

Higher Technical Institute
MECHANICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

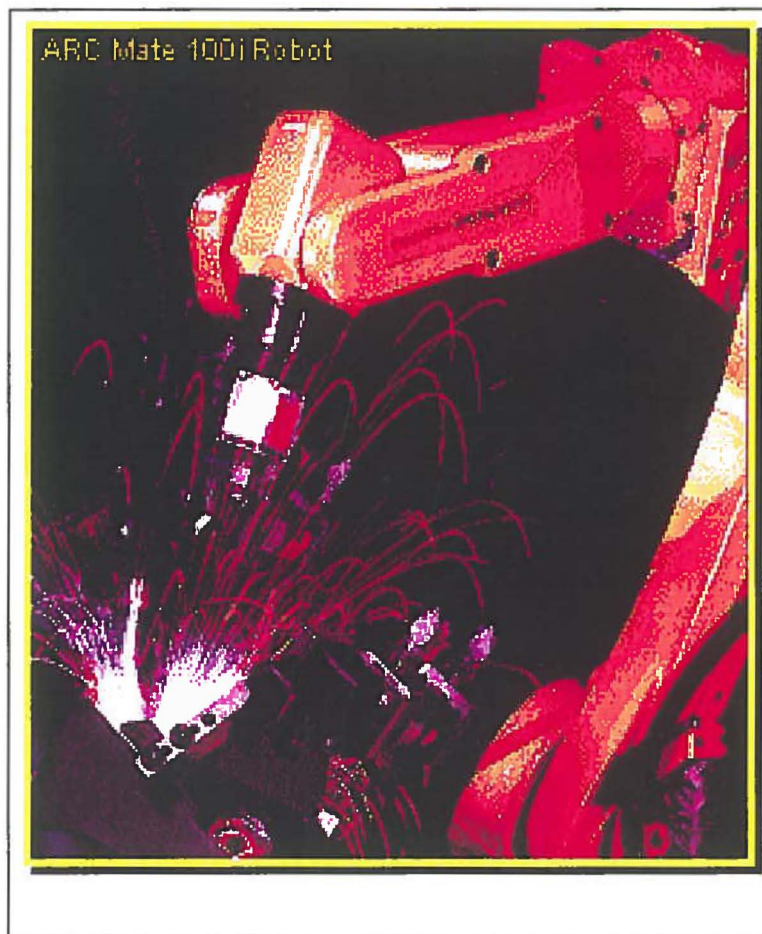
THE DEVELOPMENT OF A DEMONSTRATION
PROGRAM ON THE FANUC 100i INDUSTRIAL ROBOT

BY
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M/870

JUNE 1999

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HIGHER TECHNICAL INSTITUTE	PROJECT NO. 3036
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**THE DEVELOPMENT OF A DEMONSTRATION
PROGRAM ON THE FANUC100i INDUSTRIAL
ROBOT**

by

Andreas Tziambos

Project report

submitted to

The Department of Mechanical Engineering of the

Higher Technical Institute

Nicosia Cyprus

in partial fulfillment of the requirements

for the diploma of

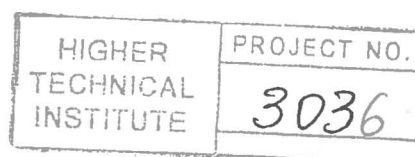
TECHNICIAN ENGINEER

in

MECHANICAL ENGINEERING

June 1999

Project number:M/870



**To my family,
Efie, and my
roommates.**

Acknowledgments

I wish to express my sincere gratitude to my project supervisor **Dr. Andreas Stassis**, Mechanical Engineering lecturer at HTI, for his quittance and priceless assistance he offered me in executing this project.

Tziambos Andreas

The Development of a Demonstration Program on the FANUC 100i Industrial Robot

by Andreas Tziambos

SUMMARY

This diploma project consists of seven chapters:

The first chapter consists of introductory information about the term robot as it is translated by several organizations all over the world.

The second chapter contains information about the use of robots in industry as well as possible future applications.

The third chapter explains specifically the robot's anatomy, the classification of robots according to the intelligence level and control system, as well as the basic types of robot programming languages.

In the fourth chapter, the behavior and the basic equipment for arc welding and material handling is demonstrated.

The chapters five and six have to do with the FANUC ARC Mate 100i robot exclusively, and with the development of a demonstration program in arc welding. In chapter six, engineering drawings are included and photos during the welding operation of the robot.

In chapter seven discussion and suggestions about the robot and the programming are included.