



## **Grant UK Technical Bulletin [16<sup>th</sup> November 2021]**

### **Grant Oil-Fired Boilers: HVO Conversion Data**

The following Technical Bulletin has been published for the attention of installers and heating engineers who work with Grant oil-fired boilers.

As part of the OFTEC field trials into the use of biofuels in oil-fired boilers, it became evident that sourcing the correct nozzles was going to be an issue for installers and engineers. Few installers would have the correct combustion equipment required to accurately measure CO<sub>2</sub> for HVO, and light oil and heavy oil would not use the correct CO<sub>2</sub> benchmark. The HVO nozzles are a recalibrated gas-oil type rather than a Kerosene-type nozzle so Grant Engineering and Riello have been working together to provide conversion data to assist engineers.

Stoichiometric-CO<sub>2</sub> value for Kerosine is 14.18%; Gas Oil is 14.22%; while HVO is 13.68%. To facilitate the use of existing nozzles and test equipment, Grant Engineering and Riello have retested every boiler to arrive at two sets of figures – one using commercially available equipment and one that should be used once the fuel is rolled out to the wider market when HVO nozzles would be available.

As these tests are ongoing, we are pleased to be able to publish the conversion data for all Vortex floor standing yellow and low-NO<sub>x</sub> yellow flame boilers.

In addition, we are validating the results for the Vortex wall hung and VortexBlue blue-flame boilers and these will be published in due course.

The conversion data\* is available to download via the Grant UK website:

[www.grantuk.com/professional/support/manuals-brochures](http://www.grantuk.com/professional/support/manuals-brochures)

\*The conversion data tables are for 100% HVO using standard kerosene nozzles only. These tables are not suitable for any blend with kerosene or gas-oil nor will Grant retest to any specific % blend. The settings are not suitable for use with FAME or any other liquid biofuel.

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