

A REPORT SUBMITTED TO THE FACULTY OF MECHANICAL ENGINEERING, MARA UNIVERSITY OF TECHNOLOGY, SHAH ALAM, SELANGOR DARUL EHSAN, MALAYSIA. DEPARTMENT OF MECHANICAL ENGINEERING (MECHANICAL)

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APPLICATION TOOLING FOR ELECTRICAL DISCHARGE MACHINE (EDM).

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ABSTRACT

With the advancement of technology nowadays, many industrial sector exist in our country in various fields.

One of the fields which has high reputation and prospect is the manufacturing industry. It requires machines and computer system in producing products.

Normally, Computer Numerical Control (CNC), Electrical Discharge Machine (EDM) and etc are being used.

Here, we are going to discuss in more details concerning the EDM and its tooling. With the widesperad use of EDM, the quality and quantity of a product definitely can be obtained and increased. This is due to the high precision/accurary of EDM compared to other machines/devices. Apart from that, EDM also can be used to produce various shape of desired product which is impossisible done by the other machines.

Tooling is important in determining the end product. The use of tooling in machining work gives a lot of advantages for man. Apart from producing high quality product, the use of tooling also make much easier task for the operator in dealing with the machine.

In a nutshell, it is hoped that we will fully utilised all the information from this survey as a knowledge to be applied in the industrial sector.

SAFETY PRECAUTION

It is important to protect the operator of the machine and the machine itself from accidents and damage respectively. These precautions apply not only to this machine but also to the setting and operations of almost all machines. Always observe this following precaution to prevent accident from happens during machining operation.

General

It is important to observe general precautions in order to have an accident free working environment and improving productivity.

1. Always wear safety eyeglasses and shoes.
2. Keep working suit in good order when operating the machine.
3. Do not operate the machine if you are wearing gloves.
4. Sufficient light must be provided around the machine and maintain the clean environment.
5. Do not remodel the machine without an authorized permission.
6. Do not use compressed air to clean and remove dust and cutting chips from the machine proper, power control cabinet, NC unit and the floor around them.
7. Do not place anything on any section of the machine.