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Automated Color-Making System for Dyeing Industry

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Abstract: *The mixing of dyes is a major technique in several industries such as textiles, paint, and leather. It can be done in improper proportions the result should be in vivid shades of color. So, the proposed method is used for the dyeing companion that works automatically with different dye ratios. The system will execute the color taking from the vessel using a syringe using a PIC microcontroller (PIC16F874A/877A). The syringe can be controlled by the keyboard and the values are displaced in LCD. The controller can give the choice of the user to choose parameters with a specific amount (green, red, and blue). The intensity of the color between 0 to 255 gives the values for each parameter. The specific amount of selected color is poured with empty vessels and mixed with a mixer at a suitable time. This method of design gives several periods of working involved in the color system mechanism toward a fully automated color-making system. This method is used to increase the productivity level and reduce the health problem faced by the workers.*

Keywords: Peripheral Interface Controller, RGB Colors, LCD, Keypad, Stepper Motor

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