

CFCS Fuel training course

5 Day training

[Brief Insite of Diesel fuels, and their applications.](#)

Notes; En590, BS2869, MGO DMA based fuels and applications

[Introduction of bio content and impacts on fuel](#)

Notes; EN14214 Rapeseed, hygroscopic, sterol Glucosides, FBT, water content

[Fuel specification parameters, whats important and why.](#)

Notes; summer & winter grades, cloud points, storage, seasonal impacts and environmental

[Fuel contamination what is it?](#)

Notes; Refining process, Induced contamination, chemical, sodium, calcium.

[What are the impacts and how to identify the forms of contamination?](#)

Notes; FBT, Increased component wear, Failures, ph, bacteria, haze, water

[Impacts on low use stored fuels and comparing to regular use stored fuels](#)

Notes: Seasonal chemical composition changes, environment, degradation, contamination

[Fuel sampling equipment](#)

Notes; thief pumps, core sampling equipment

[Fuel sampling procedures](#)

Notes; flushing lines, clean sterile bottles for every sample

[Where to sample and why](#)

Notes; Bottom, off bottom to end of line equipment

[Forms of contamination-layered](#)

Notes; waxing, pour point depressants, entrained water

[Fuel testing equipment and use](#)

Notes; introduction to ASTM and ISO test equipment and tests performed

[Rectifying issue\(s\) found](#)

Notes; insoluble and soluble contamination

Clement Cottage, Gwern-Y-Brenin, Oswestry, Shropshire, SY10 8AP

Polishing and conditioning what is it and whats the difference.

Notes; insoluble capture & chemical solubilization via chemical additives

What we want to achieve. How can we achieve it?

Notes; understanding from the testing what has been identified and rectifying

Filter bags choices

Notes; Beta ratings/efficiency micron impacts to ISO4406

Gradient filters comparison to bags and what to use and why

Notes; Fuel type and target ISO4406

Importance of re-testing and documenting.

Notes; evidence of the process and validation of the specification

When and how to take an ISO4406 particulate reading

Notes; before, during and ensuring sample is free of oxygen

Documenting readings, why is it so critical

Notes; validating the process and target levels of cleanliness achieved.

The course content will be 80% practical, use of the testing equipment and standards adopted will be constantly discussed. Identifying contamination and out of specification fuel via fuel testing will be a practical exercise and forms part of the student's familiarization and introduction to fuel test equipment. Fuel polishing and Conditioning will be a practical exercise. Note pads will be provided.

The following tests will be completed In-House and forms our Specification & Contamination Test Suit to be used on the course by the students.

1. Iso 4406 Cleanliness to ASTM D8166-21
2. Bio % F.A.M.E To ASTM D8274
3. Density to ASTM D7777
4. Cetane to ASTM D613
5. Clear & Bright to ASTM D4176
6. Debris/MBG = Visual
7. Free water = Visual
8. Biological Activity = ATP AOAC Certified
9. Flash Point to ASTM D975
10. PPM Moisture to ASTM D6304
11. Cloud Point to ASTM D7397
12. Dielectric Strength = In House
13. FBT (Filter blocking tendency) IP 387 Procedure B

Clement Cottage, Gwern-Y-Brenin, Oswestry, Shropshire, SY10 8AP

VAT Reg No: 207 855 691
Reg No: 94315671

Company