

UNIVERSITI TEKNOLOGIMARA

**MINI PLASTIC INJECTION
MOULDING**

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ABSTRACT

This is the final year project 2 which is for fabrication and also do the dissertation based on the project title. The project that will be presenting is Design and Fabricate the Mini Plastic Injection Moulding. The used for mini-injection moulding is, it can convert from recycle items such as plastics bottles, polystyrene and also polypropylene which is the raw material to useful items such as plastic paper clips, keychain or plastic comb hair. The project will be discussed about general injection moulding in industry, the heater that been used in injection moulding, plastic that been used in injection moulding and also the steel that been used to build mini-injection moulding. The project also discuss about the mini-injection moulding. The conclusion is that the project of mini plastic injection moulding can inject the raw material plastic into a mould and from that it will be a useful item.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Plastics injection moulding is the device or machine that can transform from melting to solidification such as from raw material to solid material. For the creation of plastic parts, plastic injection moulding is the most widely utilised manufacturing process. Injection moulding is used to create a vast range of items that differ widely in size, intricacy, and application. An injection moulding machine, raw plastic material, and a mould are all required for the injection moulding process. In the injection moulding machine, the plastic is melted and then injected into the mould, where it cools and solidifies into the final product. The following section goes over the processes in this procedure in further depth.

Plastic housings are one of the most prevalent uses for injection moulding, which produces thin-walled plastic parts for a range of applications. Plastic housing is a thin-walled container that frequently necessitates a large number of ribs and bosses on the inside. These housings can be found in a wide range of devices, including household appliances, consumer electronics, power tools, and car dashboards. Different sorts of open containers, such as buckets, are also prevalent thin-walled goods. Injection moulding is also used to make toothbrushes and little plastic toys, among other things. Injection moulding is also used to make a variety of medical instruments, such as valves and syringes.