



شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم



شبكة المعلومات الجامعية
@ ASUNET



شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of
15-25- c and relative humidity 20-40%

بعض الوثائق الأصلية تالفة

بالرسالة صفحات لم ترد بالاصل



Mansoura University
Faculty of Engineering
Mechanical Power Eng. Dept

620,1

3633
17710P

Analysis of Condensation Process From Moist Air

A Thesis

*Submitted in Partial Fulfillment of the Requirements for the Master Degree
of Science in Mechanical Power Engineering*

BY

Eng. Ali Musaed Alharran
B.Sc. Mechanical Power Engineering

Under Supervision of

Prof. Dr. Mohamed Gamal Hassan Wasel

Mech. Power Eng. Dept.
Faculty of Engineering
Mansoura University

Dr. Mohamed Ghassoub Saafan Mousa

Mech. Power Eng. Dept.
Faculty of Engineering
Mansoura University

2008



Mansoura University
Faculty of Engineering
Mechanical Power Eng. Dept

Analysis of Condensation Process From Moist Air

A Thesis

*Submitted in Partial Fulfillment of the Requirements for the Master Degree
of Science in Mechanical Power Engineering*

BY

Eng. Ali Musaed Alharran
B.Sc. Mechanical Power Engineering

Under Supervision of

Prof. Dr. Mohamed Gamal Hassan Wasel

Mech. Power Eng. Dept.
Faculty of Engineering
Mansoura University

Dr. Mohamed Ghassoub Saafan Mousa

Mech. Power Eng. Dept.
Faculty of Engineering
Mansoura University

2008



Supervision Committee.

Thesis Title: "Analysis of condensation process from moist air"

Researcher Name: Ali Musaed Elharran

Supervisors:

Name	Position
1. <i>Prof. Dr.</i> Mohamed Gamal Wasel	Prof. Dr. in Mech. Power Dept. Faculty of Engineering Mansoura University
2. <i>Assoc. Prof. Dr.</i> Mohamed Ghassoub Saafan	Assoc. Prof. Dr. in Mech. Power Dept. Faculty of Engineering Mansoura University

Supervision Committee:

Name	Position	Signature
<i>Prof. Dr.</i> Mohamed Gamal Wasel	Prof. Dr. in Mech. Power Dept. Faculty of Engineering Mansoura University	
<i>Assoc. Prof. Dr.</i> Mohamed Ghassoub Saafan	Assoc. Prof. Dr. in Mech. Power Dept. Faculty Of Engineering Mansoura University	

Head of Mechanical Power
Engineering Dept.

Vice Dean of the Faculty
for High Studies



Dean of the Faculty



Supervision Committee

Thesis Title: "Analysis of condensation process from moist air"

Researcher Name: Ali Musaed Elharran

Supervisors:

Name	Position
1. Prof. Dr. Mohamed Gamal Wasel	Prof. Dr. in Mech. Power Dept. Faculty of Engineering Mansoura University
2. Assoc. Prof. Dr. Mohamed Ghassoub Saafan	Assoc. Prof. Dr. in Mech. Power Dept. Faculty of Engineering Mansoura University

Supervision Committee:

Name	Position	Signature
1. Prof. Dr. Nabil Ibrahim Hewedy	Prof. Dr. in Mech. Power Dept. Faculty of Engineering Monofia University	N.I. Hewedy
2. Prof. Dr. Ahamed Abdel-razik sultan	Prof. Dr. in Mech. Power Dept. Faculty of Engineering Mansoura University	[Signature]
3. Prof. Dr. Mohamed Gamal Wasel	Prof. Dr. in Mech. Power Dept. Faculty of Engineering Mansoura University	[Signature]
4. Assoc. Prof. Dr. Mohamed Ghassoub Saafan	Assoc. Prof. Dr. in Mech. Power Dept. Faculty Of Engineering Mansoura University	[Signature]

Head of Mechanical Power
Engineering Dept.

Vice Dean of the Faculty
for High Schools

Dean of the Faculty

[Signature]



[Signature]

Acknowledgement

At first I have to thank our merciful God for every thing He gives me.

I wish to express my deep thanks and gratitude to my supervisor *Prof. Dr. Mohamed Gamal Hassan Wasel*, Professor of Mech. Power Eng, Faculty of Engineering, Mansoura University, for his valuable smooth supervision, advises and help during the performance of this work.

My sincere thanks and gratitude to *Dr. Mohamed Ghassoub Saafan Mousa* , Professor of Mech. Power Eng, Faculty of Engineering, Mansoura University for his criticism, valuable suggestion and constant interests during the performance of this study.

I also wish to thank the technical staff of the Gas dynamic laboratory, Faculty of Engineering, Mansoura University, for their help during the experimental work.

