Crane is one of the lifting equipment which are widely used in industries and the worldwide shipping. At Surabaya Shipbuilding State Polytechnic having a crane, which functions as a lifting and shifting of vessel. However, in the appointment system, still have deficiency balance point that is difficult to find the ship at the time of the lift.

One alternative to solve the problem is with the ship made an appointment system (lifting system) by using the system of crane wire ropes 4 1 binding on the cable guide. Crane uses the rail as the main completeness before you can move both horizontally and vertically by using several components such as motors, drums, ropes, and pulleys. Two drums are mounted on a motor shaft will come to move when the motor is running and in the test made two kinds of drum diameter of 40 mm and 50 mm, so that the rope is wrapped around the drum and the load can be interested in moving up and down together through a mechanism pulleys.

From the test results with a load of 10 kg and 40 mm diameter drums, got a strong current of 1.7 Ampere, voltage 12 V, rise velocity 10.63 m / s and the velocity is down 42.67 m / s. This can be compared with original data cranes, which have a power of 5 kW with a maximum load 5 tons.

Keywords: Motor, Drum, Wire rope, Rail, and Pulley