

Design and Fabrication of Pneumatic Hacksaw

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Abstract: *In mass production industries and workshops, there is frequent need of cutting objects in a very quick manner so as to meet fast processing tasks. This study aims to create a proto-type pneumatic powered hacksaw that utilizes pneumatics components to provide motion to blade, solenoid valves, an air compressor as a source of power and a programmable logic controller (PLC). This helps in reducing the overall cost of the hacksaw right from designing to manufacturing since expensive electronic circuits are not used. When compared to motorized hacksaw this pneumatic hacksaw with simultaneous and sequential pneumatic circuits is capable of performing the same task automatically with assistance of even an unskilled labour which in turn reduces the running cost of the machine.*

Keywords: Pneumatic cylinder, air compressor, pneumatic hacksaw, reciprocating motion, micro controller

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