

Design of Multi-Operational Machine

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Abstract: *The Multi-Function Operating Machine mainly carried out for production-based industries are meant for the production of useful goods and services at low production cost, machinery cost, and low inventory cost. Today in this world every task has been made quicker and fast due to technological advancement but this advancement also demands huge investments and expenditure, every industry desires to make high productivity. rate maintaining the quality and standard of the product low average cost. We have developed a conceptual model of a machine that would be capable of performing different operations simultaneously, and it should be economically efficient in this machine we are giving drive to the main shaft to which the scotch yoke mechanism is directly attached, scotch yoke mechanism is used for sawing operation. On the main shaft, we have used a bevel gear system for power transmission at two locations. Through bevel gear, we will give drive to the drilling centre and grinding centre. The model facilitates us to get the operation performed at different working centres simultaneously as it is getting driven from the single power source. Objectives of this model are conservation of electricity (power supply), reduction in cost associated with power usage, increase in productivity, reduced floor space.*

Keywords: Single slider mechanism, bevel gear, drilling, cutting, sawing, grinding, multi-operational, bearings

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