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'Metaverse Safety Promotion Center' developed Use of virtual space to improve employees' safety awareness

Meidensha Corporation (Meiden) and Meiden System Solutions Corporation, a Meiden subsidiary, have created the Metaverse* Safety Promotion Center with the aim of strengthening safety education for Meiden Group employees. The development was jointly carried out with Infinitloop Co., Ltd. and one of its group companies, VirtualCast, Inc., both based in Sapporo, Hokkaido.

About Safety Promotion Center

The Center was established in 2020 at Numazu Works in Numazu, Shizuoka Prefecture, to improve the safety awareness of Meiden Group employees. The aim of the facility is to hand down to future generations the lessons learned from industrial accidents that have occurred at Meiden and give them an opportunity to think about industrial safety.

The center displays panels showing chronological charts on the number of industrial accidents and safety measures taken; outlines of past accidents and their causes; and measures to prevent similar accidents. It also shows a video featuring interviews with those who have experienced industrial accidents and another designed to inform visitors about safety-related matters.

By sharing the stories of employees who have been involved in industrial accidents, the center serves as an educational facility that makes people aware of just how horrifying industrial accidents are and how important it is to secure safety. A total of 890 Meiden Group employees have visited the facility so far.

About Metaverse Safety Promotion Center

The real-world center has so far been visited by a limited number of safety seminar participants. Many employees working far away from Numazu find it difficult to travel to the center. This problem has been compounded by the effects of the COVID-19 pandemic.

To address the problem, the Metaverse Safety Promotion Center was created.

The Center can be visited by several employees at the same time thanks to VR head-mounted displays. Regardless of where they are located, employees can meet virtually and exchange their views. The center thus makes it possible for all Meiden Group employees—not only those working at domestic manufacturing plants, but also those working at overseas subsidiaries—to participate.

<Features>

The center is equipped with the same functions as the Safety Promotion Center.

Audio guide

Employees can deepen their knowledge by listening to explanations by manipulating a touch panel-type audio guide system installed in each "corner" of the metaverse

- 2. Videos to promote understanding about safety Videos made based on past industrial accidents at the Meiden Group are shown to convey information, the feelings of those who were involved in the accidents and countermeasures employed afterwards. The aim is to remind employees that industrial accidents should never happen again.
- 3. Tablets on which Meiden employees write their safety pledges
 Employees can write on a tablet (mimicking the votive tablets on which
 worshippers write their prayers) about how they will utilize what they saw
 and felt at the center as a message to their future selves. They can also
 make a zero-industrial accident pledge.
- 4. CG reproduction of past accidents (available only in the metaverse version)
 This recreates past accidents, which are displayed on panels at the Safety
 Promotion Center, with computer graphics on the metaverse. Using CG can
 help promote better understanding of safety issues.

This educational content was developed by applying what was achieved in the Metaverse hands-on safety educational program, which was jointly developed by Meiden and Infiniteloop and VirtualCast and unveiled in May 2022.

The Meiden Group will keep trying to eliminate industrial accidents and promote further safety awareness among its employees through the use of cutting-edge technology.

*Metaverse: A virtual-reality space where avatars can freely interact



Safety Promotion Center, left, Metaverse Safety Promotion Center (1)



Safety Promotion Center, left, Metaverse Safety Promotion Center (2)



Tablets on which Meiden Group employees write safety pledges are displayed



In the Metaverse version, past industrial accidents are reproduced with CG

To see the videos and learn about details, visit the VR Metaverse hands-on safety educational program website

https://www.meidensha.co.jp/mss/system/sys_07/sys_07_01/index.html (Japanese Only)