

Abstract Details

Title: Smart Station Implementation for Smart Manufacturing- Right at First Time

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Abstract: Smart station is the implementation of Industry 4.0 to a manufacturing company to make the system transparent and interlinked at each stage which reduces error to zero level, develops a user friendly interface and communicates with operator and other machine. It mainly works on the concept of Internet of Things (IOT) which means whole system is interlinked by internet connectivity with which all incoming data and outgoing data is recorded and shared with other systems in line. Smart station is guiding system of process flow of industry and acts as pika-pika system of a manual work station which guides what to pick and which one to pick first (material), eliminating the chances of error and rework. It monitors the process flow of the work station, improves productivity by estimating time of each process completion, manages multiple data sharing with other system, records the information of process and product also information transparency, provides mapping of real time performance and productivity, and displays statistical evaluation of all output and points of improvement and preventive actions. Smart station can also be referred as one quality system which assures quality at first time by single quality method with the help of sensors, display system, gauges etc.

Keywords: Smart, system, Internet of things, quality, machine, smart factory.