ABSTRACT

In the field of manufacture of heavy equipment in many industries to finish a job requires punctuality. Then the necessary equipment that can work fast and efficient. As an example of progress made on the workpiece vertical lathe work holding table with a diameter of 2 meters. In the process need help turning operation of a buffer on the work holding table (justing) to maintain the position of workpiece in order to avoid the slope. Based of the above writers are planning to make a parallel hydraulic jack as a tool workpiece support 1 ton capacity on a vertical lathe by using a hydraulic drive system (hydraulic jack).

The author uses a hydraulic jack to 3 Ton capacity = 30 kN, which is modified so that the ability to lift for each jack ± 250 kg. These braces use a terminal in the form of a hand pump with maximum pressure of 350 psi.

Hydraulic Jacks made parallel with the workpiece support tool on the 1 ton capacity vertical lathe authors define the construction of this tool is parallel construction 1 terminal four branches each branch having the same length so that the distribution of fluid is divided prevalent. Author also determine the dimensions of each required components include pistons with a diameter of 2.6 cm hydraulic hose with a diameter of 2 cm and bold valve, cross and tee with a diameter in the following diameter hose.

Keywords: Hydraulic Jacks, vertical lathe, a buffer.