Abstract

In the small shoes industry, it was found a large number of manual press machine driven by the workers. The impact of this case is the long process of the shoes making. On the other hand using a manual press machine was not giving an optimal quality of the shoes itself. By modifying the pneumatic system hydraulic machines press simply that has no different ways of work, it is expected that many small industries will be able to have it. Thus the results of the pressing shoes maximize both quality and quantity.

In pneumatic system shoe sole press machine modification, studying the shoe soles characteristic and the part of it’s up is the important one. Then, find the force needed, so it can be used in the planning of a pneumatic cylinder, looking for a loss of pressure in pipe. Next, do the circuit planning, selection and pneumatic components assembly. Furthermore equipment testing to determine its progress level.

From the results of this experiment it was found that the shoe soles pressing and it’s up using a pressing force of 38 kgf and it operating pressure 6.118296 kgf/cm², is required pneumatic cylinder with a diameter of 40 mm and the consumption of compressed air 2 cylinder 5,6558 lt with a loss of pressure in the pipe for 2,019 × 10⁻⁷ kgf/cm².

Key words: Pressing, shoe sole, pneumatic