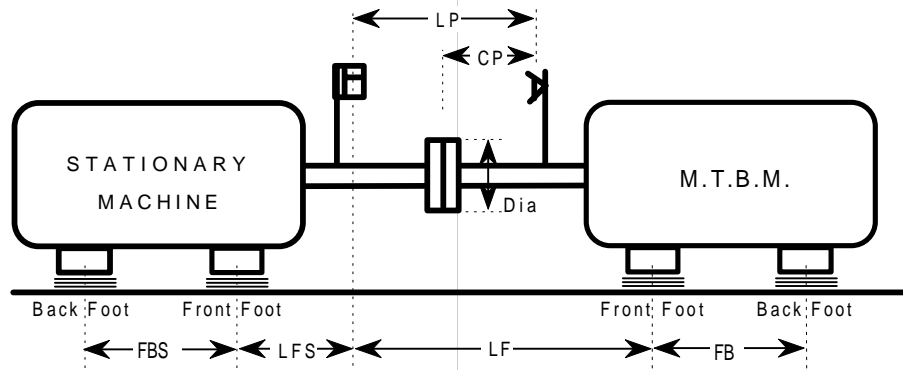
Optalign always displays the corrections needed to position the MTBM centerline colinear with the STAT centerline. The corrections needed to position the STAT centerline are just the MTBM corrections with the opposite sign. For the sign changed corrections to be useful, they must be located on the STAT machine. The negative feet distances entered in the preceding paragraph serve to locate the correction points at the STAT feet.

Therefore, if Optalign indicates shims must be added, then shims must be removed and vice versa. Use the move function by setting the system at the 1:30 clock position. Then move stationary machine in the opposite direction from that shown in the display until values approach 000.0.

LP = Laser-to-prism
 LF = Laser-to-front foot of MTBM
 FB = Front-to-back foot of MTBM
 LFS = Laser-to-front-foot of STAT
 FBS = Front-to-back foot of STAT
 CP = Coupling-center-to-prism
 DIA = Coupling diameter

VO = Vertical offset
 HO = Horizontal offset
 VA = Vertical angularity
 HA = Horizontal angularity

Note: Coupling results will be those of the MTBM shaft with respect to the STAT shaft.



Procedure

System is set in usual manner; laser on stationary (STAT), prism on MTBM.

- 1) **ON**, **/**, **ENT**
- 2) Enter LP, **ENT**
- 3) Enter LF, **ENT**
- 4) Enter FB, **ENT**
- 5) Take alignment readings in at least 3 clock positions.
- 6) **RUN**
- 7) Record feet corrections.
- 8) **□**
- 9) Enter CP, **ENT**
- 10) Enter 10" DIA. **1**, **0**, **ENT**
- 11) **RCL**, **RCL**, **RCL**
- 12) Record VO, HO, VA, HA. If corrections must be made at stationary machine, then:
- 13) **RUN**
- 14) **RCL**, **RCL**, Optalign will display distance laser-to-front-foot of MTBM.
- 15) **CLR**, **-**, LFS (LFS must be keyed in with a negative sign), **ENT**

- 16) With the front-to-back-foot distance displayed, press **CLR**, **-**, FBS (FBS must be keyed in with a negative sign), **ENT**

- 17) Optalign will display correction for stationary machine but in opposite direction.

If vertical correction is negative, add shims.

If vertical correction is positive, remove shims.

If move is negative, move toward 3 o'clock.

If move is positive, move toward 9 o'clock.

- 18) Carry out suggested shimming or moves.
- 19) To recheck alignment, leave STAT dimensions already in Optalign. Take new alignment readings. Computer will display corrections for stationary machine — in opposite direction.

To Move

- 20) **MOVE**
- 21) Set system at 1:30 and zero display.
- 22) **MOVE**
- 23) Move feet in the direction opposite to that shown by the Optalign display until values approach 000.0.