PAINTING MACHINE PROTOTYPE DESIGN USING OMRON PLC CONTROL TYPE CP1E

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ABSTRACT

Paint is a product that has been known by the general public and industry, therefore this product is widely used on objects. Paint is used as a surface coating that serves to protect and provide color so as to give beauty to the object being coated. Almost all objects can be used by this product, including preservatives (preventing corrosion or water damage), industry (coating), or objects such as household furniture, iron, wood, and walls. In today's industrial world, many simple human jobs are assisted by machines to maintain the security and safety of the main power (labor) in this discussion is when painting cylindrical parts. The existence of this machine is expected to reduce the risk due to work accidents which can later increase work productivity. In this study the system was designed to meet the needs of the painting system. In this design, a painting analysis is carried out whether the results of painting / spraying are good or not and also the results of the release of paint on the surface that is sprayed a lot or at least the paint comes out. This test was carried out 5 times with time variations, for each time an experiment was carried out 5 times spraying to get maximum painting results, this time variation included 10 seconds, 9 seconds, 8 seconds, 7 seconds, 6 seconds, and 5 seconds. . After testing each 5 times with time variations of 5 seconds, 6 seconds, 7 seconds, 8 seconds, 9 seconds, and 10 seconds, the resulting paint is evenly distributed at 8 seconds.

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