

Service Tips

metsonews

Issue 41 | June 2014

METSO'S NEWSLETTER FOR MINING CUSTOMERS



Rotary kilns

Rule of thumb for adjusting rollers

A simple way to remember what an adjustment on the rollers will cause to the movement of the kiln.

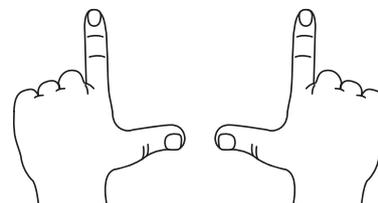
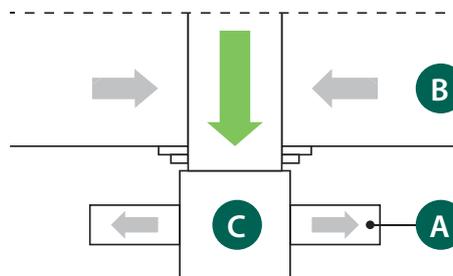
Ideally the kiln should be set to float the thrust riding ring between the upper and lower thrust rollers, maintaining even riding ring to roller wear and minimizing the load on the thrust rollers.

This is accomplished by skewing the roller shafts at slight angles to the kiln shell and is also known as training the kiln.

Training the kiln takes adjustments made in small increments. Place dial indicators on the bearing housings to measure and record the movement of each bearing. Movements should be limited to 0.005" to 0.020" (0.12 mm to 0.50 mm) at any given time.

The results of an adjustment may take several hours to show the full effects of any roller move. All movements of all bearings should be recorded during the adjustment process, as should all future adjustments of any bearing. These records will be an aid to maintain proper kiln alignment.

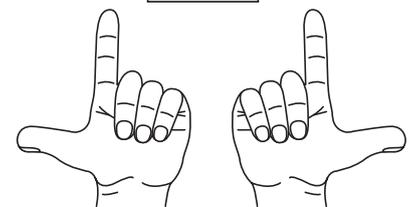
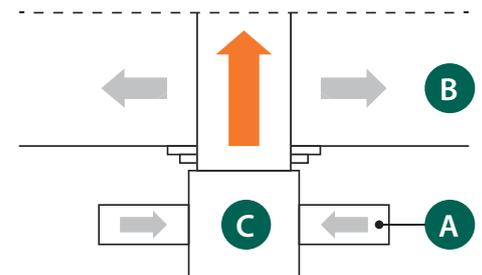
When facing down running side of kiln, hands out with palms down as shown in the illustration below:



A) Bearing roller
B) Kiln
C) Carrying roller

Index finger indicates bearing (A) and direction to move. Kiln (B) moves in direction indicated by thumb of the same hand.

Alternatively stand on the up running side of the kiln. Now with palms facing up an inward movement on the right bearing will move the kiln to the right. The carrying roller will move opposite to the kiln.



A) Bearing roller
B) Kiln
C) Carrying roller

After all carrying rollers have been adjusted, the carrying rollers and riding rings may not have full contact across their faces. No changes in carrying roller adjustment should be made. It is better to allow the rolling surfaces to wear in to full contact than it is to cut the rolls obtain full contact.

When support roller adjustments are made, observe the bearing temperatures and the kiln drive amperage. Sudden changes in temperature or kiln drive amperage will indicate problems. ■

AUTHOR Alex Merklein

PUBLISHED BY METSO BRASIL IND. E COM. LTDA

Questions should be sent to the e-mail below. Your question can be the subject in later issues.

E-MAIL marketing.br@metso.com | WEBSITE www.metso.com

 metso
Expect results

All rights reserved.