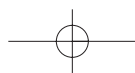
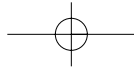
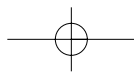
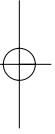
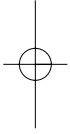


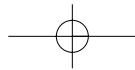
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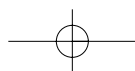
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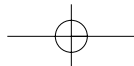
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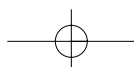
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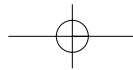
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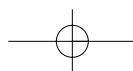
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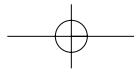




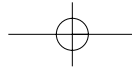
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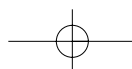
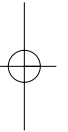
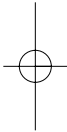


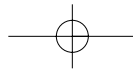


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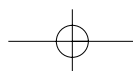
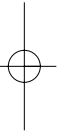
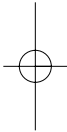


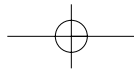
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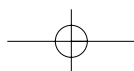


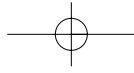
PREFACE

This fourth edition of *Computer Numerical Control: Concepts and Programming* continues to focus on the basic fundamentals of numerical control (NC) programming. Over the past eight to ten years, a certain amount of de facto standardization has taken place in the manufacture of NC controls. Although each manufacturer offers a host of different options and capabilities, the fundamental programming codes and syntax required for basic NC programming have become more similar. The core programming chapters have been revised to reflect this trend. All program examples now utilize the coding style used on the more popular current NC controls. New, expanded examples have been added.

The programs represented in this text are not as complex as those found in industry. The examples were carefully selected to demonstrate the basic concepts of CNC programming. The author's goal is to eliminate the learner's confusion that often accompanies the introduction of CNC programming. The learner will achieve an understanding of the programming principles through the programming applications and problems presented in the text. With a firm understanding of the basic principles, the learner can then move confidently ahead to apply the principles to actual industrial situations. Programming is an art, and like art in its visual form, the programming practices used by programmer or NC instructors may vary. However, the basic principles of CNC programming are exhibited in each programmer's effort.

The CD in the back of the book contains the sample programs that are provided in specific chapters. These txt files are listed by chapter directory. They can be copied to your computer for future use and modification. The CD also contains web links to certain CAD/CAM companies that supply CAM modules and code verification software.





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