ABB delivered power quality solutions to help improve efficiency and productivity at a factory in Indonesia, and achieved a return on investment in less than a year.

Two of ABB’s innovative power quality technologies have been applied, PCS100 AVC (Active Voltage Conditioner) and PCS100 UPS-I (Industrial UPS), the configuration provided the customer with significantly improved productivity and increased uptime to 99 percent.

ABB’s customer, experienced 50 to 60 power quality issues in 2015, severely affecting its sensitive production process. Losses worth millions of dollars were accumulated from production material scrap, excessive down time, and very high spare part costs. The application of a conventional solution of UPS double conversion did not succeed and the results were far below expectations.

ABB offered a solution involving connecting the PCS100 AVC and PCS100 UPS-I in an innovative serial configuration, to protect the factory’s ‘fill and pack’ process. The AVC protects against voltage disturbances such as dips, swells, imbalances, flickers, and phase angle errors, while the UPS protects against power interruption or outages. The solution has been providing the company with total protection of critical loads since it became operational in January 2017. Both, annual cumulative production losses of $5 million and around 60 annual power quality events have been brought down to nil.

“ABB is pleased to support our customer to achieve higher efficiency and productivity at its factory through our revolutionary technology”, said Ferdinand Sibarani, ABB’s Sales Engineer for Electrification Products in Indonesia.

The PCS100 AVC is ABB’s energy-storage-free technology to protect industrial loads against an arrangement of voltage disturbances. With modular architecture, small footprint, and extremely high speed power electronic technology, positions the PCS100 AVC as one of the world’s most efficient and effective voltage conditioning solution.

The PCS100 UPS-I is a single conversion power electronic device specifically designed to protect industrial loads against power outages or interruption. With unrivalled flat efficiency of more than 99 percent. ABB’s innovative technology takes less than 2 milliseconds for the PCS100 UPS-I to transfer the load from normal supply mode to energy storage supply mode.

To find out more about ABB’s power protection solutions:
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