LS-DYNA data translator for NX I-deas

Facilitating data exchange and sharing to/from NX I-deas

Benefits
- Shorten model preparation time
- Reduce errors caused by manual data entry

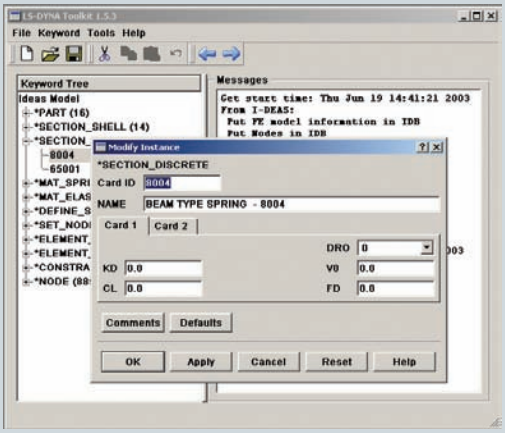
Features
- Exports NX I-deas FE models to LS-DYNA keyword files
- Imports LS-DYNA keyword files to NX I-deas Simulation

Summary
LS-DYNA data translator provides an interface between LS-DYNA and NX™ I-deas™ software (NX MasterFEM) digital simulation, facilitating the exchange and sharing of product data. Keywords are translated to their equivalent finite element (FE) entity on import. On export, NX I-deas FE entities are written to the corresponding keyword. LS-DYNA data translator provides a form-based environment to help you prepare a model for translation to and from NX I-deas, or to make modifications in the LS-DYNA deck. The current version of the LS-DYNA data translator supports LS-DYNA Version 960 and earlier.

The LS-DYNA data translator for NX I-deas allows for keywords and keyword instances to be laid out in a data tree with branches that expand and collapse, making management and editing of content simple and efficient. During keyword instance editing, you can select FE entities from the NX I-deas graphics region. These features shorten model preparation time and reduce errors caused by manual data entry.

Export/import capabilities
LS-DYNA export capabilities include:
- Creation of complete finite element models
- Generation of LS-DYNA sets, loads and boundary conditions
- Preparation of ready-to-run LS-DYNA keyword files for vehicle safety analysis

LS-DYNA import capabilities include:
- Complete LS-DYNA finite element models
- Support of both block and fixed format keyword file(s)
- Option to process “include” files
- Direct importing of LS-DYNA keyword data into NX I-deas (no generation of intermediate files)



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LS-DYNA data translator for NX I-deas

Productivity tools

Mapping tool The mapping tool enables you to decrease your keyword file building time by replacing data in certain keyword instances in the current keyword file with data from matching keyword instances in an external keyword file. Mapping works for the following keywords: part, section and mat.

Merging tool With the merging tool, you can control how the keyword instances in a source file, or those being exported from NX I-deas, are added to the current keyword file. The tool is flexible, allowing you to merge all keywords or select a subset of keywords to merge.

Technical specifications

Supported keyword instances All LS-DYNA keyword instances are supported. Two levels of support exist: basic text editing and full form editing.

- Airbag
- Ale
- Boundary
- Component
- Constrained
- Contact
- Control
- Damping
- Database
- Define
- Deformable_to_rigid
- Element
- EOS
- Hourglass
- Include_{option}
- Initial
- Integration
- Interface
- Load
- Mat
- Node
- Part
- Rigid wall
- Section
- Set
- Termination
- Title
- Translate
- User

Computing platforms

LS-DYNA data translator is supported on HP, Sun, IBM and SGI UNIX and Windows 2000/NT hardware platforms. Visit http://support.ugs.com/online_library/certification/ for additional system configuration information.

Prerequisites

NX MasterFEM (NX I-deas digital simulation modeling set)

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