

Microprocessors
AND Minicomputers
IN THE
TEXTILE
INDUSTRY

Microprocessors
AND *Minicomputers*
IN THE
**TEXTILE
INDUSTRY**

EDITED BY
Perry L. Grady
AND *Gary N. Mock*

SCHOOL OF TEXTILES
NORTH CAROLINA STATE UNIVERSITY

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Microprocessors and Minicomputers in the TEXTILE INDUSTRY



INSTRUMENT SOCIETY OF AMERICA

This book is dedicated with affection to my wife, Patricia,
my daughters, Lynn and Julie,
my mother, Ruby,
and the memory of my father, Perry.

—Perry L. Grady

And to my wife, Ruth,
my sons, Kevin, Darin, and Brian,
my father, Norman,
and the memory of my mother, Zelma.

—Gary N. Mock

PREFACE

the textile industry in the United States and the world has used the power of the computer to reduce operating costs and improve quality as rapidly as these machines have been made available for industrial control. The earliest installations for direct digital control date easily into the 1960s for batch dyeing machines and Jacquard knitting machines. Many of the early installations met with immediate success, while others, after gallant attempts were made to fulfill the requirements for continuous, uninterrupted service, failed and were removed somewhat ingloriously from service. After these initial failures, many progressive companies bided their time and awaited the development of more reliable machines. The introduction of solid state devices pioneered the development of these new machines and major progress was off and running.

In the mid-1970s, North Carolina State University began to offer a series of short courses devoted to computer applications in textiles through the Continuing Education Division. The purpose of these courses was to bring together the ~~pioneers~~ pioneers in the development of these new applications and the eventual users in the primary industry.

The contributions to this book are based on the many papers that were presented at these short courses and other contributed papers. The authors acknowledge the continued support of Mr. Frederic S. Cushing of the Instrument Society of America and his suggestion that this body of papers be collected and

published. Finally, the invaluable contributions of Elizabeth House, Victoria Simmons, Janis Enterline-Baker, Joanne Self, Patricia Heath, Linda Robinson, Eloise Ragland, and Gail Bianchi in the preparation of the manuscript should not go unacknowledged and are greatly appreciated.

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