RWTH RHEINISCH WESTFÄLISCHE TECHNISCHE HOCHSCHULE AACHEN (AACHEN UNIVERSITY OF TECHNOLOGY)

DEGREE CERTIFICATE

Mr. **Michael Hans Okorn**

born November 13th, 1964

in Bochum (Germany)

passed the **degree examinations**

in the subject **Mechanical Engineering**

with the mark above average

and was awarded the academic title **Diplom - Ingenieur**

He passed the following subjects

Fluid Dynamics I (Krause)
Hydraulics and Pneumatics (Murrenhoff)
Dynamics of Machines (Dittrich)
Work Organisation I (Luczak)
Industrial Engineering and Ergonomics I (Luczak)

He successfully participated in the following practical courses

Laboratory in Mechanical Engineering
Manufacturing Engineering Laboratory (WZM/FT) I,II
Welding Technology Laboratory

1st study thesis	Methods for mechanical Metal cleaning (Knotek)	exceptional
2nd study thesis	Algorithms for automatic generation of RC-Programs for an Industrial Robot (Weck)	exceptional

Mr. **Michael Hans Okorn**

has achieved the following particular examination results

	subject (professor)	weight	mark
compulsory subjects	Automatic Control (Rake)	3	average
	Turbomachines and reciprocating Engines (Pischinger/Bohn/Gallus)	3	average
	Manufacturing Technology I,II (König)	4	above average
	Production Engineering I,II (Eversheim)	4	above average
	Welding Technology I,II (Dilthey)	4	above average
	Machine Tools I,II (Weck)	4	above average
	Effective Design in respect to the Manufacturing and Assembly Process (Eversheim/Weck)	2	above average
	Quality Management (Pfeiffer/Eversheim)	2	average
compulsory elective subjects	Industrial Logistics I,II and Factory Planning (Luczak/Eversheim)	4	above average
	Systems Theory I (Bruns)	2	above average
dissertation	Simulation of automatically generated machine-programs for a flexible open-die forging cell in the robot simulation system ROBCAD as well as realisation and testing in a prototype forging cell (Weck)	10	exceptional

Aachen 30. September 1996

The representative of the Examination Board

Mr. **Michael Hans Okorn**

passed the following compulsory subjects in the preliminary studies prior to specialisation in manufacturing engineering

Chemistry
Physics
Electrical Engineering
Advanced Mathematics I
Advanced Mathematics II-IV
Mechanics I
Mechanics II, III (Dynamics)
Introduction to Manufacturing Engineering
Materials Science I-II
Mechanical Drawing I-II
Machine Elements I,II
Informatics
Numerical Analysis
Fluid Mechanics I
Thermodynamics I,II

compulsory elective subjects

English in Science and Technology
Advanced Technical English

practical courses

PASCAL Programming
Physics Laboratory