
February 15, 2010

Storage of Spare Motors, Follow-up

It appears the storage of spare motors is a pretty hot topic for many of the motor programs out there. After a short reminder on the importance of rotating the shafts of stored motors and the need to minimize their exposure to vibration many of our customers wrote back to share their best methods. To everyone who took the time to write us back thank you and here are some of the comments for everyone to see.

One customer made a very good suggestion on how to minimize waste and vibration. At their facility not only do they store their motors on wooden pallets, but they use their worn conveyor belts as added vibration absorbing padding material between the pallet and the motor.

Several customers mentioned that they turn their shafts annually as part of their procedures to maintain the grease coating on the rollers of the bearing. Two even mentioned that they make sure to rotate the shafts several turns in both directions to ensure a really good coating. Semiannual shaft rotation was the most commonly reported periodicity for shaft rotation.

Another customer reported that the rotation of the motor shaft was to occur quarterly. All motors are stored so the shafts face the aisle between the storage racks. Once a quarter they rotate the shafts 2 and $\frac{1}{4}$ turns. During the first quarter all keyways will be at zero degrees (facing upwards). Once they move into the second quarter all the keyways will be at 90 degrees and so on. This serves as a quick visual check that allows anyone to know if the shafts are being rotated.

In "Principles of Large AC Motors" by the Electrical Apparatus Service Association it is recommended to rotate the shaft monthly. However, each motor and bearing manufacturer have their own recommendations. One motor manufacturer provides a chart ranging from weekly to every two months based on storage conditions. The one thing we do know is the shaft needs to be rotated to maintain the health of the bearings.

You are invited to submit an Electric Motor Testing Tip of your own and receive a free PdMA mug or hat if we publish it! Contact Lou at 813-621-6463 ext. 126 or lou@pdma.com.