THE QUICK GUIDE TO GETTING A NATURAL ADVANTAGE IN PERFORMANCE

THE CHALLENGE

The high speed, highly accurate cutting and lubricating demands of manufacturing often means that mineral neat oils are the only viable solution. In terms of enhanced cutting and grinding techniques, reduced friction and tool wear, they deliver the required performance. But this is often achieved by accepting certain compromises relating to increased safety risks and factory cleanliness because of high levels of misting and/or smoke.

THE ISSUE

This view that performance cannot be achieved while minimizing the impact on other aspects of the operation is widely shared in the manufacturing industry. Issues caused by mineral-based cutting fluids have long been overlooked. Weaknesses such as varnish or high temperatures, which do not allow for high feed and speed rates, tend to be accepted in pursuit of the performance advantages that are essential to production demand and quality.

Metalworking professionals are understandably reluctant to jeopardize output levels, particularly when disruptions are not necessary and especially for commodity components like lubricants. However, downtime and operator safety risks are commonplace and this presents an increasingly frustrating situation for the manufacturing industry.

> "CASTROL'S PLANT OIL BASED METALWORKING FLUIDS ANSWER THE CHALLENGE OF ATTAINING ACCEPTABLE PERFORMANCE LEVELS THAT CUT THE COMPROMISE."

THE SOLUTION

Castrol's plant oil based metalworking fluids answer the challenge of attaining acceptable performance levels that cut the compromise. Performance Bio NC fluids have been developed to help overcome the problems of oxidation stability in plant or plant-based products.

This has been evidenced in recent laboratory tests* and in customer trials** that show Performance Bio NC fluids can deliver improvements in oxidation stability that are up to 50 percent better than other plant-based lubes of a similar grade and viscosity. Better oxidation stability can contribute to cleaner - and in turn more productive - working environments by avoiding excessive staining or deposits appearing on equipment.

Anecdotal feedback from customer trials also supports that these fluids are believed to offer better performance compared to traditional mineral-based neat oils. Metal working professionals report that Performance Bio NC fluids can reduce the friction between metal surfaces in cutting processes, which could lead to more streamlined, speedier operations. Coupled with this, field test responses suggest that these attributes keep tools sharper for longer and the operating temperatures lower.**

Get your natural advantage in performance.

PERFORMANCE BIO GET A NATURAL ADVANTAGE

This quick guide is part of a trilogy. To find out about value and safety, download our other Performance Bio NC quick guides in the series.

www.naturaladvantage.castrol.com

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* Performance Bio NC cutting fluids were tested using standard industry methodology to assess the oxidation stability of each grade in the range against existing Castrol and competitive mineral and ester-based products of a similar grade and viscosity.

**Based on feedback received from Castrol customers in the USA using Performance Bio NC fluids.

IT'S MORE THAN JUST OIL. IT'S LIQUID ENGINEERING.

Castrol Industrial