REVIEW ON DESIGN OF FIXTURE FOR HORIZONTAL MACHINING CENTRE

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ABSTRACT

The final year project is start by the overview of fixture. it us describe the project mainly HMC fixture.the cylindrical part is held in machine is not easy so the advance fixture are innovate. First we go in industry Grandures Engineering pvt ltd. To find out the problems then we discuss about it and give suggestion to improve the fixture design. It is important work help to improve Productivity , stability of machine as wellas work piece.

Index terms: *Fixture, Efficiency, Improve Accuracy, Productivity.*

INTRODUCTION

The industry has sufficient changes are required to handling the machine. We start manufacturing of basic general equipments.the flexibility required in industry for fulfilment of requirement of product the convectional machine are not fulfil the market requirement so we need to improve capability of each and every part of machine. In that condition we use two type of machine like semi-automatic and automatic. But in every stage they not work satisfactorily so some part of machine is innovate or change and replace by newly design part now in this project we works on the HMC fixture to improve quality, productivity stability of machine as well as work piece.the work piece holding capacity of fixture is also increase.

LITERATURE REVIEW

1. P. Maniar in this paper we discussed about newly design of fixture they used in various areas in industry. The innovative fixture which can be mounted on machine to reduce the installation cost and operational cost .the fixture is highly costlier so they handle with carefully.
2. Harish P. Jorwekar in this paper we study about fabrication and design of HMC fixture, the fixture holds the object during operation in relative space and specific reference point it is work in minimum four axis and six axis it has six degree of freedom. It helps to increase the production rate of of machine.
3. Faiezul Bin Zainal in this paper we study about specification , safety, characteristics of machine and design the fixture basis on this factors it is solve problems for circular, and cylindrical work piece.
4. Chetan M. Patel in this paper we know about design and modification of horizontal machining centre fixture the design based on the support and locators there is need to apply all experiment modification works on it to satisfy all applications.
5. Maureen Fang in this paper we study the fixture is most critical and costlier product in industry so it will handle carefully. So many time they damage by the handling of worker and treatment of

worker, that why we refer this paper to understand the features of fixture.the proper design reduces the deflection and improve the accuracy

CONCLUSION

We perform on the project on HMC machine fixture in grandeur engineering at the start of project we analysed the problems in fixture and suggest some remedies to overcome the problem in fixture then we start to and perform some analysis like geometric, force, deformation by using CAD/CAM software and we get some useful output. Recent we select the parameters and materials to perform future operation or process.

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