

ABSTRACT

PT. XYZ is an orthodox tea processing company. Orthodox tea processing process through the process of Withering, grinding, oxidation, drying, sorting, packing, storage, and transport. In the process of sorting is often the accumulation of spilled tea powder that is when the tea is processed in a sorting machine. Related to the above is taken data on spills at each work station. The result is a sorting work stations are scattered among the largest tea powder other work stations in this factory, which seesar 27 460 g. Spills that exist in the sorting process is actually made up of several types of tea, but usually returned into the tub with BM quality so that there is a downgrade in terms of quality which will affect the selling price. Based on these problems have done the research to design and assess carrier spilled tea powder at the work station is found downgrade sorting for tea production. In response to these problems do research to overcome the problems cecran tea powder by improving conveyance spills. From these studies generated the concept of a conveyance spilled tea powder. But the results of these studies do not yet have product specifications are ready for production. There is also a motion mechanism and a mechanism to filter Removable product that needs to be studied again. By using machine design concepts of previous research through the process of recognition of the need, stage mechanism, the analysis phase style, material selection stage, stage design elements, phase modification, detail drawings and production. From the resulting outcome of these processes in the form of a conveyance design with motion mechanisms that have an increased frequency filter to filter motion, and mechanism Removable easier, specification of components that can be purchased, and product assembly.

Keywords— Product Development, Detail Design, Machine Design, Sortation Machie, tea processing.