Introduction

It is generally observed that at construction sites, the construction workers do not like to wear the hearing protection devices all the time. However, it is advisable to wear the hearing protection devices particular when the noise levels are higher than 85 dBA. In order to protect the hearing of the workers who are provided with effective hearing protection devices, the following solutions are proposed.

1. Central Alert Messaging System

In a construction site, generally, there is a central field office and several nearby work sites. In a worksite, whenever a construction machine particularly a heavy one is started for operation, and at the same time, a message is transmitted to the central field office which then is communicated to all workers through the alert system, so that the workers can wear the hearing protection devices.

2. Individual Noise Indication Approach

In this approach, each worker becomes aware of the noise level in his or her location, through a device. The device can be a wearable commercial noise indicator such as 3M Ni-100 or a simple sound level measuring app on a smartphone. If the noise level at his or her location goes higher than 85 dBA, then workers should wear the hearing protection devices.

3. Simple Communication Tests Approach

In the absence of any measuring device on hand, a simple method can be used. Two workers stand 2-3 feet away from each other and carry out a conversation. If they feel difficult to carry out conversation in normal voice and have to raise their voice, then can assume that the sound level is at or above 85 dBA. This means that the hearing protection device should be used.

Concluding remarks

Thus the three methods are proposed so that all the three can be used which enable all the workers in the construction site to use the hearing protection device and reduce the risk of hearing loss.