PREFACE

In spite of giving maximum weightage to the research everywhere in the world, proper utilization of men, materials and processes for the best results is still incomplete and lot of work is going on everywhere. Aluminium is one of the metal largely available resources on earth and one of the most important alloys in use is Al-Si-Mg alloy (A357). This alloy finds application in many of the major components of aircraft industry, automotive industry, components of complex geometry, etc. due to its high strength to weight ratio. Proper understanding of this alloy for the better performance with certain modifications is the major topic of any research work. Proper standard heat treatment procedure, manufacturing methods and modifications has lot of influence on improved properties of the alloy. After referring a number of technical papers on microstructural modification methods and heat treatment methods of heat treatable cast Aluminium alloys, I have decided to share more systematically what I had learned from all that experience.