

ABSTRACT

This paper presents the concept of Design and Fabrication of Multi- purpose Sieving Machine mainly carried out for production-based industries. Today in this world every task has been made quicker and fast due to technological advancement, every industry desires to make a high productivity rate maintaining the quality and standard of the product at a low average cost. We have developed a conceptual model of a machine capable of performing various sieving operations easily. A sieve is a device used for separating wanted elements from unwanted material or for characterizing the particle size distribution of a sample, typically using a woven screen such as a mesh or net. In this machine, it mainly depends on converting the rotary motion provided by the AC motor into the sliding motion of the sieving bracket (a slider-crank mechanism). The motor is provided with crank to provide the required motion as it rotates the shaft connected to the movable framing portion does back and forth motion as such the mesh attached to it when moves or slides separate the particles and other foreign Particles of required size based on the size of the mesh. This process can be used for as many numbers of different sizes of particles. Thus the Design and fabricating of the Sieving Machine is to help the industrial people and farmers on the global market. The advantage is to obtain the easy separation of things according to mesh and reduction in cost associated with power usage, increase in productivity rate and produce less space.