

## EVALUATION OF INDUSTRIAL NOISE: A CASE STUDY OF TWO NIGERIAN INDUSTRIES

S. A. Anjorin, A. O. Jemiluyi & Akintayo T. C.

Department of Mechanical Engineering  
The Federal University of Technology  
PMB 704 Akure, NIGERIA

### ABSTRACT

This study is aimed at quantifying noise pollution from industrial noise (machine and human generated) at two selected processing and manufacturing industries namely: Denki Wire and Cable Nigeria Limited and Wanwood Nigeria Limited, both in Akure, Ondo State, Nigeria. The machines used for processing and production in these two industries were considered for the research study as well as their operators and workers. Emphasis was given to noise emitted by the individual industrial machines. The average noise equivalent level ( $LA_{eq}$ ) was studied to identify the noisy machines and to generate baseline data. A precision grade sound level meter was used to determine the various pressure levels of sound at thirty minutes interval for five days. It was observed that noise limit values were exceeded at almost all machines based on the regulation criteria and international standard. Also, the results of this study shows that noise control measures were not put in place or where provided they were not adequate in the industries surveyed.

**Keywords:** Industrial noise pollution, industrial machines, workers, noise control measures.