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شبكة المعلومـــات الجامعية التوثيق الالكتروني والميكروفيا.



## جامعة عين شمس

التوثيق الالكتروني والميكروفيلم



نقسم بللله العظيم أن المادة التي تم توثيقها وتسجيلها على هذه الأفلام قد اعدت دون آية تغيرات



#### يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

40-20 في درجة حرارة من 15-20 منوية ورطوبة نسبية من

To be kept away from dust in dry cool place of 15 – 25c and relative humidity 20-40 %









# INFLUENCE OF SEMI-SOLID CASTING PROCESS PARAMETERS ON MICROSTRUCTRAL CHARACTERISTICS OF MECHANICALLY STIRRED A356 ALUMINUM ALLOY

B116.0

By

Eng. LAILA SHEHATA YOUSEF EL-SAYED

A Thesis Submitted to
Faculty of Engineering at Cairo University
in Partial Fulfillment of the
Requirements for the Degree of
DOCTOR OF PHILOSOPHY

In METALLURGICAL ENGINEERING

To

Department of Mining, Petroleum and Metallurgy, Faculty of Engineering, Cairo University

June 2007



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### INFLUENCE OF SEMI-SOLID CASTING PROCESS PARAMETERS ON MICROSTRUCTRAL CHARACTERISTICS OF MECHANICALLY STIRRED A356 ALUMINUM ALLOY

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