MEIDEN NEWS

FY2013 TETC Training for Meiden Group Engineers in Southeast Asia was Held

For two weeks from October 21 2013, Technical Education & Training Course (TETC) for 12 Meiden Group engineers in Southeast Asia was held at Meiden Engineering Center in Numazu City, Shizuoka Prefecture, Japan. This is the training mostly for Meiden T & D (transmission and distribution) products.

The programs include the lecture series on high-voltage power distribution system, traction power system for railways, respective major Meiden T&D products, live deterioration diagnosis techniques, protection coordination, etc.. The curriculum includes the practical training sessions using real T&D products. It focused on the ado-hoc group-based exercises like trouble-shooting by Fault-Tree Analysis (FTA). TETC provides the programs useful for their daily work skills and for the aims to:

(1) improve their technical knowledge

(2) build the good relations among the trainees across each company line

(3) play a role of strong motivator to other colleagues in their workplace for higher job performance

(4) become a person contributing the rise of Meiden Group in Asia

In order to accelerate Meiden Group going global with stronger HR there, we intend to utilize Meiden Engineering Center, renowned for its top level training facilities in Japan, to raise the excellence of Meiden Group engineers in Asia and to promote the camaraderie of attended members for unity of Meiden Group firms.

Meiden Engineering Center

A view of training

High-Voltage PM Motor Drive System

Stimulated by a growing interest in energy saving, there has been an increase in demand for the speed-controlled operation of motors and the attainment of higher efficiencies. The Permanent Magnet Synchronous Motor (PM motor) uses permanent magnets in its rotor and such a configuration remarkably increases efficiencies compared with many of ordinary induction motors conventionally used. The major features of PM motor are as itemized below.

(1) Compared with induction motors, efficiencies are increased by 2% to 4%.

(2) The motor structure is almost the same as that of an induction motor; therefore existing motors can be replaced easily.

(3) The high-voltage inverters are of the multi-cell type in order to suppress the generation of surge voltages.

(4) Since the function of speed and position sensorless control is adopted, no rotary sensors of motors are required.

(a) High-voltage PM motor

(b) High-voltage inverters THYFREC VT730S