



A STUDY OF CERAMIC COATING BY PLASMA SPRAY MACHINE

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CHAPTER I

INTRODUCTION

1.1 Introduction

This report presents a study of ceramic coating (Yttria Stabilized Zirconia) by using plasma spray process. This study advised by co. supervised Mr. Abdul Rahim Bin Mahamad Sahab. This study is to determine the ceramic coating characteristic and properties of coating where are coated onto metal substrate (mild steel) by using plasma spray coating machine. Experiments were done to determine the testing mechanical properties of the samples with bond coat and without bond coat and to observe the microstructure of the coating. Some test has been done such as bending, microstructure, hardness, ultrasonic and adhesive. The machines used are Shimadzu Autograph Universal test machine, Abramin – Struers, Grindo Sonic (the impulse excitation technique) machine and microscope.