

SMART PAINT ROLE

Abstract:

Painting is part of construction activities. Painters usually use brushes or paint roller to paint buildings, bridges, and other structures. Large flat surfaces are usually painted with paint roller. On the other hand, brushes are used to paint small and difficult to reach areas. Obviously, painting large areas with paint rollers are faster than using brushes ,but paintings with conventional paint roller still consume a lot of time and movements. The painter needs to do dipping the roller sponge into the paint and rolls it on the wall surface. These movements are repeated until the job is finished. This also means that the painters need to do a lot of bending and stretching. Therefore, an innovating is needed to make paint roller a more user friendly painting equipment in the construction painting. Finally, the innovated paint roller which is called Smart Roller Paint is introduced as an automatic paint roller. The new roller requires no dipping the roller into paint, less movement and save time in painting a surface.

Keyword: Paint roller, brushes, painting, roller sponge

IP no:

Finding:

Method	Time to paint 18.25m ² of area(s)	Time per Area(s/m ²)
Smart Roller	120 second	6.58
Paint Roller	182 second	9.97

- The painter needed 120 seconds to paint the area with the smart roller 182 seconds with the paint roller.
- The amount of time needed to paint a square meter of surface for the smart roller was 6.58 s/m² and 9.97 s/m² for the paint roller.
- This showed that the smart roller was 62 seconds or 40 % faster that the paint roller when painting a square meter of surface.

Suggestion for future work

- i. Improvement of existing products and produce products that can facilitate painting. The quantity of paint used more cheap and no wastage and spills.
- ii. Make improvement paint roller in order to save lives of existing products.
- iii. More reduce movement can reduce waste from spilled paint during painting.
- iv. The latter is to create a generation of creative for future product enhancements. This product can achieve the overall objective, but there are some drawbacks to wash.

Picture related to project**Name of student & registration no:**

1. Muhamad Arief Bin Azhar
14DKA14F2025
2. Muhammad Azhari Iqbal Bin Ramli
14DKA14F2063
3. Mohammad Naim Bin Akhir
14DKA14F2032
4. Muhammad Nasihin Nubil Bin Ya'acob
14DKA14F2044

Supervisor of the project:

1. Puan Haizah Binti Hamzah
2. Puan Hazilah Binti Mohamad