

VR to Provide Safety and Health Training

Virtual Reality Contents Training will be provided from 5 Safety Experience
Training Sites in Korea, Starting from June

「...A worker wears a virtual reality experiencing apparatus, Head Mounted Display (HMD). A crane work site is displayed in front of him. The crane driver lifts a heavy object using a ceiling crane. The wire rope supporting the heavy object straps while transferring the object. The object falls on top of the worker...」

- From the Safety and Health Training Utilizing Virtual Reality -

- ☐ The Ministry of Employment and Labor (Minister: Lee Ki-Kwon) and Korea Occupational Safety and Health Agency will provide safety and health training sessions using virtual reality (VR) at safety experience training sites located in 5 different areas in Korea starting from June this year.
- ☐ The purpose of this safety and health training using virtual reality is to allow a worker wearing a VR equipment to directly experience safety accidents in a virtual space that is configured similar to an actual work site, thus to inspire safety awareness of workers through such training.
- ☐ This training is a program that takes approximately 1 hour, that proceeds in the order of △ introduction to the process of experiencing virtual reality and utilizing the equipment, △ demonstration on experiencing virtual reality, △ experience by workers and △ explanation on safety measures.
- ☐ The contents of the training consists of 3 types of accidents: △ crane operation accidents, △ robot operation accidents and △ fall accidents, that allow significant experiencing effects, of the large scale accidents running the risks of death and accidents in the occupational sites, each type of accidents taking about 4 minutes. The contents may be integrated with VR equipments based on smart phones, thus the contents are portable.
- ☐ The training will be provided to about 24,000 people each year at

the safety experience training sites located in 5 areas (Gimhae, Damyang, Incheon, Gyeongsan, and Gongju).

- ☐ The contents were developed based on the 'Virtual Reality Contents Development MOU' signed between KOSHA and Samsung Institute of Safety and Environment, last October.
- ☐ Under this MOU, KOSHA supervised the development of virtual reality contents, while Samsung Institute of Safety and Environment provided approximately 200 million won of financial support for contents development as part of an effort of social contribution activity.
- ☐ Further, besides the smart phone-based contents developed as aforementioned, the Ministry of Employment and Labor and KOSHA are planning to further develop a type of virtual experience contents utilizing simulators and two types of contents utilizing augmented reality, and disclose them during the Safety and Health Emphasize Week that will be held in the first week of July.
- ☐ President Lee Young-Soon of KOSHA said "virtual reality contents increase the engagement of trainees, and effectively transfer the awareness of risk of occupational disasters", and also added "KOSHA will continue to develop safety and health contents integrated with the state-of-the art technologies such as virtual reality (VR) and augmented reality (AR), and make efforts to help the experience-oriented safety and health training take roots".

* What is virtual reality (VR)?

It is a human-computer interface providing a certain specific environment or situation made by a computer, as if the person using it is actually reacting with the surrounding situation and environment.

* What is augmented reality (AR)?

Technology of showing a 3-dimensional object in a real world. (ex: Pokemon Go)