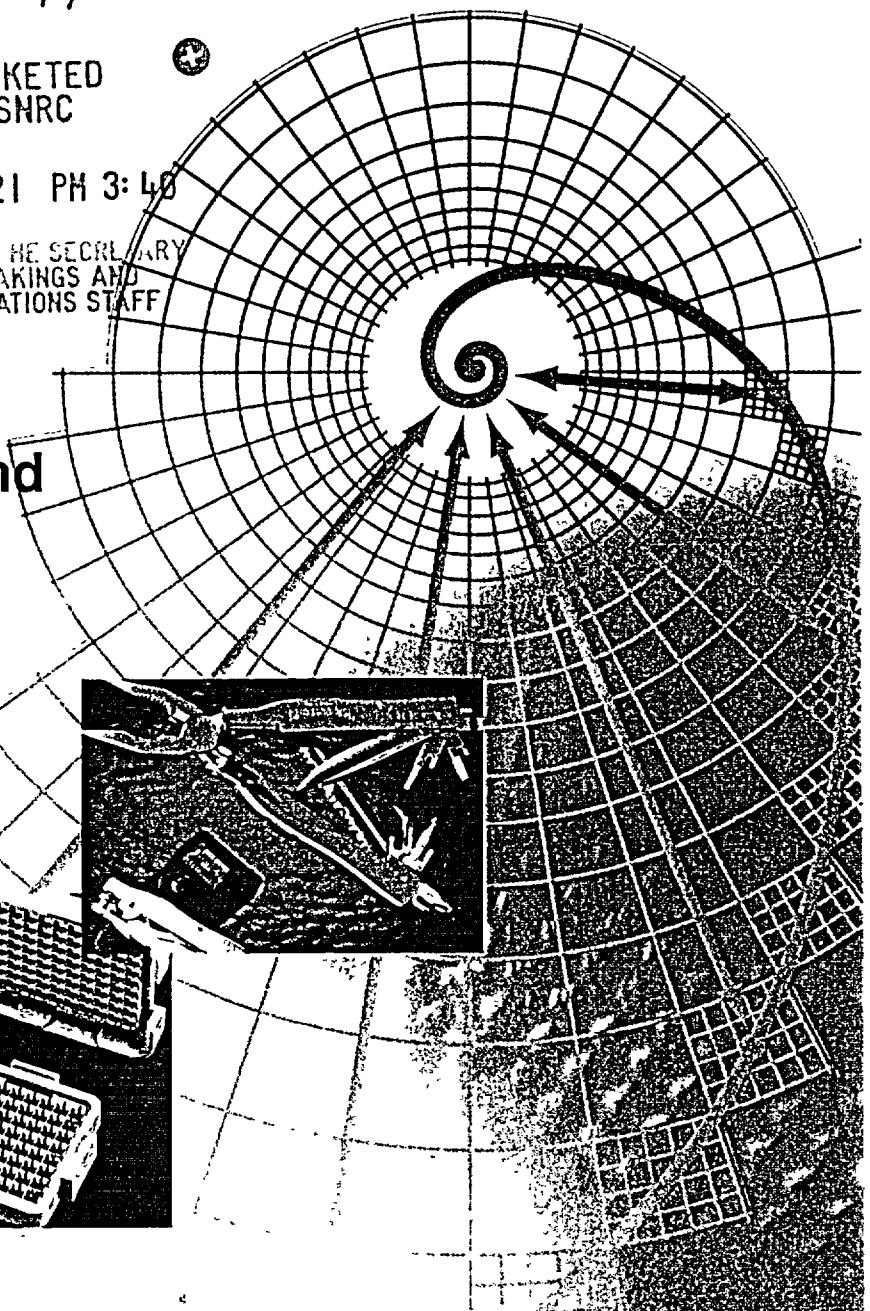




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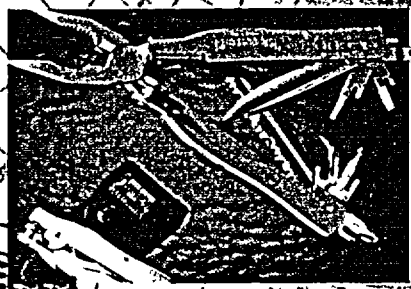
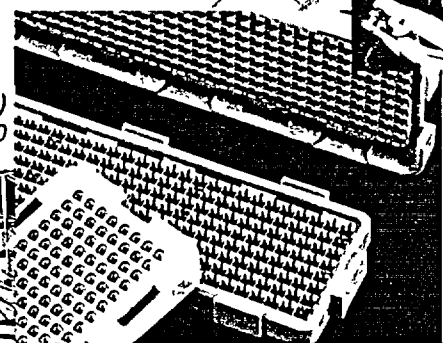


Advanced Contact and Bolt Pretension

Training Manual

for Release 5.6

001361 (Volume 1)
May 30, 2000



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**Advanced Contact
and Bolt Pretension
For ANSYS 5.6**

Contact and Bolt Pretension - Training Manual

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Advanced Contact and Bolt Pretension - Training Manual

Table of Contents

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Training Manual

| | | | |
|--|------|-----------------------------|------|
| 1. Introduction | 1-1 | 7. Node-to-Node Elements | 7-1 |
| 2. Contact Overview | 2-1 | 8. Node-to-Surface Elements | 8-1 |
| A. Typical Applications | 2-2 | 9. Bolt Pretension Elements | 9-1 |
| B. Contact Classifications | 2-7 | A. PRETS179 Element | 9-4 |
| 3. Contact Stiffness | 3-1 | B. Typical Procedure | 9-7 |
| A. Basic Concepts | 3-2 | C. Workshop | 9-15 |
| B. Determining a Value | 3-5 | | |
| 4. Friction | 4-1 | | |
| 5. Contact and Auto Timestepping | 5-1 | | |
| 6. Surface-to-Surface Elements | 6-1 | | |
| A. Overview | 6-4 | | |
| B. Advanced Options for Special Problems | 6-7 | | |
| C. Rigid Surface Considerations | 6-54 | | |
| D. Creating without the Contact Wizard | 6-63 | | |
| E. Troubleshooting | 6-83 | | |

Advanced Contact & Pretension v.6

1. Introduction

Introduction
Welcome!

-
- Welcome to the *Advanced Contact and Bolt Pretension* Training Course!
 - This course covers those contact models that cannot be readily solved using the Contact Wizard, default contact settings, and automatic solution control settings. It also covers a related topic, bolt pretension analysis.
 - This course is intended for ANSYS users who are already familiar with the concepts and procedures for iterative nonlinear analysis, and who have learned how to do “simple” contact analysis (topics covered in *Basic Structural Nonlinearities*).

Introduction

... Welcome

ANSYS®

Training Manual

Advanced Contact & Pretension 5.5

- This is the second in a series of three training course on ANSYS nonlinearities:
 - *Basic Structural Nonlinearities* (2 days)
 - *Advanced Contact and Bolt Pretension* (1 day)
 - *Advanced Structural Nonlinearities* (2 days; scheduled for completion in September 2000)

To teach advanced nonlinear contact analysis procedures, including the following topics:

- Contact classifications
- Contact stiffness
- Friction
- Surface-to-surface, node-to-node, and node-to-surface elements
- Bolt pretension



Introduction
Course Material

- The *Training Manual* you have is an exact copy of the slides.
- Workshop descriptions and instructions are included in the *Workshop Supplement*.
- Copies of the workshop files are available in ftp://ftp.ansys.com/pub/archive/training/adv_cont56

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