LED Lighting Interviews and Assessment in Forest Machines

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Abstract : The objective of the study is to assess the implementation of LED lighting into forest machine work in the dark. In addition, the paper includes a wide variety of important and relevant safety and health parameters. In modern, computerized work in the cab of forest machines, artificial illumination is a demanding task when performing duties, such as the visual inspections of wood and computer calculations. We interviewed entrepreneurs and gathered the following as the most pertinent themes: (1) safety, (2) practical problems, and (3) work with LED lighting. The most important comments were in regards to the practical problems of LED lighting. We found indications of technical problems in implementing LED lighting, like snow and dirt on the surfaces of lamps that dim the emission of light. Moreover, service work in the dark forest is dangerous and increases the risks of on-site accidents. We also concluded that the amount of blue light to the eyes should be assessed, especially, when the drivers are working in a semi-dark cab.

Keywords : forest machines, health, LED, safety

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020