



Department of Mechanical
Engineering
Faculty of Industrial Technology
and Systems Engineering

STANDARD OPERATING PROCEDURE

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Head of Laboratory

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Operation Of Savonius Turbine

Laboratory : Fluid Mechanics and Machineries _____

HAZARD POTENTIALS	Electric shock Cuts/scratches
PERSONAL PROTECTIVE EQUIPMENT (PPE)	Eye protection (safety glasses, goggles). Wearpack. Hair protector (hair net or hat). Shoes, gloves. First aid kit.
BEFORE OPERATING THE MACHINE	Ensure the lab equipment and work area are clean, and all PPE is worn. Roll up sleeves securely. Ensure no exposed electrical wiring. Make sure all plugs are properly connected.
NEVER	Operate the machine without wearing PPE. Ignore exposed electrical wiring. Touch the turbine while it is spinning.
STEPS FOR USING THE EQUIPMENT	<ol style="list-style-type: none">1. Turn on the Power Stabilizer and ensure the input voltage is 220V.2. Connect the Regulator to the Stabilizer.3. Turn on the Blower by pressing Power On and ensure the Regulator value is set to 50.4. Slowly adjust the Regulator until the desired wind speed is reached.5. Check the wind speed using a Manometer.6. Once the rotation is stable, data collection from the turbine can be performed as needed for research.
AFTER USE	<ul style="list-style-type: none">• Slowly adjust the Regulator back to 0• Turn off the Blower and Power Stabilizer• Clean and organize the machine and tools.