

Recent changes in the duty payable to some fuel oil grades has prompted queries around suitable fuel selection for these boilers. The following is intended to assist.

All Hoval UltraOil boilers are designed for use with a fuel oil that has **less than 50ppm** Sulphur content. Under the BS2869 (2010) - Fuel oils for agricultural, domestic and industrial engines and boilers – Specification, the only class of oil that met this criteria is Class A2. This is the dyed fuel oil that was widely available previously and could be used for heating purposes. It is a gas oil or diesel.

This rebate on the duty for Class A2 was scrapped on 01/04/2022 for most commercial heating purposes - which may adversely impact on its availability and will certainly impact on its cost.

Domestic heating applications are exempt from this rebate change.

There are also a variety of branded Heating Oil products offered by oil suppliers. Many of these are typically a named product with a 35 suffix, indicating that they are also a diesel or gasoline-based heating oil. These appear to be a blend of Class A2 gas oil, and other specification gas oil fuels.

The branded products have been offered by the fuel suppliers for several years and their specification is typically in line with BS2869 Class D. This is a gas oil or diesel but permits a Sulphur content of **up to 1000ppm** (or 0.1%).

In practise the blended fuels offered will likely have a Sulphur content 300-500ppm as delivered typically. They should have similar physical properties to the Class A2 oil, and the pump pressures/nozzle settings on the boilers may not need to be changed - but this will ultimately depend on the quality of the blended oil product offered.

Hoval recommend that if these fuel oils are used in the boiler, then the heat transfer surfaces will need to be checked and cleaned more frequently than stated in the operating manuals.

This is due to the higher percentage of Sulphur present in the fuel oil. This involves removing some of the boiler casings and opening the boiler door to access the heat exchanger. If these branded fuel oils are to be used then initially, we would suggest you accommodate at least one additional check and clean, but this subject to how an individual boiler is used and it may be necessary to clean more frequently.

All UltraOil models can potentially operate with **HVO** fuel oil. This is a **renewable** diesel fuel oil synthesised from 100% renewable raw materials. It is a **Sulphur free** fuel oil. A check on the oil pump fitted to the burner will be necessary to confirm if the switch can be made without replacement parts/adjustment. . Boilers may need a recommission if swapping to this grade of oil.

If the burner is fitted with a Suntec oil pump – 2-Stage AT2V (all) then it should be possible to swap without adjustment. Please check with Hoval Technical if the pump fitted in the burner is manufactured by Danfoss.

Tank cleaning would be recommended for any change of fuel.

Hoval do not recommend that a Kerosene product is used as a replacement. This is not a gas oil, and its BS2869 specification (Class C1 and C2) also permits a level of sulphur, potentially up to 1000ppm. There are physical differences with this grade to the gas oil based fuels. It has less lubricity and if used in the boiler will increase the wear on the oil pumps and nozzles, requiring more frequent replacement and servicing. It would certainly require a recommission to check and adjust the pump pressures. We would therefore not recommend you choose to use this type of fuel oil in the boiler.