
Scope

The specification EI 1581 6th Edition is applicable to filter/water separators (FWS) intended for use in commercial jet fuel (defined as Category C), military jet fuel (defined as Category M) and military jet fuel containing an additive used to enhance thermal stability (defined as Category M100).

Existing qualifications to the 5th Edition of EI 1581 are recognized as also meeting the requirements of the 6th Edition. A FWS can be qualified by similarity providing that qualification testing is similar to those already tested and provide that the criteria specified in EI 1582 are met.

EI 1581 specification applies to FWSs having either a vertical or a horizontal orientation. FWSs utilising 50 mm (2 in.) nominal diameter elements are only to be fitted in horizontal vessels, with side-by-side element layout.

Main revisions of the 6th Edition

- Inclusion of a new Type S-M (a combination of the former Type S-LD and S-LW)
- Coalescer elements with nominal diameters of 50 mm (2 in.) and 100 mm (4 in.)
- Standardised element lengths for 50 mm (2 in.) nominal diameter coalescer elements
- Deletion of the requirements for FWS vessels and vessel accessories
- FWSs shall be housed in filter vessels meeting the requirements of the latest edition of EI 1596

General information

Category C

For commercial aviation fuel Jet A and Jet A-1. Tested with a fuel containing Stadis 450 and DCI-4A simulating a severe Jet A-1.

Category M

For military aviation fuel. Tested with a fuel containing Stadis 450, DCI-4A and Di-EGME (FSII) used in military fuels.

Category M100

For thermal stability enhanced military aviation fuels (JP8 + 100). Tested with Category M fuel that contains an additional dispersant additive used to enhance thermal stability.

Type S-M

Intended for into-aircraft applications, where low levels of free water and minimal amounts of particulate matter can be expected.

Type S-LW

Intended for into-aircraft applications, where low levels of free water are encountered. Note: EI 1581 5th Edition Type S-LW systems also qualify as EI 1581 6th Edition Type S-M systems at the tested flow rate and conditions.

Type S

Intended for fixed vessel installation, airport fuel depots and upstream terminals, where significant levels of both water and particulate matter can be expected. Note: Qualified EI 1581 Type S systems also qualify as Type S-LW and Type S-M systems at the tested flow rate and conditions.

EI 1581 6th Specification

Specifications and laboratory qualification procedures
for aviation fuel filter/water separators

Aviation fuel supply chain and filtration systems

