

## 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.

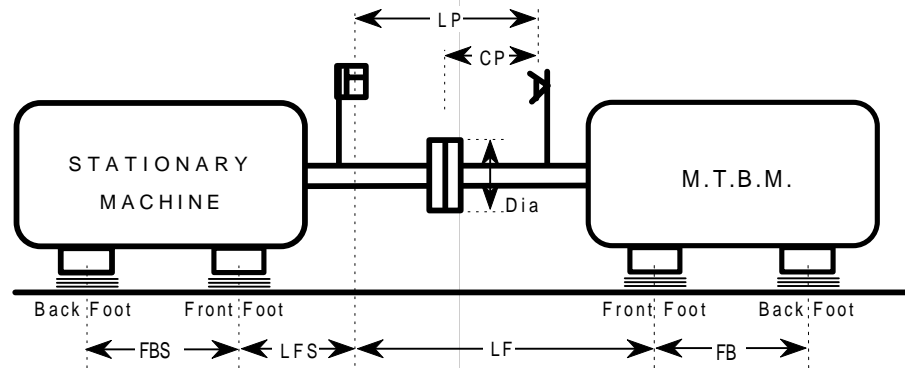
### Overview

After taking alignment readings and recording feet corrections and coupling results, press **DIM**, **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 stationary 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) , ,
- 2) Enter LP,
- 3) Enter LF,
- 4) Enter FB,
- 5) Enter CP,
- 6) DIA = 10"
- 7) Take alignment readings in at least 3 clock positions.
- 8) , record feet corrections.
- 9)
- 10) Record VO, HO, VA, HA. If corrections must be made at stationary machine, then:
  - 11)
  - 12) , , Optalign will display distance laser-to-front foot of MTBM.
  - 13) , , LFS (LFS must be keyed in with a negative sign),
  - 14) With the front-to-back-foot distance displayed, press , , FBS (FBS must be keyed in with a negative sign),
  - 15) , 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)
- 21) Set system at 1:30,
- 22) Zero display.
- 23) Move feet in the direction opposite to that shown by the Optalign display until values approach 000.0.