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Automation manufacturing using MES

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Automation of Manufacturing in Industry 4.0 involves handling large equipments used for manufacturing. The modern era requires automation to manufacture products in order to reduce manpower and increase the efficiency of production. Automation helps in improving the manufacturing cycle time, and in tracking all transactions right from quotation to shipment of the product based on the Manufacturing Execution System (MES). It captures defective data and supports end-of-the-line audits. In this work, an application is developed to implement MES which has two tracking processes, namely, Work In Process (WIP) Tracking and Steps involved in Project (SPEC) and Equipment Tracking (ET). In process WIP, manufacturing orders or work orders for the product are designed and implemented. The equipment tracking process provides the information of the stage at which the material is being processed through which the end-user will know the status of the product. The developed software helps to calculate Loss Pareto and to improve the manufacturing yield and deliver products to customer within the expected time.

Topics

Industry

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