

**RANCANG BANGUN MESIN PENGADUK GELCOAT UNTUK
GALANGAN MINI TEKNIK PERKAPALAN
POLITEKNIK NEGERI BENGKALIS**

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Abstract

This fiberglass gelcoat concoction served to assist in the process of working on the fiberglass ship. In gelcoat fiberglass batter there are several ingredients used in gelcoat paste such as the combination of polyester, aerosil and pigment resin. In the framework of a gelcoat mass-mixing machine using eight-inch galvanish tubes, it has dimensions of a device 100 cm by 60 cm by 100 cm. It was a phase of a single ac electric motor with a round 2850 RPM. Using a pulley motor to a gearbox using a 3-inch pulley, and the pulley shaft is a 5-inch inch pulley with a gearbox ratio of 1 to 1, adding a rotary speed to an 85.5 rpm. Testing 1 obtained in the fiberglass gelcoat paste testing by processing the weight of 25,042 kg polyester resin, and the addition of the other ingredients known as aerosil and pigment produce a gelcoat mass that has been perfectly mixed at 25.3075 kg (25.3075 lb). Testing 2 obtained in the testing of gelcoat fiberglass batter by processing the weight of the polyyster resin 20.5222 kg and the addition of the other ingredients known as aerosil and pigment produces a gelcoat weight that has been perfectly mixed in 20,788 kg by 58:53 seconds. Testing 3 obtained in the testing of gelcoat fiberglass batter by processing the weight of the polyyster resin at 15.5549 kg and the addition of the pigment, the aerobister and the pigment yield a perfectly mixed gelcoat weight of

15.8199 kg, which takes approximately 33:24 seconds. Based on the test that the gelcoat mixing machine had been designed to be used.

Keywords: *Machine frame, Motor power, Fiberglass Gelcoat Dough*

