

LAPURAN PROJEK TAHUN AKHIR  
KURSUS DIPLOMA LANJUTAN KEJURUTERAAN JENTERA  
KAJIAN KEJURUTERAAN, I.T.M., SHAH ALAM

THE DESIGN AND FABRICATION OF  
A WAX-INJECTION VESSEL FOR INVESTMENT CASTING

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Preface:

Investment casting or lost wax casting is already known and practiced by the Malays especially in the State of Trengganu and Kelantan since decades ago. Until now, the practice is only on small scale basis as 'cottage industry'. The 'art' is passed from generation to generation and they are famous in making silver wares, household items and malay costumes wares.

Efforts have been taken by the government to modernise the practice. Several government bodies have been entrusted to standardise the sale and market either locally or abroad. On the whole, still few attempts have been made in trying to introduce new techniques and machinery to make the practice a much profitable industry.

This project is somehow the breakthrough attempt of trying to introduce some basic new technique to this industry. The wax-injection vessel developed is hoped to change the way in obtaining the wax-patterns at much faster rate compared to the present practice. Further analysis and improvement on the design is very much needed to upgrade the efficiency of the vessel.

Basic engineering concept and theory is followed closely during the design stage. Several code of practices are referred and some catalogues from manufacturers are also looked upon.

Due to lacks of time, not much improvement is done on the first design. It is realised that this design is still lack in one way or another and still not more room for future improvement.

As the tourist industry develops so fast and in view of the development achieved by our country today, it is believed that this 'cottage industry' has bright and profitable future. Improvement on the methods and technology is needed from time to time to upgrade the standard. Let's hope that one day in the near future we have this industry to be proud of.

(Abdul Hali b. Abdullah)

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