

***Analysis Of Performance Supercritical Boiler at Unit 3 PT. POMI East Java***  
Mokhammad Nuruddin as a counselor

**Amalina Nur Shabrina**  
Renewable Engergy Engineering Study Program  
Engineering Departement  
Politeknik Negeri Jember  
[amalinanurshabrina@gmail.com](mailto:amalinanurshabrina@gmail.com)

***ABSTRACT***

*This research was conducted to determine the effect of load on the boiler on boiler performance, especially after the overhaul that occurred in 2019 and 2020. The load given to the boiler prior to the overhaul in 2019 and 2020 was 813MW resulting ini a 69% performance, but after overhauling in 2019 and 2020 the show yield increased to 70%. The 606MW load given to the boiler befor the 2019 overhaul resulted in a 71% performance show and after a 72% overhaul, in 2020 before the overhaul was carried out the 70% performance result was carried out and after overhaul the boiler performance result was 73%. The 413MW load given to the boiler befor the 2019 overhaul resulted in a 72% performance show and after a 75% overhaul, in 2020 before the overhaul was carried out the 70% performance result was carried out and after overhaul the boiler performance result was 75%. The results of boiler performance are influeced by the mass flow rate of the working fluid, the mass flow rate of the fuel and olso the enthalpy. High fluid mass flow rate and low fuel flow rate and enthalpy will result in a good boiler performance show.*

**Keywords :** *Performace, Boiler, Fluid Mass Flow Rate, Fuel Mass Flow Rate, Enthalpy.*