

Maintenance Hassles Eliminated with Molub-Alloy 6040

MACHINERY MANUFACTURE (USA)

Chuck Grease

Castrol Molub-Alloy® 6040/460-1.5

ANNUAL SAVINGS: 67% reduction in grease usage



THE SITUATION

A large manufacturer of specialty washers was experiencing high usage of their “premium” chuck grease. The centrifugal force of the chuck and the use of an oil-rejecting synthetic coolant was causing the chuck grease to sling out prematurely. This increased the maintenance need on these machines and caused intermittent chuck failures.

Additionally, the excess grease fell onto the slideways and formed sticky residues that caught chips and caused corrosion.

BEFORE

- Excessive maintenance (daily)
- Intermittent chuck failures
- Rusting on internals of the machine tool
- Coolant contamination

AFTER

- Reduced maintenance (weekly)
- No chuck failures
- Cleaner, rust free machines
- Reduced coolant contamination and extended coolant life

THE CONCLUSION

- Compatibility analysis was done to ensure that Molub-Alloy 6040/460-1.5 could be safely used with the previous grease.
- The previous grease was applied nearly daily while the Molub-Alloy 6040/460-1.5 is only applied weekly or less.
- Grease usage has been reduced by 3 times, and the maintenance burden has been lowered by almost 5 times.
- Reduced total grease cost by \$2,000.
- Reduced usage by 67%.
- Reduced total operating costs (downtime, labor, parts, etc.)
- Increased machine tool uptime.

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RECOMMENDATIONS

Molub-Alloy 6040 is ideally suited for chuck applications due to its high resistance to coolant wash-out, along with the excellent EP protection package to prevent component wear.

In this case, the customer was having constant maintenance problems with the previous grease in their Haas lathes, including the need for frequent re-greasing and chuck failures. This was related directly to the poor coolant resistance of the grease and separation of the oil & thickener under centrifugal force.

CONCLUSION

Molub-Alloy 6040 significantly reduced the frequency of re-greasing and eliminated chuck failures & residue/corrosion problems from the leaky grease.

The result was 67% reduction in grease usage (\$2,000 savings) and much lower maintenance attention needed.

“I am using 1 tube of Castrol for every 3 tubes of the competitor’s grease and I am very happy...I even told our R&D department about this product.”

– CNC Foreman



OTHER POTENTIAL APPLICATIONS

Molub-Alloy 6040 is a calcium sulfonate complex grease formulated for maximum resistance to water wash-out and high EP protection. It is an excellent choice for areas with heavy loads, water contamination, and/or high centrifugal force (such as chucks and couplings).