

# Chapter 10

## Design of Gripper and Selection of Robotic Arm for Automation of a Pick and Place Process



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### Introduction

The process of enclosing a product to preserve it for storage, sale, distribution, and use is packaging. The term packaging also means designing, producing, and evaluating of packages. In other words, packaging can also be described as the system of pre-processing of goods for transportation, storage, sales, and the end consumer. The packaging is used to contain, protect, and preserve the product to be transported, informs, and sold [1]. The packaging industry valued for 3.65 billion USD is estimated to be valued at 5.96 billion USD by 2024 with the compound annual growth rate (CAGR) of 8.52%, within the forecast period of 2019–2024 [2]. Packaging in the pharmaceutical and cosmetic industry is one of the highly regulated processes with only minor variations in detail from region to region. Its main objectives are to protect products from climatic or biological reactions, chemical or physical contamination, and at the same time also being economical. It must also

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