

## **PROKUT EP 38 ES –Next Generation Technology Lubricant**

**Kouper Lubricants –“Every drop adds value”**

**PROKUT EP 38 ES - “One stop solution for all your machining problems”**

Case background:

The most challenging phenomenon in the Machining process today is an uncertainty in achieving the maximum equipment efficiency in its operations consistently with the optimal consumption of the lubricant stock used in the any given operating environment. Application Engineers across the industry is looking for a better solution which could provide their machining operations successful as well as economical. Where do we achieve that is a big challenge ahead of an every application engineer today.

Let us have look in the current scenario to understand the exact problem.

In any conventional machining process, the coolant is the vital factor in shifting the curve towards right in achieving the maximum efficiency. The lubricant used in this process is flooded between the cutting tool and work tool interface. If we look at this process closely, it is clearly evident that the higher volume of the lubricant used and its subsequent effects like greater difficulty in maintaining the quality consistency of the lubricant over the period of time, contamination, recirculation or top up, and its disposal. Whilst lower equipment efficiency is a challenge to tackle from one end, nevertheless this is the cost to the company as the flooded lubricant must factor the cost of its disposal in to their machining costs.

Way ahead: How does Kouper approach this problem for their customers?

Kouper Lubricants presenting for its customers with an alternative method to save costs, improved machining efficiency, eliminating the complexity in dealing the conventional lubricant stock and its disposal.

What is that everyone is pondering of?

In fact all our Kouper customers are scrambling to implement this new technology called Minimum quantity Lubrication (MQL). When we talk about MQL, the most critical element of this technology is the type of the lubricant stock in application and its characteristics. This is because the type of the Lubricant stock provides consistency in operation and flow rate and flow rate adjustability. Flow rate adjustability is critical as each operation could require a different amount depending on the tool, the material, the speed and the depth of the cut. Therefore the success any MQL system highly depend on the type of the Lubricant stock in application and its characteristics. The excellent lubricity of a good MQL lubricant means that the majority of the heat is transmitted to the chip and exists the interface as chips are expelled. This lubrication and transfer of heat keeps the cutting tool much cooler and reduces the wear. The friction and heat in the interface vaporizes the small amount of lubricant and leaves cutting tool parts, equipment and floors dry and clean.

To meet all these above challenges of MQL, Kouper offers “**PROKUT EP 38 ES**” a fully synthetic lubricant base stock with the following features.

- **Flash point:** In the range >300 – 310 degrees --- Reduces the vapor /mist formation during the operation
- **Fire point:** In the range 318-325 degrees – Ensures safe operation.
- **Lubricant chemical composition:** Fully synthetic stock contains polyalcohol’s, esters, olefins and additives

Characteristics of “**PROKUT EP 38 ES**”:

- The Kinematic viscosity @ 40 °C in the range 38-42 cst will provide better excellent lubrication , consistency in flow rate and increase in tool life.
- Higher viscosity index provides greater Thermal stability and while transfer of heat the lubricant keeps the cutting tool much cooler and reduces wear.
- Lower acid value < /= 0.5 mg KOH/g and Iodine value in the range 72-82 gl/100g gives better oxidation stability and thereby providing excellent protection against pitting/micro pitting in machine bed or corrosion.
- **PROKUT EP 38 ES** with Higher oxidation stability, viscosity index, good Thermal stability, and lower viscosity and excellent lubricity reduces the recirculation, top up and ensures optimal lubricant for adequate coverage proves highly economical and benefits the customer.

**Sounds Interesting?**

To know more about the application and other details of **PROKUT EP 38 ES** Please feel free to write to us at [info@kouper.in](mailto:info@kouper.in) or contact our application engineers @ 9606077921, 9611517922 to assist you. Do Visit our website [kouperlubricants.com](http://kouperlubricants.com) regularly to know our latest products and technologies in Lubrication.

Excellent Lubricity, Excellent viscosity Property, Low volatility, Excellent thermal Stability, Good Filterability, Excellent low temperature Properties, Sustainable, High flash & fire point, Biodegradable.



