

CUTTING OIL MAINTENANCE PROCEDURES

Cutting oils, just as coolants, can become contaminated by various items overtime that will inhibit or negatively affect the cutting oils performance. Hangsterfer's Hard Cut is a high performance fluid designed to maintain a high level of consistent performance. The following preventive maintenance and countermeasure are recommended.

Common sources of contamination and corresponding remedies:

Contaminant: Machine Lubricants which include Way, Hydraulic and Spindle Oils.

Remedy: Use Hangsterfer's Machine Lubricants. In most bar feeder lubricating systems a cutting oil can be used as the bar feed lubricant. As the bar indexes and small portions of the bar feed lube enter the system (in this scenario cutting oil) it will not dilute the properties of the cutting oil used in the machining process.

Contaminate: Cleaners and solvents.

Remedy: If an aqueous cleaner is required, apply Hangsterfer's Res-X and if a non-aqueous solvent is required, apply Hangsterfer's Ozonic. Special consideration should be made with Hangsterfer's Ozonic 203; Ozonic 203 is 100% compatible with Hangsterfer's cutting oils. Ozonic often replaces the need and use of mineral spirits used in and around the machining process. Ozonic 203 can be used to clean off cutting oil and once saturated with the cutting oil it can be added to the machine using Hangsterfer's cutting oil.

Contaminate: Moisture from aqueous cleaners, cross contamination by coolants, wet air lines and humidity.

Remedy: Use Res-X or Ozonic in place of aqueous cleaners. Make sure all parts are dry and free from coolants before entering a machine using cutting oil. All air is wet and the water should be blown off before using the air on the cutting oil system. Decantation can help remove accumulated moisture.

Contaminant: Metal Coatings.

Remedy: Request clean surface material from the raw metal supplier.

Decantation: In addition, the Hard Cut Series is designed to reject contaminants to a large degree. A screw machine, for example, can be drained once every 3-6 months, depending on the use, and the contents can be placed in a clean, empty container or decantation tank. Allow the contaminants to settle out of the cutting oil for 2 to 7 days. The contaminants will condense to the bottom of the container. Clean all the sludge and metal fines (swarf) from the machine itself. Remove from the container the top 80-95% layer of cutting oil, being careful not to disturb the bottom layer. Add to this fresh cutting oil to maintain the proper fluid level.

The above are the added value and advantages of using Hangsterfer's Hard Cut cutting oils and fluids

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