

2021 August

Feature

Life Sciences & Health Care Continue to Create New Opportunities



Mitsubishi Heavy Industries

Brain Sciences Show Comfort Level Varies with AC Airflow Direction

Mitsubishi Heavy Industries Thermal Systems, a **Mitsubishi Heavy Industries (MHI)** Group company, and a group led by Tsuyoshi Okamoto, associate professor at Kyushu University's Faculty of Arts and Science, have shown that the airflow direction of an air conditioner affects not only the thermal environment around people in a room but also the subjective assessment and psychological as well as physiological measurements of those in the room from a brain sciences perspective. Physiological measurements indicated higher comfort levels in an indirect airflow due to a reduction of the strength in the beta and gamma brain waves that indicate stress levels, while stress-indicating brain waves were detected in a direct airflow. The study's results were published on April 14, 2021, in the PLOS ONE online peer-review magazine.



Two commercial inverter packaged air conditioning units made by Mitsubishi Thermal Systems.

Left: The FDT in-ceiling indoor unit with four vents.

Right: The compact FDTC in-ceiling indoor unit with four vents.

Both employ the AirFlex draft prevention panel, an industry first. The panel houses airflow direction control plates operated using a remote control. Controlling each vent individually makes it possible to create an air-conditioned environment that suits the user's preference at any particular time.

<https://www.mhi.com/news/21042602html>



For more information about the Mitsubishi companies, see "mitsubishi.com"

■ <https://www.mitsubishi.com/en/>



The Mitsubishi Monitor is published by the Mitsubishi Public Affairs Committee

Marunouchi Nakadori Bldg., 2-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-0005, Japan
Phone: 81-3-5218-8660 Fax: 81-3-5218-8661

