COMPARISON STUDY ON THE EFFECT OF ENVIRONMENT ON THE PERFORMANCE OF INSTRUMENT IN BOILER PT. PERTAMINA RU IV CILACAP AND PT. PERTAMINA RU VI BALONGAN

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Abstract
Boiler is one of the equipment which has a central role in a plant therefore the failure of the boiler should be avoided. One of the factors that can cause failure of the boiler that environmental factors. This analysis was conducted to determine the effect of environment on the performance of an instrument which in this case is the reliability of an instrument. Maintenance of the data values will be calculated MTTF, failure rate and PFD of each instrument and then the results of these calculations will be carried out by the method of regression analysis to determine the correlation relationship of environmental conditions on the value of his PFD. From the calculation in getting that environmental conditions in the PT. Pertamina Balongan RU VI has a higher influence on the PFD value of the environmental conditions in the PT. RU IV Cilacap Pertamina. Moreover, when viewed from the three environmental conditions, the observed SO$_2$ has the greatest influence on the appeal by two other factors, namely the U value of 0.071 for PT. RU IV Cilacap Pertamina and PT 0.108. Pertamina Balongan RU VI.

Key Word—Boiler, Environmental conditions, Instruments failure, Regression