ABSTRACT

Boiler Feed Water pump functions as boiler feed water pumping from the tank to the steam drum BFW, production process, desuperheater and quenching water. Measurement of sound pressure levels have been conducted by the Department of the K3 around the pump area and retrieved the results sound pressure levels on average by 96.7 dB. These values exceed the threshold value is set by the Government through Permenakertrans No. 13/Download/X/2011 where the value of the threshold of noise in a workplace of 85 dB. The noise level of each frequency analysis showed that the frequency of 1000 Hz noise level reached its peak that is as big as 94.85 dBA. The methods used for the reduction of noise is by addition of the enclosure. From the results of the discussion undertaken following conclusion of a third model enclosure that has been created, i.e., which consists of plywood with a thick material ¼ inches. The design of the enclosure consists of 3 pieces of the window, one door and a hole the wind as the wind out of fan vent pump. Calculation of the results obtained for the broad wall partition of 23 m². The highest noise level in boiler feed water pump area occurred at a frequency of 1000 Hz that is as big as 94.63 dBA and at a frequency of 2000 Hz, is 94.65 dBA. After the added enclosure at the same point experienced a reduction in the frequency of 1000 Hz into 64.42 dBA and 2000 Hz frequency became 60.4 dBA.

keywords: Enclosure, noise level, transmission loss