DESIGN AND MANUFACTURE HYDRAULIC SYSTEM AS A DRIVER CUTTING AND MAKING FILTER HOLE MACHINE OF RICE COOKER 2 KG CAPACITY FOR STAINLESS STEEL

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Abstract
In the home industry to make cookware still much apply simple method, especially manufacture filter of rice cooker. To increase efficiency and productivity is to make the machine where the machine is two production processes into one machine, namely the process of piercing and blanking.

Design of the machine must be able to shearing and make holes diameter 3mm as much 46 holes with stainless steel sheet. This machine uses system hydraulic. Begins of the calculation start from tensile test to find ultimate tensile strength of material and then planing hidraulic system find of force on shearing, head loss, and power of motor.

From the analysis it is concluded that: cylinder used 80mm, pump capacity $5.13 \text{ cm}^3/\text{rev}$ and the electric motor 3 HP/2.2 KW with 1425 rpm spin.

Key word: piercing, blanking