

Fuel Oil - Edible Oil Waste Blend



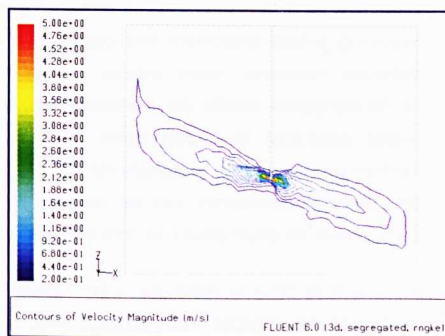
Fuel oil is used in many industrial applications such as for industrial furnaces and boilers. However, not all fuel oil grades can be used directly due to their high viscosity. UPM has been successful in commercializing the heavy fuel oil by blending it with waste edible oil in suitable ratios, which is saleable to the consumers. Waste edible oil from fast food operators and commercial premises has been proven to be an excellent candidate due to the lower viscosity compared to the current diluents such as light fuel oil and diesel. The result of study indicated that the fuel oil – waste oil blend gives satisfactory oil properties such as heating value, flash and pour point, and ash content specified by the customers.

In this project a simulation work on the oil blending using jetting nozzle has also been carried out. The result from the simulation gives blenders important information such as the jet penetration length before they carry out the real blending operation. The project was commercialized in 2004 by IFA Asia-Pacific Sdn Bhd.

The finding provides an alternative to waste management of waste edible oil produced by the food industry in the country, which is approximately at 100,000 tones per annum. Besides solving environmental issues, it also converts the polluting waste oil into a valuable resource for the industries.

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Jet nozzle blending simulation profile

