

***11<sup>TH</sup> INTERNATIONAL CONFERENCE ON STABILITY,  
HANDLING AND USE OF LIQUID FUELS  
October 18-22, 2009  
Prague, Czech Republic***

**FILTRATION – AN ATTRACTIVE ROUTE FOR DIRT REMOVAL**

Air BP / Alisdair Q Clark

Air BP, Sunbury Business Park, Chertsey Road, Sunbury-on-Thames, Middlesex, TW16 7LN  
UK.

Cleanliness has been a primary quality requirement for aviation fuels from the dawn of flight to the present day. During this time procedures have been developed to remove dirt and water from fuel throughout the manufacturing and distribution chain, ensuring product delivered to aircraft is of the highest quality. Test methods and specifications have evolved to monitor quality, sometimes simple visual checks and, more recently, sophisticated particle analysis. Within this paper some of the sources of dirt in fuel are examined, including test methods for detection/quantification and remediation technology. Particular focus is placed on the presence of rust and the use magnetic filtration. Contamination sources, particle size distribution and performance are discussed, including operational procedures and environmental impact of magnetic versus conventional filters.