

Automatic Process Control System Development and Application to Cement and Bond Producing Process

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In this research, the automatic control system of the existing cement manufacturing process is improved and the automatic control system of the tile bond manufacturing process is constructed and applied to Youngjin Housing Co., Ltd.

For both cement and bond manufacturing process, PLC was installed and connected with factory facilities to create a control environment. Precise and integrated control was performed by using an automatic software, called PROMONICON. The manufacturing process can be divided into three systems: raw material weighing, transporting, and mixing. By making the three divided control systems automatic, both cement and bond manufacturing were precisely automatized by PROMONICON. By the integrated automatic process system, the productivity has increased about more than 30%, due to improvement of production rate.