

21<sup>st</sup> May2019

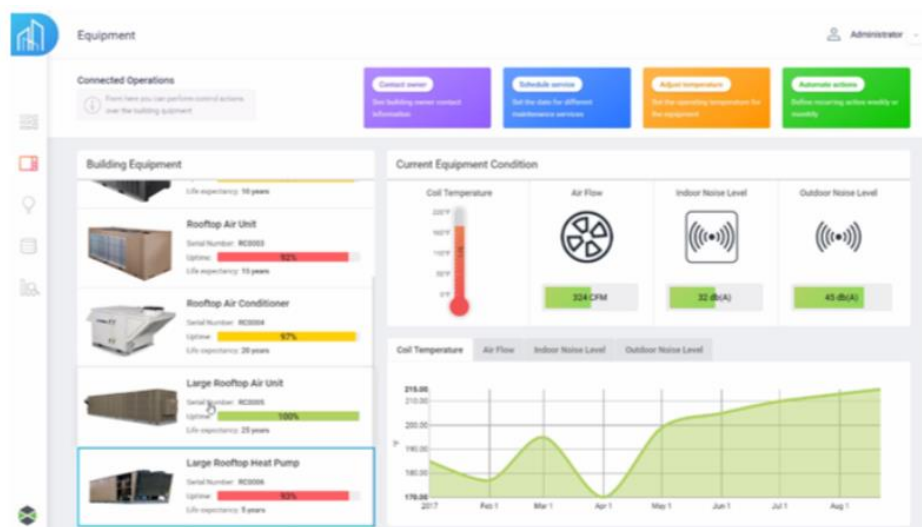
## MAT signed MoU with THAI TAKASAGO to become an outsourcing business partner for their IoT Project.

"To develop and secure a visualized facility operation system while increasing effectiveness of damage prediction and/or preventive maintenance"

Material Automation (Thailand) Co., Ltd.

Material Automation (Thailand) Co., Ltd. under Canon Marketing Japan Inc. (Main Office: Bangkok, Thailand, President & CEO: Mr. Makoto Yoshida, MAT hereinafter) and Thai Takasago Co., Ltd., Thai subsidiary of Takasago Thermal Engineering Co., Ltd. (Head Office: Samutprakarn, Thailand; Managing Director: Mr. Takehisa Muraki, TTC hereinafter) entered into a Memorandum of Understanding (Mou) for their IoT Project .

TCC and MAT work together to combine "ThingWorx," an Internet of things (IoT) platform system developed by PTC, and optimized sensors in order to automatically collect data from service facilities of clients' factories and buildings such as air conditioning and pumps, and these data will be managed within a cloud data system. By displaying the operation status on various dashboards, the effectiveness of damage prediction/preventive maintenance will increase.



Enhancing synergy between TTC's long-time experience in general facilities construction business with advanced air conditioning technology and MAT's impressive past achievements in Thailand's IT solution arena, we are confident that our partnership can provide new values to existing clients while attaining new customers by differentiating our services from competitors.

The importance of new technologies such as IoT and artificial intelligence (AI) has been strongly recognized in the global market. In Thailand, due to the gradual rising labor costs and lack of workers caused by declining birthrate/aging population; lowering energy usage, less labor and lowering costs have become necessary. Therefore, utilizing IoT into managing facility and equipment has become an important consideration for many companies.