

MSc technology in Energy Storage System pilot project in Italy

A braking energy regeneration pilot project has started recently in Italy. MSc has provided its technology for the supercapacitor-based energy storage system in the project.

The project's main objective is to regenerate the braking energy airport trains create when stopping at the stations. Each time the airport train stops at any of the various stations along its route, a significant amount of energy is created. Without regeneration all this energy is wasted.

A pilot system consisting of an energy storage and a converter has been installed at the Italian airport train station. MSc provided the system with bidirectional DC/DC converters. When the airport train arrives at the station, its braking energy is fed through the MSc converters into the supercapacitor-based energy storage. This braking energy fed into the storage is utilized in the power supply system of the emergency illumination of the train tunnel.

- Energy regeneration is becoming more and more trendy. It is perfectly possible to make energy storage systems in the routes of electrical trains, trams and metro trains. Why would this be done? Naturally, in order to save energy. The regenerated energy can be supplied as electricity into a specific application, or then, it can be used to support a power supply grid. Similar pilot projects will start in the near future elsewhere in Europe, explains Sales Director **Mr. Pekka Hytti**.

