

Review on Capsule Filling Machines

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Abstract: Encapsulation also known as capsule filters, capsule filling machines or encapsulation machines are mechanical devices widely employed in pharmaceutical and industrial industries. These are machines fill soft or hard gelatin capsule of various gelatin sizes with powder, active granules, semisolid or liquids containing active pharmaceutical ingredients or a Combination ingredients and solution is describe the active pharmaceutical ingredients and excipients encapsulation is the word used to describe process of filling empty capsule with content. The instrumentation of capsule filling machines operating by the tamping principle has been described only once, using strain gauges. The pneumatic system replaces the conventional springs situated between tamping pins and the upper part of the tamping head. It was found that the use The pneumatic tamping head is limited to the control of fill weight during tamping. Major adjustments of fill weight at the set-up stage of the machine should be made by alteration of the tamping pin and powder bed height settings. Briefly state the primary goal of the project, such as designing, optimizing, or analyzing a capsule filling machine. describe the boundaries of the project, specifying the aspects of the capsule filling machine to be addressed, whether it's design, efficiency, optimization, or another focus area Outline the methods, techniques, or approaches used in the project, whether it involves modeling, simulation, experimental testing, data analysis, or a combination of these. Highlight the importance or relevance of the project, emphasizing how its outcomes contribute to advancements in pharmaceutical manufacturing, healthcare, or related field. Provide a glimpse of the expected outcomes or potential contributions resulting from the project, such as improved efficiency, optimized processes, or innovative designs.

Keywords: Capsules, Gelatin, Soft and Hard gelatin capsule, Advantages and Disadvantages , Capsule-filling machines, Types of capsule-filling machines Their Working Principle

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