***HYDRA (HYBRID DRYER MULTIPURPOSE) DRYERS ENERGY-EFFICIENT HYBRID SYSTEM***

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**ABSTRACT**

***The purpose*** *of this research is to provide problem solution for Dried Fish Farmers of NambanganKenjeran Barat Village about conventional drying process of fish in the sun which is not necessarily good or bad weather condition and long drying.*

***This method*** *is designed to resemble a house that has 3 shelves made from Food Grade and a house wall made from acrylic transfaran, with a hybrid energy system that is sunlight and Infra red stove made from LPG Gas Fuel. This tool integrates ECU (Electrical Control Unit) technology.*

***The results*** *with a hybrid drying system, this drying process can improve the drying process faster up to 3 times, maintaining the hygiene of product and efficient in the use of fuel up to 20%. so productivity increased from 25kg/day to 50 kg/day.*

***The findings*** *of a hybrid drying system that utilizes sunlight, heat and heat from LPG-fueled infrared burners, which can be used alternately or simultaneously equipped with ECU (Electrical Control Unit) that serves to adjust the room temperature drying when using a wall space burner in a dryer made from clear acrylic on each side.*

***Keywords :*** *SME, Hybrid, ECU (Electrical Control Unit), Drying*