

127, 17 27, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20) 77, 17 (20









جامعة عين شمس

التوثيق الالكتروني والميكروفيلم



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



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15-20 مئوية ورطوبة نسبية من 20-40 %

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



ثبكة المعلومات الجامعية





Information Netw. " Shams Children Sha شبكة المعلومات الجامعية @ ASUNET بالرسالة صفحات لم ترد بالأص

Ain Shams University Faculty of Engineering

OPTIMIZATION OF CABLE SUSPENDED STRUCTURES

By

Eng. Mohamed Samir Elkasry

Graduated on 1989

A thesis submitted in partial fulfillment for the requirements of the degree of master of science in civil engineering (structural)

Supervised By

Dr. Saafan A. Saafan Prof. of Structural Eng. Ain Shams University Dr. Mohamed N. Fayed Assoc. Prof. of Structural Eng. Ain Shams University

Dr. Magda M. El-Rakabawy
Assoc. Prof. of Structural Eng.
Ain Shams University

Cairo, 1997

BN CKK



سي الراع الراع الراعي



EXAMINERS COMMITTEE

Name, Title and Affiliation

Signature

1. Dr. SABRY SAMAAN MIKHAIL

Professor of Structural Engineering Cairo University

SSamaan

Dr. AHMED ABD EL MONEM KORASHY

Professor of Structural Engineering Ain Shams University

A Korashy

On the Behalf of Supervisor Committee

Dr. Saafan A. Saafan

Professor of Structural Engineering Ain Shams University

5-A-Sagla

Dr. Mohamed N. Fayed

Associate Professor of Structural Engineering

Ain Shams University

Date / 1997

Noor tal



INFORMATION ABOUT THE RESEARCHER

Name : Mohamed Samir Elkasry

Date of Birth : March 19, 1967

Place of Birth : Heliopolis, Cairo

Qualification: B.Sc. degree in Civil Engineering

-Structural Section with general grade

"Distinction with honor", Faculty of

Engineering, Ain Shams University, June

1989.

STATEMENT

This dissertation is submitted to Ain Shams University for the degree of Master of Science in Civil Engineering (structural).

The work included in this thesis was carried out by the author in the departement of Civil Engineering (Strucural Division), Ain Shams University, from February 1991 to March 1997.

No part of this thesis has been submitted for a degree or a qualification at any other University or Institution.

Date: / /

Name: Mohamed Samir Elkasry

Signature:

