

**EXPERIMENTAL STUDY OF USED USED OIL USING GASOLINE AS FUEL
ON JET TORNADO API BURNER**

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ABSTRACT

The development of the industrial world and the use of motorized vehicles that produce more and more new waste, namely used oil, has not been used optimally, only used to test limestone. One alternative method that can be used to use used oil is by mixing it with other fuels such as gasoline. In the research used oil will be mixed with gasoline oil with a ratio of 60%: 40%, 70%: 30%, 80%: 20%, 90%: 10% and also 100% used oil, this aims to determine the effect of variations in fuel between used oil with gasoline oil on the fire tornado jet burner. The parameters that will be measured due to the influence of this variation in fuel are flame temperature, heating rate, and combustion rate. The instrument used for measurement in this study is an infrared thermometer. The data analysis technique used in this study is the quantitative analysis method. The results showed that each addition of the gasoline oil mixture content increased the flame temperature, heating rate and combustion rate. The highest value is shown in the ratio of 60% used oil: 40% gasoline oil and the lowest value is shown in the use of 100% used oil.

Keywords: *used oil, gasoline oil, burners, variations*