NEiNastran *for Windows*

Editor

Overview

The NEiNastran Editor is an industry unique tool that gives engineers greater control over their Nastran FEA models and results. Features such as advanced editing, context-sensitive input, and dynamic help greatly increase productivity and results reliability from the start. Built-in tools such as the trade study generator, a basic optimization utility, give users quick insight into the effects of design changes. Real-time results are displayed through an integrated post-processor allowing users to visualize results as they are generated during the solution sequence. These features combined make the NEiNastran Editor an indispensable tool for designers and analysts alike.

Solution Types:

The NEiNastran Editor is supported in all NEiNastran solution sequences.

Capabilities:

General:

- Fully integrated and customizable Nastran Editor controls program operation and provides results summary data through an easy to use GUI
- Complete online documentation and context sensitive help with hypertext links
- COM (Component Object Model) interface provides interactive communication to Nastran solver during analysis for real-time job control and status
- Automatic update notification

File Display and Editing:

- Full-featured Windows text editor with user configurable toolbars, drag-and-drop editing, search and replace, multi-level undo and redo, book marking, clipboard access, and Multiple Document Interface (MDI) support
- Tabbed windows to give immediate access to all input and output files
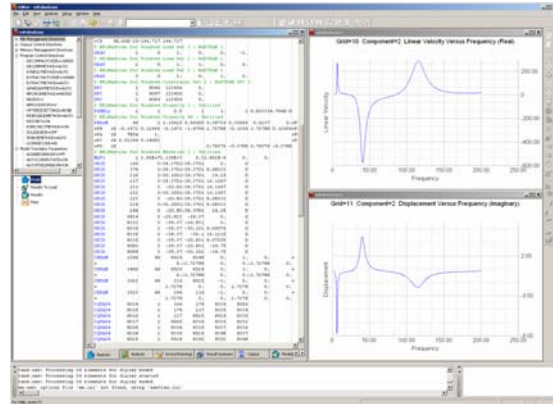
- Tabbed windows to give immediate access to all input and output files
- Column selection and column cut and paste operations
- Large file support
- Syntax coloring feature highlights comments and recognized Nastran commands and entries
- Free field to fixed field converter utility
- Vertical field markers to simplify manual editing
- User positionable field labels

Job Control:

- Real time job status information with stop/start controls
- Graphical nonlinear convergence form displays nonlinear work, load, and displacement convergence in percent complete bar format
- Expandable tree access to all model parameters and initialization directives
- Direct error message linking to Nastran input file helps locate errors quickly
- Configuration trade study generator automatically generates and queues models with user specified design variable changes such as thickness or dimension for design sensitivity analysis
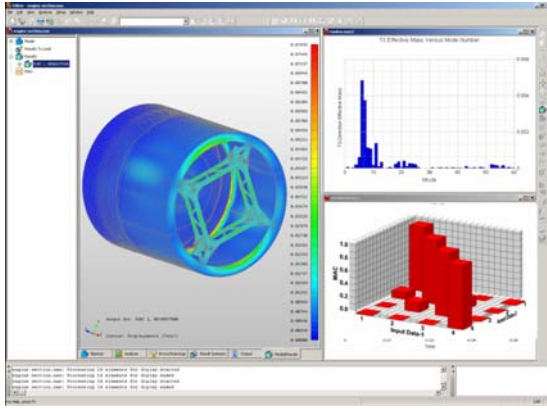
Model Graphical Display:

- Hidden line and wireframe displays
- 3D dynamic pan, zoom, and rotation
- Light source shading and transparency
- Toolbars access for frequently used commands
- Dynamic highlight during selection operations
- Load and boundary condition display including: constraints, forces, moments, pressures, and temperatures
- Model data query for nodes, elements, properties, and materials
- The default analysis options include user-definable default settings for Display Options and Post-Processing.
- Interactive 'drilldown' querying allows users to look at internal nodes, element, properties, and materials as they change in depth

Results Graphical Display:

- Deformation, animation, and vector displays
- Filled color contours and criteria displays
- X-Y plots
- Single and multi-set set animations
- Tabular results output with quick find search buttons
- Print graphics and tubular results windows
- Export graphics to JPEG, BMP, TIFF, and GIF formats
- Save animations with animated GIF support
- Real time deformed shape and results contour displays with automatic updating for nonlinear static and transient solutions

- Interactive 'drilldown' querying allows users to look at internal element results as they change in depth

Results X-Y Plotting:

- Real-time results x-y plot support at max/min and user specified model locations with automatic updating at each nonlinear or dynamic solution step
- Export x-y plots to MS Excel Comma Separated Variable (.CSV) file format
- 3D vertical bar plot support for Modal Assurance Criterion (MAC) and Modal Cross Orthogonality (MXO) analysis
- Automatic modal effective mass and frequency versus mode number X-Y plot generation for modal response solutions
- Real/imaginary and magnitude/phase plots in frequency response and random vibration solutions
- User definable settings can be customized and saved for different solution types

Advanced Tools:

- Special input forms for classified DDAM data allows models to run in an unclassified environment
- Parabolic shell to linear shell element converter
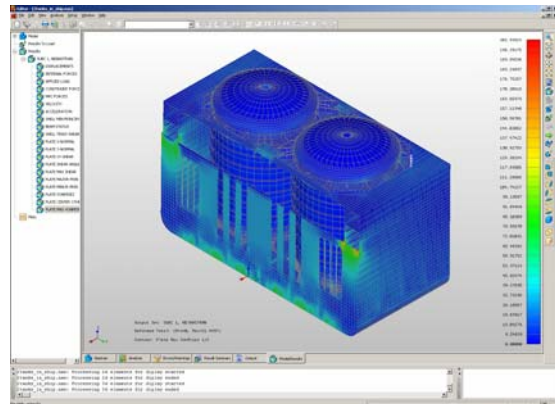
Noran Engineering, Inc is aggressively focused on commitment to the customer. Detailed documentation, customized on-site training, and comprehensive technical support ensures that you will see immediate return on your investment.

For more information about our company or our products, please contact:

Headquarters:

Noran Engineering, Inc
5555 Garden Grove Blvd., Suite 300
Westminster, CA 92683-1886
USA
Phone: 1.714.899.1220
Fax: 1.714.899.1369
Email: info@noraneng.com
Website: www.NENastran.com

Europe:

SmartCAE
Piazza della Gualchierina, 9
59100 Prato
ITALY
Phone: +39.0.574.404.642
Fax: +39.0.574.401.265
E-mail: info@smartcae.com
Website: www.smartcae.com

Asia/Pacific:

Digital Solutions
Kyoei Nakasuji Bldg., 3-7-18
Nakasuji, Asaminami-ku
Hiroshima 731-0122
JAPAN
Phone: +81.8.2850.2210
Fax: +81.8.2850.2215
E-mail: post@digital-sol.co.jp
Website: www.digital-sol.co.jp

NEiNastran *for Windows*
From Noran Engineering, Inc.