

## Issue Focus: Grease Lubrication

### TIP #1

Store grease in a cool, dry indoor area where there is minimal airborne debris. Where necessary, grease should be brought to a satisfactory dispensing temperature just before being put into service.



### TIP #2

In a humid environment, condensate can form in rolling element bearings and cause corrosion, leading to a reduction of the bearing life. The condensed moisture's effect can be reduced by carefully choosing the grease lubricant. Greases thickened with sodium soap will absorb (emulsify) large quantities of water, but may, however, soften it to such an extent that the grease flows out of the bearing. Lithium soap greases do not emulsify water, but with suitable additives can provide good protection against corrosion. There are also a number of greases available containing synthetic thickeners that offer excellent protection against corrosion, prolonging the bearing life.

### TIP #3

The consistency of the grease can be critical, particularly if it is to be pumped through a centralized system. Most automatic lubricators require an NLGI 1 or 0 grade grease.

### TIP #4

When repacking grease guns from a pressure line, wipe down the fitting and the pressure line to prevent contamination. When repacking with tubes, move to an environmentally controlled area, such as a control room, to replace the tube.

## **TIP #5**

If you use several greases at your facility, then it is important for them to be compatible with one another. A safe first assumption is that they are not compatible unless proven otherwise. To confirm compatibility, have your supplier or an independent lab run a shear stability test on the greases individually and then repeat the test using a mixture of the products that you wish to cross-check. Ideally, you would like to see little to no change in the consistency of the greases either separately or after mixing.