# Viscosity guide for industrial lubricants

Discover how we can help your business achieve its true potential! (Talk to Us)



First and foremost, we must emphasize that the specifications for the proper lubricant to be used should be found in the equipment manufacturer's manual. After all, no one knows better what the equipment actually requires than its manufacturer. Therefore, one should always study the manual to avoid making mistakes that can damage the equipment. Incorrect oil determination is the most common cause of lubrication-related breakdowns.

Lubricants have direct interactions with other operational parameters. As a result, they can be used to determine which oil and viscosity are best suited. When making a purchase, keep these four points in mind at all times.

### Industrial input costs

A fluid subjected to high loads, for example, for the conveyor belts discussed above, it must resist the pressure imposed without rupturing the lubricating film. The one used in a steel mill's blast furnace, for example, must survive the asset's continuous operation as well as the high temperatures. Thus, the service to which the lubricant will be subjected must be thoroughly examined in order to obtain the greatest performance.

#### Temperature

As previously stated, temperature has a direct effect on the active's viscosity. In cold climates, a less viscous oil is required to allow the system to function properly. However, it is necessary to consider not only the ambient temperature, but also the operational temperature, which increases significantly during operation.

## Environment

When selecting a lubricant, it is also necessary to consider the location of the equipment. For example, in agribusiness, the frequent exposure of machines to dust can raise the risk of oil contamination. In steelmaking, the high temperatures, which are a decisive element in the fluid's degradation, require the use of more robust inputs that can endure heat without losing their qualities. High-humidity environments also require specific consideration.

# **Application / Use**

This problem is an excellent illustration of how seriously the indication of usage should be treated. Of course, blast furnace turbines have special specifications and lubrication requirements in the steel industry. However, maintenance specialists frequently apply hydraulic oils to these components. While insufficient lubrication may not cause immediate damage, over time the effects of insufficient lubrication can cause major difficulties, including equipment failure.

There are several classes for lubricants based on their intended application. The viscosity of automotive oil is determined by SAE (Society of Automotive Engineers), while the ISO establishes the parameters for industrial use.









To learn more, click <u>here</u> or scan the QR code



Discover how we can help your business achieve its

true potential!