

Pedal Operated Hacksaw Machine for PVC Pipes and Wood

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Abstract: In this project work an effort has been made to design and developed model of Pedal Powered Hacksaw. The pedal powered hacksaw is a device which is used for cutting wood, plastic and metals. The basic principles of power driven hacksaw is Slider Crank Mechanism which is an inversion of four bar chain mechanism. In this mechanism, the connecting rod is directly connected to the hacksaw for the processing of cutting the wooden blocks. The hacksaw move to and fro motion when the pedal is powered, so as the rotating disc rotates. The main aim of this project is to reduce the human effort for machining various materials.

Keywords: Pedal Powered Hacksaw, Sprocket Arrangement, Slider and Crank Mechanism

REFERENCES

- [1]. C. Pravin, s. Chirag, v. Jaydeep, r. Mehul, and d. Pratikv, "design and fabrication of power hacksaw," international journal of engineering and technology, vol. 2, pp. 45- 53, 2015.
- [2]. A. R. And k. S., "pedal powered washing machine (ppwm)," international journal of engineering research and technology, vol. 3, pp. 113 - 118, 2012.
- [3]. K. Ahsan-uz-zaman, k. M. Ullah, m. Mishir, and m. Alam, "generation of electrical power using gymnasiumbicycle," in 2017 iee region 10 humanitarian technology conference (r10-htc), 2017, pp. 198-200: iee.
- [4]. P. Mogaji, h. Jayeola, and d. Echoga, "development of an improved pedal powered washing machine," au ejournal of interdisciplinary research (issn: 2408- 1906), vol. 5, no. 2, 2020.
- [5]. J. Patel, s. Patel, p. Soni, s. Prajapati, and m. Patel, "design of a pedal powered hacksaw machine."
- [6]. D. T. Ajetunmobi and a. Adeola, "development of a pedal