

PACKAGE ID - 000273MLTPL00 TAURUS96*

KWIC TITLE - 3-D Finite Element Code Postprocessor

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LIMITATION CODE -COPY **AUDIENCE CODE** - LIM

COMPLETION DATE - 11/30/1993 **PUBLICATION DATE** - 11/30/1993

DESCRIPTION - TAURUS is an interactive post-processing application supporting visualization of finite element analysis results on unstructured grids. TAURUS provides the ability to display deformed geometries and contours or fringes of a large number of derived results on meshes consisting of beam, plate, shell, and solid type finite elements. Time history plotting is also available.

PACKAGE CONTENTS - Media Directory; Software Abstract; MDG Codes - Installation Guides for SUN, IBM, and SGI; UCRL-MA-105401; Media Includes Source, Compilation Instructions, Linking Instructions;

SOURCE CODE INCLUDED? - Yes

MEDIA QUANTITY - 1 CD Rom

METHOD OF SOLUTION - TAURUS interpolates element-based results back to the mesh nodes. Visible element faces, shaded according to the result values at their vertexes (nodes), are rendered using LLNL's DIGLIB which is included in this package.

COMPUTER - MLT-PLTFM

OPERATING SYSTEMS - UNIX, VMS

PROGRAMMING LANGUAGES - FORTRAN

SOFTWARE LIMITATIONS - 99 file limit on input database.

SOURCE CODE AVAILABLE (Y/N) - Y

UNIQUE FEATURES - Visualization of 3D and 2D engineering results on unstructured grids; fringe plots; isocontours; reflection planes; time-series plots; hardcopy output.

RELATED SOFTWARE - Input files created in TAURUS Plotfile Format and TAURUS Time History Format by finite element analysis codes

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RELATED SOFTWARE - (CONT) DYNA3D, NIKE3D, and TOPAZ3d.

OTHER PROG/OPER SYS INFO - Requires DIGLIB, which is supplied.

HARDWARE REQS - The binary (32-bit) is approximately 1.0 Mb.

TIME REQUIREMENTS - Initialization and rendering are highly dependent upon the size of the finite element mesh being post-processed and the type (s) of elements in the mesh.

REFERENCES - Thomas Spelce, J.O. Hallquist, and B.E Brown TAURUS: An Interactive Post-Processor for the Analysis Codes NIKE3D, DYNA3D, and TOPAZ3D, UCRL-MA-105401, May 1991.

ABSTRACT STATUS - Submitted July 1996. Released screened 8/7/96

SUBJECT CLASS CODE - N

KEYWORDS -

COMPUTER PROGRAM DOCUMENTATION
T CODES
THREE-DIMENSIONAL CALCULATIONS
MESH GENERATION
INTERACTIVE DISPLAY DEVICES
COMPUTER GRAPHICS

EDB SUBJECT CATEGORIES -
990200

SPONSOR - DOE/DP

PACKAGE TYPE - AS - IS