June 4, 2025
Meidensha Corporation

Joint R&D project launches to reduce transformer oscillation and noise

Applying metamaterial acoustic technology to suppress sound and vibration

Meidensha Corporation and Pixie Dust Technologies, Inc. (PxDT) have launched a joint research and development project to reduce transformer oscillation and noise. Transformers are long-lived, critical components for stable power supply, but when installed near homes and other occupied areas their operational noise and vibration can be a nuisance.

The project will combine Meidensha's extensive experience in controlling transformer noise and vibration with PxDT's proprietary acoustic control technology, iwasemi™, to develop new metamaterials* for use in Meidensha-manufactured transformers.

Meidensha and PxDT are committed to advancing quieter, more livable technologies by addressing transformer sound and vibration—issues that previously received limited attention.

PxDT, based in Chuo-ku, Tokyo, is led by Chairman & CEO Yoichi Ochiai and President & COO Taiichiro Murakami.

Metamaterial using iwasemi™

*1: Metamaterial: An engineered substance with properties not found in naturally occurring materials.