SEMI-AUTOMATIC CONTROLLING SYSTEM IN BLANKING SPONS MACHINE FOR SANDAL ACCESORIS IN USE 5-10MM THICKNESS WITH ELECTRO-PNEUMATIC

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Abstract

At this time industry of accesoris from a spons has spread up highly in Indonesia because it’s a high comodity, but almost of the accesoris machines come from other country so to buy a machine is too expensive by a local industry, in other that the local machines is still didn’t growing up. One of alternatives conclusion to increase the efficiency dan quality local product is to create a blanking spons machine with pneumatic system.

In built a blanking spons machine with pneumatic system need a material pressure test, calculate again the force to determine the size of cylinder, and a election of pneumatic circuit to be need is: compressor, manometer, 5/2 way valve solenoid, pneumatic actuator, and the kind of pipe type is K.P Poly Urethane Hose, and the plate of knife can be design by yourself.

Based on the calculation, to cutting a spon in high 5 mm, needed a cutting force 436 kgf, so to build a machine needed one double acting actuator cylinder with diameter Ø 100 mm, pressure operation used 7 bar, with speed of the cylinder 3,2x10^{-2} m/s.

Keywords : Spons, Pneumatic, Blanking.