

USE OF ANTIFOAMS IN MAINTENANCE OILS

POSSIBLE CAUSES OF FOAM

Foam in lubricating oils may be caused by a variety of conditions. Physical conditions, such as excessive aeration or cavitating pumps, can introduce air into the oil. Contamination in the form of water or particulate can also contribute to foam. Elimination of these conditions is the best way to control foaming.

TYPES OF ANTIFOAMS

There are two popular chemistries for oil antifoams – silicone and non-silicone. Careful consideration needs to be made when selecting which antifoam to use. The biggest concern is with silicone based defoamers. These defoamers have the potential to cause “fish-eyes” if exposed surfaces are to be plated or painted.

USE OF ANTIFOAMS

The use of antifoams should only be considered when foaming is excessive and is causing issues with the performance of the system. A few bubbles on the surface of the fluids would not warrant the use of an antifoam.

Once it has been determined an antifoam is needed, identify the amount needed to treat the system. Be sure to follow the antifoam manufacturer’s recommended dosage and never exceed the maximum. Dividing the dosage in half and making the addition over a period of a couple days can help ensure the system is not overdosed. In this scenario, the foam can be re-evaluated after a day to determine if the second dose is needed. Overdosing an antifoam can promote foam and render the oil unserviceable.

For best dispersion of the antifoam, it is recommended to add the antifoam when the oil is warm, preferably at operating temperature and when the unit is in operation, if that can be accomplished in a safe manner. If possible, disperse the antifoam in fresh oil or warm oil withdrawn from the reservoir prior to adding to the unit. It should be added downstream of any filters to prevent the filters from removing the antifoam before it can be dispersed.

If treating a Molub-Alloy branded gear oil, the presence of lubricating solids in the product can interfere with the effectiveness of the antifoam. It is recommended to contact your Sales Representative or Application Engineer for assistance with these fluids.

Industrial Technology Deployment

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