

Field Results with Abradable Piston Skirt Coatings: A Technical Deep Dive with Line2Line Coatings and Jon Kaase

In a recent technical webinar, **Line2Line Coatings** and **Jon Kaase Racing Engines** presented an in-depth discussion on the real-world performance of **abradable piston skirt coatings**. Featuring insights from **Andrew Suman** and **Brian Neal** from Line2Line Coatings; and special guest **Jon Kaase**, Owner of Jon Kaase Racing Engines, the session highlighted the latest advancements and field results of this innovative technology.

Revolutionizing Piston Coatings for Performance and Durability

The discussion centered on the unique benefits of abradable coatings, which are designed to **optimize piston-to-wall clearance, reduce friction, and improve heat transfer efficiency**. This breakthrough technology enhances both performance and longevity, making it particularly valuable in **high-horsepower racing engines** and extreme-performance applications.

Jon Kaase, a legendary engine builder and owner of **Jon Kaase Racing Engines**, shared firsthand experience with these coatings in various racing environments. He emphasized how controlled piston expansion and reduced wear contribute to improved power output and reliability.

Key Benefits and Field Results

During the webinar, Andrew Suman and Brian Neal outlined the measurable performance gains observed in **dyno testing and real-world race conditions**. Key takeaways included:

- **Enhanced Ring Seal:** Abradable coatings conform to cylinder walls, leading to improved compression and reduced blow-by.
- **Reduced Friction:** Lowered frictional losses contribute to increased efficiency and horsepower gains.
- **Extended Component Life:** Less piston scuffing and wear result in **greater engine longevity**.
- **Improved Cold Start Performance:** Coatings adapt to thermal expansion, optimizing performance from startup to full operating temperature.

Industry Implications and Future Applications

As **performance engine builders continue to push the limits of efficiency and reliability**, abradable coatings offer a significant competitive advantage. The webinar underscored the importance of precision engineering in modern racing engines, where

even **marginal gains in friction reduction and heat management** can lead to substantial improvements in lap times and overall durability.

Learn More

For those who missed the live session, [the full webinar is available here.](#)