



Rethinking Filter Element Replacement Rules

Extension of aviation fuel filters operational life

As our contribution to industry goals on sustainability, FAUDI Aviation have implemented numerous energy saving practices at our manufacturing facilities and have reviewed our recommendations for filter element changeout.

Recommended Extension of Coalescer Operational Life with EWS is up to 7 Years

Recognising the value both environmentally and commercially of reducing frequency of filter element replacement, we have identified the mechanism to allow an extension of the operational life of filter elements. We are able to offer this extension as a result of the proven value and reliability of the FAUDI Aviation AFGUARD® Electronic Water Sensor (EWS). By continuously monitoring for free water, filter malfunctions and process failures are detected at an early stage. When integrated into a refuelling shutdown system, contaminated fuel is prevented from reaching the aircraft. Through such data-based validation, performance dictates replacement, resulting not only in a reduction in hazardous waste but also in an increase in operational efficiency.

In the three years since the combined filtration technology of Dirt Defence Filters and Electronic Water Sensors were adopted into JIG Standards, confidence has been firmly established. Consequently, we at FAUDI Aviation are pleased to announce an extension to the operational life of our filter coalescers up to 7 years when their performance is monitored by an AFGUARD® EWS, installed downstream of a filter vessel. Unlike a filter water monitor, a correctly functioning filter/water separator (FWS) does not have the ability to shutdown flow in the presence of wet fuel. Filter elements in a FWS may become disarmed at any time by surfactants, thereby allowing water downstream. Additionally, performance of a FWS deteriorates over time in dry fuel, resulting in the current recommended changeout period of 3 years. With an AFGUARD® EWS installed downstream of a filter/water separator, performance is monitored constantly and a system shutdown signalled in case of a high water content.

Recommended Extension of Dirt Defence Filter Operational Life with EWS is up to 7 Years

Along with the extension to operational life of Coalescer elements, we are extending the recommended operational life of DDF up to 7 years!

Hazardous Waste Reduction

Over the extensive operational life of Dirt Defence Filters (DDF) spanning up to 7 years, the resultant reduction in hazardous waste is significant when compared to the waste generated using traditional filter monitors by up to 86%!

The AFGUARD® EWS is qualified to EI 1598 2nd Edition and has been accepted for use as an alternative to Chemical Water Detectors (CWD) by the Joint Inspection Group (JIG) since 2018, as announced in JIG Operations Bulletin 110. When comparing an AFGUARD® EWS with CWD, simple calculations reveal up to a 95% reduction in CWD hazardous waste disposal and a significant reduction in manual handling of aviation fuel samples.

For operators at airports complying with JIG standards, the combination of filtration and sensor technology has become commonplace. Following almost 4000 successful implementations of AFGUARD® at numerous locations worldwide and evidence of safety and reliability for 15 years, the use of electronic water sensors provides the required assurance that every single litre of fuel delivered into aircraft is monitored.

SAP-Zero 2023 is Sustainable!

A zero tolerance limit of SAP on the part of industry and engine OEMs led to the withdrawal of the EI 1583 specification at the end of 2020. Filter monitors were withdrawn from JIG standards in June 2023.