FINITE ELEMENT ANALYSIS feaINFORMATION.COM

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Inside This Issue

FEA Information Inc. is a publishing company founded April 2000, incorporated in the State of California July 2000, and first published October 2000. The initial publication, FEA Information News continues today as FEA Information Engineering Solutions. The publication's aim and scope is to continue publishing technical solutions and information, for the engineering community.

FEA Information Inc. Publishes:

FEA Information Engineering Solutions
FEA Information Engineering Journal
FEA Information China Engineering Solutions

FEA Information Engineering Solutions:

A monthly publication in pdf format sent via e-mail, additionally archived on the website FEA Publications. www.feapublications.com

FEA Information China Engineering Solutions

The first edition was published February 2012. It is published in Simplified and Traditional Chinese in pdf format. Published : February, April, June, August, October, December. The China Solutions is archived on the website FEA Publications. www.feapublications.com
To sign up for the Traditional, or Simplified edition write to yanhua@feainformation.com

FEA Information Engineering Journal: ISSN #2167-1273, first published February, 2012

Available on www.feaiej.com

Platinum Participants

www.beta-cae.gr

www.cray.com

www.datapointlabs.com

www.eta.com

www.esi-group.com

www.gns-mbh.com/

http://gridcore.se

www.hengstar.com /

www.jsol.co.jp/english/cae

www.lstc.com

www.oasys-software.com/dyna/en/

kaizenat.com

www.dfe-tech.com

LANCEMORE Co.
www.lancemore.jp/index_en.html

Comet
www.cometsolutions.com

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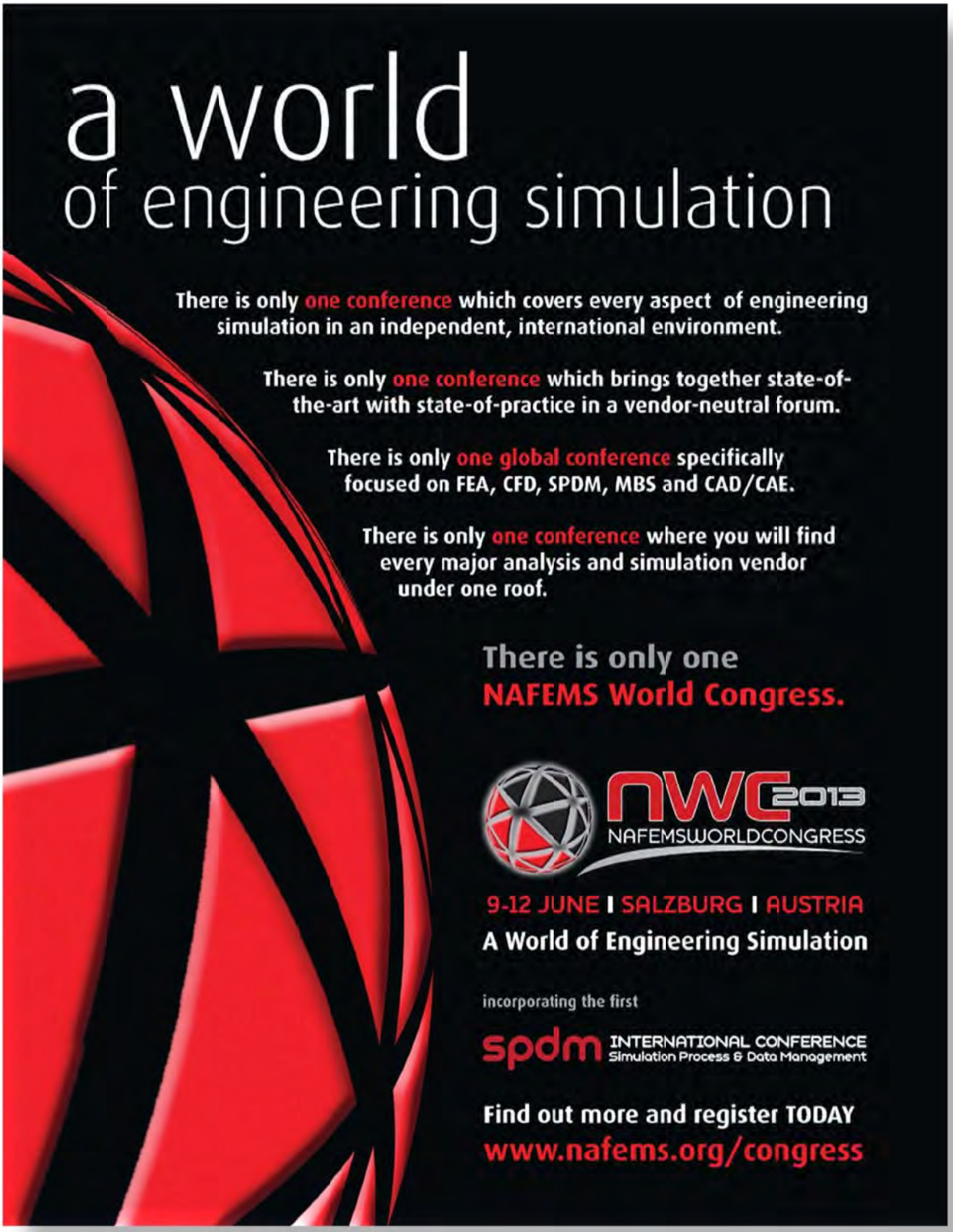
China LS-DYNA Users' Conference

COVER:

For information on the 1st 2013 China LS-DYNA Users' Conference hosted in Dalian China, October 16th-18th contact yanhua@lstc.com

Sincerely, Marsha Victory, Trent Eggleston
FEA Information


a world
of engineering simulation
There is only one conference which covers every aspect of engineering simulation in an independent, international environment.
There is only one conference which brings together state-of-the-art with state-of-practice in a vendor-neutral forum.
There is only one global conference specifically focused on FEA, CFD, SPDM, MBS and CAD/CAE.
There is only one conference where you will find every major analysis and simulation vendor under one roof.
There is only one
NAFEMS World Congress.
nwc2013
NAFEMSWORLDCONGRESS
9-12 JUNE | SALZBURG | AUSTRIA
A World of Engineering Simulation
incorporating the first
spdm INTERNATIONAL CONFERENCE
Simulation Process & Data Management
Find out more and register TODAY
www.nafems.org/congress

April 9th, 2013

Excerpt: For Complete Information Visit:
http://www.beta-cae.gr/news/20130409_announcement_ansa_meta_v14.1.0.htm

BETA-CAE system S.A. announces the release of v14.1.0 of our ANSA & µETA pre- and –post processing suite. Additional new features and tools, and enhancements in the existing ones add up to our continuous effort to bring optimum solutions to CAE engineers' needs.

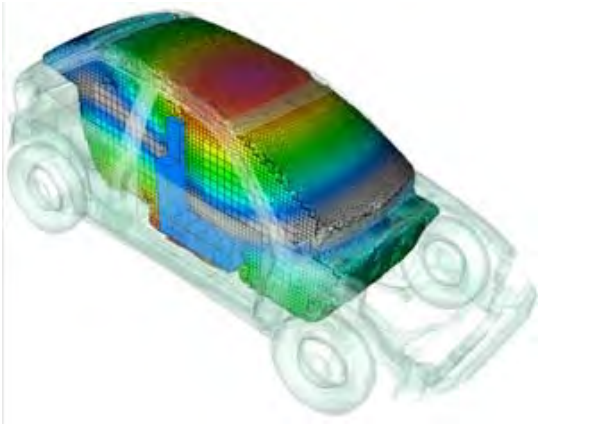
Enhancements and Known Issues Resolved in ANSA Pre-processing

- New function that enables the slide of a a feature or a member with automated fit on the underlying surface
- *PARAMETER/ *PYVAR are now supported when importing LS-DYNA, Pam-Crash, and Abaqus FEA files. The parametric values can now be used instead of the absolute ones
- Tangential face extension and other significant enhancements allow for more accurate connectivity definition based on geometry and topology
- New CAVITY Mesh function for the creation of acoustic cavity mesh. Wizard interface, better recognition of structural surface features, and high quality tetrahedral or hexa-dominant volume mesh
- New function (SIMILAR GROUPS) enables the detection of group of faces/elements with independent connectivity and assigns groups with similar shape under one parent group enabling the fast and easy creation of Multi-Instances and Linked geometries
- New group of functions “Instances” is now supported and offer the options to select and highlight all parts of the same instance, to open parts of the same instance in a new window, and to convert the selected parts to Multi-Instances.
- Representation of faces’ boundaries (CONS) in all drawing modes
- Automatic connectivity identification and definition for “self-welded” components and control of hole diameter per flange with a user script
- A new tool that creates transition zones between Hexa block boxes, using polyhedral elements, and a new function that splits Hexahedral boxes to pentahedral boxes
- FLUENT shell warping and solid orthogonality criteria are now supported

- New button for the “fringe plot” colour modes, for element thickness, load distribution, etc.
- Permas Sandwich materials are now supported
- NASTRAN MCOHE materials are now supported
- FEM Topology is now automatically performed between the chunks of the imported facets (strips) when translating JT files. No topology is applied between strips of different PID
- Enchantments in modifying DOFs/Weights and new option to redefine the Di and WTi of RBE3s
- Fringe mode for Abaqus *Film Boundary condition
- Results Map of multiple files in one mapper and ability to handle T junctions for composite parts
- GTK theme runs now on Ubuntu version 12.10 (or newer)
- Improved performance in CWELD CFAST drawing
- The *GENERATE option is now supported for sets containing ranges in Abaqus
- BC-GUI Designer is now supported for python scripting language
- The Laminate Tool’s list loading time has been significantly decreased when reading laminates with many layers
- The Fluent based Sensitivity function has been added in Fluent Deck
- Support of Theseus AirZone and Volume under a new FLUIDs group (Fluid entities)
- Structural NSM can now be plotted with a fringe bar (for NASTRAN)
- Ability to Draw NSM per subcase (for NASTRAN)
- The Reference function for ANSA Parameters has been introduced
- Numerous new keywords for SESTRA deck
- Ability to add Option AUXILIARY in Contact Card
- Contact entities can be defined as “Auxiliary” for better interpretation of deck files during Input/Output
- Contact simulations with FE, Geometry and standard shapes for the Kinetics MultiBody Dynamics Solver
- Addition of Animation controls, Consecutive time runs, and simulations history for the Kinetics Simulator
- Assistants for Joint, Forces guided creation for the Kinetics Module
- Handy tools in the Script Editor for indentation and searching
- and more...

For more details about the new software features, enhancements and corrections please, refer to the Release Notes document.

Enhancements and Known Issues Resolved in µETA Post-processing



- New features & enhancements in µETA post-processing
- Significant improvements in graphics performance
- Periodic cyclic symmetry for CFD models
- LS-DYNA keyword *AIRBAG_PARTICLE for visibility and results is now supported
- LS-DYNA keywords *PART_COMPOSITE and *PART_TSHELL_COMPOSITE are now supported
- LS-DYNA composite results are now supported in the CompositePost toolbar
- NASTRAN axisymmetric elements CQUADX and CTRIAX are now supported
- NASTRAN SRS SOL103 results are now supported
- NASTRAN PFPANEL keyword is now supported for the response of structure DOFs
- NASTRAN ERP panel definition in bulk files is now supported
- SC/Tetra CFD code is now supported
- Horizontal fringebars have been added
- Animated cut planes have been added
- Several enhancements of the 2D plot have been made
- Video and image distortion correction added
- Model hierarchy can be exported within 3dxml files
- Several enhancements in the user toolbars have also been made
- and more...

Complete Information on Release Notes are on the website.
Please visit and contact for information

Shanghai Hengstar became authorized reseller in China for ESI's software Visual-Environment for LS-DYNA®

Shanghai Hengstar expands its software portfolio with ESI's Visual-Environment applications to support LS-DYNA simulation. Besides solver specific software sales, distribution and support activities Shanghai Hengstar offers associated training and consulting services to the Chinese automotive market since April 1st, 2013.

Shanghai Hengstar Technology, sells and supports Visual-Crash DYNA, ESI's Visual-Environment application dedicated to support LS-DYNA simulation. This solution provides the Chinese automotive industry a mature suite of tools embedded in a unique, powerful and expandable simulation environment designed and ready for future multidisciplinary CAE engineering needs.

Covering and supporting most efficiently the full range of CAE simulation tasks, Visual-Crash DYNA comprises an integrated meshing tool, extensive preprocessing features like model set-up, comprehensive and time saving model checks, assembly features, extended safety functionalities and comfortable post-processing possibilities such as plotting, curve creation, injury report generation.

The availability of generic process templates completes the offer and ensures best in class support for any simulation task related to LS-DYNA crash & safety simulation.

Shanghai Hengstar Technology with its head office in Shanghai was founded in 2009 by Dr. Hongsheng Lu, who worked as a senior-scientist at LSTC headquarter in Livermore, USA. Dr. Lu and his team, comprising 10 highly qualified and experienced engineers, have very detailed knowledge of LS-DYNA solver and are well established in the Chinese automotive industry. Besides software sales, Shanghai Hengstar provides engineering services, consulting and training that combine analysis and simulation using Finite Element Methods such as LS-DYNA.

*Note: Car FEA model is from FHWA/NHTSA National Crash Analysis Center
Dummy FEA models are from LSTC

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For product information and ESI news, visit: www.esi-group.com/newsroom

Kaizenat and DYNAmore, GmbH Announces Strategic Partnership Agreement

"Partnership to include DYNAmore Tools Software Sales, Consulting, Training in India."

Kaizenat and DYNAmore announced that they have forged a strategic partnership for the welfare of the CAE industry in India. As part of the partnership, Kaizenat is authorized to distribute, support, train, consult and have conferences on DYNAmore's suite of software products listed below, for all companies, organizations, government entities and educational institutions located in India. This partnership will help Kaizenat to bring DYNAmore experts to india and share their expertise/knowledge for Kaizenat's LS-DYNA customers in India.

Any customer that is under a multi-country LS-DYNA licenses with DYNAmore Gmbh can choose the local support from Kaizenat Technologies Private Ltd.

Authorized Products:

plotcprs
check13
check-failed
d3plot-head
plot2bc
plotintrusion
rcrel
byteswap
check-hsp
nodrel
check-binout
kin2plot
plot2coor
plot2nodout
seghandle

The listed products are the proprietary software of DYNAmore GmbH.

About Kaizenat: KAIZENAT Technologies Private Limited(KTPL) is founded to sell & support LSTC products with high quality LS-DYNA support for Indian Industry.

- Nice blend of key persons with strong LS-DYNA support experience & strong project delivery experience from Indian top OEMs & leading CAE software/service providers.
- Help customers to use LS-DYNA effectively & efficiently to maximize the benefits from the software.
- Help our customers with corporate trainings & onsite placements in various CAE Domains

About DYNAmore: DYNAmore is dedicated to support engineers to solve non-linear mechanical problems numerically. Our tools to model and solve the problems are the finite element software LS-DYNA as solver and LS-OPT for optimization. We sell, teach, support, and co-develop the software and provide engineering services

www.dynamore.se

New Employee Joins DYANmore Nordic

Jesper Karlsson

Jesper Karlsson, Ph.D. will primarily work with the development of LS-DYNA in the CAE-software Development Group located in the Goteborg office.

Jesper obtained his Ph.D. from KTH Royal Institute of Technology in Stockholm.

Info Day In Oslo May 28, 2013

For the first time DYNAmore Nordic will arrange an Information Day in Oslo, where features in LS-DYNA and ANSA targeted towards offshore applications will be displayed. An agenda will shortly be available on our website – register to participate.

Info Day in Goteborg September 26, 2013

This year, we will arrange and Information Day in Goteborg, where you can meet staff from DYNAmore as well as be updated on the latest developments of LSTC and BETA software. Workshops will be arranged and this is an ideal Info Day to discuss ideas, capabilities and application uses.

DYNAmore Nordic Website

Now more integrated allowing users to find courses, seminars, webinars from within the DYNAmore Group.

Contact us for any information on classes or software you need>

support@dynamore.se

The complete Training Courses offered can be found at http://www.dynasplus.com
Please check the site for accuracy and changes.

Special Classes By Iñaki ÇALDICHOURY (LSTC) hosted by DynaS+

- LS-DYNA R7 – Electromagnetism (EM) By Iñaki ÇALDICHOURY (LSTC)
  - Paris Office 27-28/05 (1.5 days)
- LS-DYNA R7 – Incompressible CFD (ICFD) By Iñaki ÇALDICHOURY (LSTC)
  - Paris Office 29-30/05 (2 days)
- LS-DYNA R7 –Compressible CFD (CESE) By Iñaki ÇALDICHOURY (LSTC)
  - Paris Office 31/05 (1 day)

DynAS+ regular training class in 2013

- LS-DYNA Introduction Explicit Solver
  - 09-11/09
- LS-DYNA Introduction Implicit Solver
  - 23/09
- LS-DYNA Unified Introduction Implicit & Explicit Solver
  - 17-20/06 & 09-12/12
- LS-OPT & LS-TaSC Introduction
  - 16-17/10
- Switch to LS-DYNA
  - 12-13/11
- Switch from Ls-PrePost 2.X to 3.X/4.X
  - 25/09 & 14/11
- LS-DYNA Advanced Implicit Solver
  - 24/09
- LS-DYNA ALE / FSI
  - 14-15/10
- LS-DYNA SPH
  - 13-14/05 & 7-8/10
- LS-PrePost 3.X/4.X – Advanced meshing capabilities
  - 26/09 & 15/11
- LS-DYNA User Options
  - 15-16/05
- LS-DYNA – Plasticity, Damage & Failure – By Paul DU BOIS
  - 26-27/11
- LS-DYNA – Polymeric materials – By Paul DU BOIS
  - 28-29/11
- LS-DYNA – Geo-material modeling
  - 24-25/06
- LS-DYNA – Geo-material calibration
  - 26/06

http://cometsolutions.com/2013/02/comet-solutions-adds-support-for-ls-dyna/

Comet Solutions Adds Support for LS-DYNA

Comet Solutions, Inc., the innovative provider of Comet® software for design process automation across repeatable simulation workflows starting early in the product design cycle, has added support for LS-DYNA in the latest version of its Comet Software and now offers automation solutions for CAE processes that involve highly nonlinear transient events.

See Website for pdf information on:

- Automated Impact Analysis
- Automated Plastic Bottle Analysis

Comet enables rapid and robust design space exploration from concept discovery and selection through concept validation using a model-based engineering approach. We empower our customers to discover an array of possible design concepts, evaluate which ones are feasible, then select the best.

Comet software is a tool-open, extensible, vendor-neutral performance engineering workspace that lets engineers and engineering project teams readily carry out multi-fidelity, multi-physics modeling and simulation.

In the Comet workspace, companies can better leverage all of their simulation assets – “best practices” expertise, COTS as well as in-house engineering tools, and product performance data.

info@cometsolutions.com

Among The Courses for LS-DYNA on line:

- Intro LSDYNA with Workshops
- Intro LS-DYNA Fluid Structures Interaction with Workshops
- Getting Started with LS-DYNA
- Getting Started with LS-DYNA Implicit
- Getting Started with Fluid Structure Interaction in LS-DYNA
- Getting Started with Blast and Penetration using LS-DYNA
- Composite Materials in LS-DYNA
- Contact in LS-DYNA
- LS-DYNA Dummies
- Advance Impact Simulations Using LS-DYNA
- Material Modeling Using User Defined Material
- Intro LS-PREPOST
- Advance LS-PREPOST
- Blast and Penetration

BETA CAE Systems S.A. **www.beta-cae.gr**

BETA CAE Systems S.A.– ANSA

Is an advanced multidisciplinary CAE pre-processing tool that provides all the necessary functionality for full-model build up, from CAD data to ready-to-run solver input file, in a single integrated environment. ANSA is a full product modeler for LS-DYNA, with integrated Data Management and Process Automation. ANSA can also be directly coupled with LS-OPT of LSTC to provide an integrated solution in the field of optimization.

BETA CAE Systems S.A.– μETA

Is a multi-purpose post-processor meeting diverging needs from various CAE disciplines. It owes its success to its impressive performance, innovative features and capabilities of interaction between animations, plots, videos, reports and other objects. It offers extensive support and handling of LS-DYNA 2D and 3D results, including those compressed with SCAI's FEMZIP software

CRAY www.cray.com

http://www.cray.com/Products/Products.aspx

The Cray XK6

The Cray XK6 supercomputer combines Cray's proven Gemini interconnect, AMD's leading multi-core scalar processors and NVIDIA's powerful many-core GPU processors to create a true, productive, hybrid supercomputer

Cray XE6™ and Cray XE6m™ Supercomputers

The Cray XE6 scalable supercomputer is engineered to meet the demanding needs of capability-class HPC applications. The Cray XE6m is optimized to support scalable workloads in the midrange market.

Cray XMT™ System YarcData uRiKA™ Graph Appliance

The YarcData uRiKA graph appliance is a purpose built solution for Big Data relationship analytics. uRiKA enables enterprises to discover unknown and hidden relationships in Big Data, perform real-time analytics on Big Data graph problems, and realize rapid time to value on Big Data solutions.

The uRiKA graph appliance complements an existing data warehouse or Hadoop cluster.

Cray Sonexion 1300™ Storage System

The Cray Sonexion 1300 system is an integrated, high performance storage system that features next-generation modular technology to maximize the performance and capacity scaling capabilities of the Lustre file system.

Cray also offers custom and third-party storage and data management solutions

DatapointLabs

www.datapointlabs.com

Testing over 1000 materials per year for a wide range of physical properties, DatapointLabs is a center of excellence providing global support to industries engaged in new product development and R&D.

The compary meets the material property needs of CAE/FEA analysts, with a specialized product line, TestPaks®, which allow CAE analysts to easily order material testing for the calibration of over 100 different material models.

DatapointLabs maintains a world-class testing facility with expertise in physical properties of plastics, rubber, food, ceramics, and metals.

Core competencies include mechanical, thermal and flow properties of materials with a focus on precision properties for use in product development and R&D.

Engineering Design Data including material model calibrations for CAE Research Support Services, your personal expert testing laboratory Lab Facilities gives you a glimpse of our extensive test facilities Test Catalog gets you instant quotes for over 200 physical properties.

ETA – Engineering Technology Associates

www.eta.com

etainfo@eta.com

Inventium Suite™

Inventium Suite™ is an enterprise-level CAE software solution, enabling concept to product. Inventium's first set of tools will be released soon, in the form of an advanced Pre & Post processor, called PreSys.

Inventium's unified and streamlined product architecture will provide users access to all of the suite's software tools. By design, its products will offer a high performance modeling and post-processing system, while providing a robust path for the integration of new tools and third party applications.

PreSys

Inventium's core FE modeling toolset. It is the successor to ETA's VPG/PrePost and FEMB products. PreSys offers an easy to use interface, with drop-down menus and toolbars, increased graphics speed and detailed graphics capabilities. These types of capabilities are combined with powerful, robust and accurate modeling functions.

VPG

Advanced systems analysis package. VPG delivers a unique set of tools which allow engineers to create and visualize, through its modules--structure, safety, drop test, and blast analyses.

DYNAFORM

Complete Die System Simulation Solution. The most accurate die analysis solution available today. Its formability simulation creates a "virtual tryout", predicting forming problems such as cracking, wrinkling, thinning and spring-back before any physical tooling is produced

ESI Group www.esi-group.com

Visual-Environment: Visual-Environment is an integrated suite of solutions which operate either concurrently or standalone within a common environment. It aims at delivering an open collaborative engineering framework. As such, it is constantly evolving to address various disciplines and available solvers.

Visual-Crash is a dedicated environment for crash simulation: It helps engineers get their job done in the smoothest and fastest possible way by offering an intuitive windows-based graphical interface with customizable toolbars and complete session support.

For LS-DYNA users, Visual-Crash DYNA allows to focus and rely on high quality digital models, from start to finish as it addresses the coupling with competitive finite element or rigid body based software. This very open and versatile environment simplifies the work of CAE engineers across the enterprise by facilitating collaboration and data sharing.

Further tools are integrated in Visual-Environment enhancing CAE engineers work tasks most efficiently.

Visual-Mesh generates 1D, 2D and 3D elements for any kind of simulation.
Visual-Mesh provides automatic and guided surfaces clean up, application specific mesh generation and intuitive post mesh editing features..

Visual-Viewer is a complete, productive and innovative post-processing environment for CAE applications.

Visual-Viewer delivers a dedicated plotting and animation control solution. It offers a multi page, multi plot environment, allowing to group data into pages and plots. It is designed with a Windows GUI based on an intuitive and sleek user interface.

Visual-Process Executive is an advanced CAE environment for process customization and automation.

VisualDSS is an End-to-End Decision Support System for CAE. Manufacturers widely resort to Simulation-Based Design to gain a competitive edge in product development.

GNS - Gesellschaft für Numerische Simulation mbH

www.gns-mbh.com

Animator4

A general finite element post-processor and holds a leading position in its field. Animator4 is used worldwide by almost all automotive companies, a great number of aerospace companies, and within the chemical industry.

Generator2.

A specialized pre-processor for crashworthiness applications and has become very successful in the field of passenger safety and pedestrian protection. It is mainly used as a positioning tool for finite element component models by a great number of automobile companies throughout the world.

Indeed

An easy-to-use, highly accurate virtual manufacturing software that specializes in the simulation of sheet metal forming processes. Indeed is part of the GNS software suite and works concurrently with all other GNS software products.

OpenForm

A pre- and post-processor independently of a particular finite element forming simulation package. The software is extremely easy to handle and can be used as was designed to enable those who are not finite element experts to carry out multi-stage forming simulations with even complex multi purpose finite element codes.

Gompute on demand®/ Gridcore AB Sweden
www.gompute.com www.gridcore.se

Gompute is owned, developed and operated by Gridcore AB in Sweden. Founded in 2002, Gridcore is active in three areas: Systems Integration, Research & Development and HPC as a service.

Gridcore has wide experience of different industries and applications, developed a stable product portfolio to simplify an engineer/scientist's use of computers, and has established a large network of partners and collaborations, where we together solve the most demanding computing tasks for our customers. Gridcore has offices in Gothenburg (Sweden), Stuttgart (Germany), Durham NC (USA) and sales operations in The Netherlands and Norway.

The Gridcore developed E-Gompute software for internal HPC resources gives end users (the engineers) an easy-to-use and complete environment when using HPC resources in their daily work, and enables collaboration, advanced application integrations, remote pre/post, accounting/billing of multiple teams, license tracking, and more, accelerating our customers usage of virtual prototyping

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JSOL Corporation

www.jsol.co.jp/english/cae/

HYCRASH

Easy-to-use one step solver, for Stamping-Crash Coupled Analysis. HYCRASH only requires the panels' geometry to calculate manufacturing process effect, geometry of die are not necessary. Additionally, as this is target to usage of crash/strength analysis, even forming analysis data is not needed. If only crash/strength analysis data exists and panel ids is defined. HYCRASH extract panels to calculate it's strain, thickness, and map them to the original data.

JSTAMP/NV

As an integrated press forming simulation system for virtual tool shop the JSTAMP/NV meets the various industrial needs from the areas of automobile, electronics, iron and steel, etc. The JSTAMP/NV gives satisfaction to engineers, reliability to products, and robustness to tool shop via the advanced technology of the JSOL Corporation.

JMAG

JMAG uses the latest techniques to accurately model complex geometries, material properties, and thermal and structural phenomena associated with electromagnetic fields. With its excellent analysis capabilities, JMAG assists your manufacturing process

Livermore Software Technology Corp.

www.lstc.com

LS-DYNA

A general-purpose finite element program capable of simulating complex real world problems. It is used by the automobile, aerospace, construction, military, manufacturing, and bioengineering industries. LS-DYNA is optimized for shared and distributed memory Unix, Linux, and Windows based, platforms, and it is fully QA'd by LSTC. The code's origins lie in highly nonlinear, transient dynamic finite element analysis using explicit time integration.

LS-PrePost

An advanced pre and post-processor that is delivered free with LS-DYNA. The user interface is designed to be both efficient and intuitive. LS-PrePost runs on Windows, Linux, and Macs utilizing OpenGL graphics to achieve fast rendering and XY plotting.

LS-OPT

LS-OPT is a standalone Design Optimization and Probabilistic Analysis package with an interface to LS-DYNA.

The graphical preprocessor LS-OPTui facilitates definition of the design input and the creation of a command file while the postprocessor provides output such as approximation accuracy, optimization convergence, tradeoff curves, anthill plots and the relative importance of design variables.

LS-TaSC

A Topology and Shape Computation tool. Developed for engineering analysts who need to optimize structures, LS-TaSC works with both the implicit and explicit solvers of LS-DYNA. LS-TaSC handles topology optimization of large non-linear problems, involving dynamic loads and contact conditions.

LSTC Dummy Models

Anthropomorphic Test Devices (ATDs), as known as "crash test dummies", are life-size mannequins equipped with sensors that measure forces, moments, displacements, and accelerations.

LSTC Barrier Models

LSTC offers several Offset Deformable Barrier (ODB) and Movable Deformable Barrier (MDB) model.

Oasys, Ltd

www.oasys-software.com/dyna

Oasys LS-DYNA® Environment

The Oasys Suite of software, exclusively written for LS-DYNA®, is at the leading edge of the market and is used worldwide by many of the largest LS-DYNA® customers.

Oasys PRIMER is a model preparation tool that is fully compatible with the latest version of LS-DYNA®, eliminating the risk of data loss or corruption when a file is manipulated, no matter what operations are performed on it:

Key benefits:

- Maintains data integrity
- Finds and fixes model errors (currently over 5000 checks)
- Specialist tools for dummy positioning, seatbelt fitting, mechanisms, interior head impact etc.
- Connection manager for spotwelds, bolts, adhesive etc.
- Intelligent editing, deletion and merging of data
- Customisable with macros and JavaScript.

Oasys D3PLOT is a powerful 3D visualization package for post-processing LS-DYNA® analyses

Key benefits:

- Fast, high quality graphics
- Easy, in-depth access to all LS-DYNA® results.
- User defined data components
- Customisable with JavaScript.

Oasys T/HIS is an X-Y graph plotting package for LS-DYNA®

Key benefits:

1. Automatically reads all LS-DYNA® results.
2. Wide range of functions and injury criteria.
3. Easy handling of data from multiple models
4. Scriptable for automatic post-processing

Oasys REPORTER is an automatic report generation tool, for use with LS-DYNA®. which allows fast automatic report creation for analyses.

Shanghai Hengstar www.hengstar.com

Center of Excellence

Hengstar Technology is the first LS-DYNA training center of excellence in China. As part of its expanding commitment to helping CAE Engineers, Hengstar Technology will continue to organize high level training courses and seminars in 2012.

The lectures/training are taught by senior engineers and experts mainly from LSTC, Carhs, OEMs, and other consulting groups.

On Site Training

Hengstar also provides customer customized training programs on-site at the company facility.

Training is tailored for company needs using LS-DYNA or the additional software products by LSTC.

Distribution & Support

Hengstar Distributes and supports LS-DYNA, LS-OPT, LS-PrePost, LS-TaSC. Hongsheng Lu, previously was directly employed by LSTC before opening his distributorship in China for LSTC software.

Hongsheng travels to LSTC often to keep current on the latest software features and support to continue to grow Hengstar as a CAE consulting group.

Canada **Metal Forming Analysis Corp MFAC** galb@mfac.com

www.mfac.com

	LS-DYNA	LS-OPT	LS-PrePost	LS-TaSC
	LSTC Dummy Models	LSTC Barrier Models	eta/VPG	
	eta/DYNAFORM	INVENTIUM/PreSys		

United States **CAE Associates Inc.** info@caeai.com

www.caeai.com

	ANSYS Products	CivilFem	Consulting ANSYS
			Consulting LS-DYNA

United States **DYNAMAX** sales@dynamax-inc.com

www.dynamax-inc.com

	LS-DYNA	LS-OPT	LS-PrePost	LS-TaSC
	LSTC Dummy Models		LSTC Barrier Models	

United States	**ESI-Group N.A** www.esi-group.com			
	QuikCAST	SYSWELD	PAM-RTM	PAM-CEM
	VA One	CFD-ACE+	ProCAST	Visual-Process
	VisualDSS	Weld Planner	Visual-Environment	IC.IDO
United States	**Engineering Technology Associates – ETA** www.eta.com		etainfo@eta.com	
	INVENTIUM/PreSy	NISA	VPG	LS-DYNA
	LS-OPT	DYNAform		
United States	**Gompute** www.gompute.com		info@gompute.com	
	LS-DYNA Cloud Service		Additional software	
	Additional Services			
United States	**Comet Solutions** Comet Software		steve.brown@cometsolutions.com	

United States	**Livermore Software Technology Corp**		sales@lstc.com	
	LSTC www.lstc.com			
	LS-DYNA	LS-OPT	LS-PrePost	LS-TaSC
	LSTC Dummy Models	LSTC Barrier Models	TOYOTA THUMS	

United States	**Predictive Engineering** www.predictiveengineering.com		george.laird@predictiveengineering.com	
	FEMAP	NX Nastran	LS-DYNA	LS-OPT
	LS-PrePost	LS-TaSC	LSTC Dummy Models	
			LSTC Barrier Models	

France	**DynAS+**		v.lapoujade@dynasplus.com	
	www.dynasplus.com			
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	DYNAFORM	VPG	MEDINA	
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Germany	**CADFEM GmbH**		lsdyna@cadfem.de	
	www.cadfem.de			
	ANSYS	LS-DYNA	optiSLang	DIGIMAT
	ESAComp	AnyBody	VPS	
	FTI FormingSuite			

Germany	**DYNAmore GmbH**		uli.franz@dynamore.de	
	www.dynamore.de			
	PRIMER	LS-DYNA	FTSS	VisualDoc
	LS-OPT	LS-PrePost	LS-TaSC	DYNAFORM
	Primer	FEMZIP	GENESIS	
	TOYOTA THUMS		LSTC Dummy & Barrier Models	

Germany	**GNS**		mbox@gns-mbh.com	
	www.gns-mbh.com			
	Animator	Generator	Indeed	OpenForm

The Netherlands	**Infinite Simulation Systems B.V**		j.mathijssen@infinite.nl	
	www.infinite.nl			
	ANSYS Products	CivilFem	CFX	Fluent
	LS-DYNA	LS-PrePost	LS-OPT	LS-TaSC

Italy	**EnginSoft SpA**		info@enginsoft.it	
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	CADfix	LS-DYNA	Dynaform	Sculptor
	ESAComp	AnyBody	FTI Software	
	AdvantEdge	Straus7	LMS Virtual.Lab	ModeFRONTIER
Russia	**STRELA**		info@dynarussia.com	
	LS-DYNA	LS-TaSC	LS-OPT	LS-PrePost
	LSTC Dummy Models		LSTC Barrier Models	
Sweden	**DYNAmore Nordic**		marcus.redhe@dynamore.se	
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	LS-PrePost	LS-TaSC	FastFORM	DYNAform
	FormingSuite		LSTC Dummy Models	
			LSTC Barrier Models	
Sweden	**GRIDCORE**		info@gridcore.com	
	www.gridcore.se			
	LS-DYNA Cloud Service		Additional software	

Switzerland	**DYNAmoreSwiss GmbH**		info@dynamore.ch	
	www.dynamore.ch			
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	LS-TaSC		LSTC Dummy Models	
			LSTC Barrier Models	
UK	**Ove Arup & Partners**		dyna.sales@arup.com	
	www.oasys-software.com/dyna			
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	LS-TaSC	PRIMER	D3PLOT	T/HIS
	REPORTER	SHELL	FEMZIP	HYCRASH
	DIGIMAT	Simpleware	LSTC Dummy Models	
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Australia	**LEAP**			
	www.leapaust.com.au			
	ANSYS Mechanical	ANSYS CFD	ANSYS EKM	Recurdyn
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China	**ETA – China**		lma@eta.com.cn	
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	Inventium	VPG	DYNAFORM	NISA
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China	**Oasys Ltd. China**		Stephen.zhao@arup.com	
	www.oasys-software.com/dyna			
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	LS-DYNA Courses	LS-OPT	LSTC Dummy Models	LS-PrePost

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	http://kaizenat.com /			
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http://jp.fujitsu.com/solutions/hpc/app/lsdyna

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www.lancemore.jp/index_en.html

Consulting LS-DYNA

Korea **THEME** wschung@kornet.com

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LS-DYNA	LS-OPT	LS-PrePost	LS-TaSC
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eta/DYNAFORM	FormingSuite	Simblow	TrueGRID
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FEMZIP			

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Taiwan **Flotrend** gary@flotrend.tw

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Taiwan **APIC**

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United States	Gompute www.gompute.com	

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For course location visit www.alyotech.fr

June 19 - 21, 2013 www.usersmeeting.com/en.

Invitation & Call For Papers
ANSYS Conference & 31st CADFEM Users' Meeting 2013
June 19th – 21st, 2013, Rosengarten Mannheim, Germany

The Users´convergence

"Convergence" is this year's motto for all the ANSYS Users´ conferences taking place around the world. Traditionally, the conference with the largest content of information is the ANSYS Conference & CADFEM Users´ Meeting held in German. Therefore, a very large number of ANSYS users meet, or "converge", at this event to exchange ideas, experience and news, and actively increase their know- ledge. The interdisciplinary specialist conference organized by CADFEM and ANSYS Germany is an excellent opportunity for those who are interested in but do not yet belong to the users´ community, to become more acquainted with the practical use of numerical simulation.

Convergence of contents and requests
Software updates, user reports and compact seminars – it's the mix that makes it work. We are most happy to satisfy the requests of former participants and will reduce the number of product presentations, thus providing more opportunities for technical information and training. Get first-hand tips and tricks on achieving precise simulation results even faster or on how to cope with new challenges using ANSYS, other tools and a first-class IT environment.

Call for Papers

Early bird discounts available until 22nd February 2013
Whether you apply as a lecturer or participant, by registering early, i.e. by and no later than February 22nd 2013, you will receive a 10% early bird discount on your registration fee, because early registrations are a great help for the event organizing team. Cancellations made up to one month before the conference starts will not be charged.

We cordially invite you and look forward to meeting you in Mannheim in June!

The CADFEM & ANSYS Germany Team
.

June 2013

9th European LS-DYNA Users' Conference

Location: Manchester Central Convention Complex, Manchester, UK

Welcome Reception and Social Event:
Sunday 2nd June 2013

Conference:
Monday 3rd and Tuesday 4th June 2013

Gala Dinner:
Monday 3rd June 2013

Arup are pleased to announce that the 9th European LS-DYNA Users' Conference will be held at Manchester Central Convention Complex, UK on 3rd and 4th June 2013.

Manchester is situated in the centre of the UK with one of the world's best connected international airports and efficient road and rail links. The event will give those in academia and industry a chance to present their work to colleagues and additionally to catch up on the latest developments in the software. Attendees can also meet with exhibitors to find out more about hardware, software and services relating to LS-DYNA.

On the evening of Monday 3rd June the Gala Dinner will take place at the Museum of Science and Industry, just a short walk from the conference venue. The museum brings to life innovation and invention from science and industry through the ages even offering rides on 'Planet', a reproduction steam locomotive!

Important dates:

Registration Opens: end of September 2012
Abstract Deadline: end of December 2012
Papers Deadline: end of April 2013

If you would like to attend, present, exhibit or sponsor, please visit our conference website at: http://arup.cvent.com/euroconference.

We look forward to welcoming you to the event!

June 2013

The 5th ANSA & µETA International Conference

June 5th to June 7th 2013,

The MET Hotel, Thessaloniki, Greece.

There is no participation fee for this event.
Speakers will receive free accommodation.
The language of the event is English.

For Complete Information: http://www.beta-cae.gr/conference05_announcement.htm

The principal aims of this event are to bring the CAE Community together and to promote an international exchange of the latest concepts, knowledge and development requirements on our software products.

Technical papers will be presented outlining the latest advances in CAE strategy, methodology, techniques and applications related to our products. Participants will have the opportunity to be informed about the latest software trends, demonstrate their concepts and achievements and present new development requirements. The closer technical communication with the software developers' team of our products, within the framework of a technical forum, features this three-day conference.

Further discussions, sessions, meetings and events will allow the interaction between participants and organizers. Senior executives of our company, the engineers from the development and services teams and our business agents from around the world will be glad to meet with customers and users, to discuss the applications, the existing functionality, latest enhancements and future development plans of our software products. We expect that this will be a unique opportunity for you to share your success and for us to share our vision.

Dates:
Abstracts submission: February 28th, 2013
Acceptance notification: March 22nd, 2013
Speakers' registration: April 17th, 2013
Final manuscripts submission: April 26th, 2013
Delegates Registration: April 26th, 2013
Presentations files submission: May 10th, 2013
Welcome reception: June 4th, 2013
Event: June 5th to June 7th 2013

Oct. 16th-18th, 2013

Dalian, China

In recent years, China witnessed a rapid growth in the CAE technology. As leading finite element software in the industry, LS-DYNA has been well acknowledged and widely adopted in various industries such as Automotive, Aerospace and Aeronautics, Die Casting and Electrical & Electronics.

LSTC is a well-known software engineering company providing complete engineering software package including LS-DYNA, LS-PREPOST and LS_OPT. For better serving our customers in China, LSTC is hosting the first China LS-DYNA Users' Conference on Oct. 16 at Dalian, China. It is our chance to introduce new features in LS-DYNA and your chance to to share your LS-DYNA experience. The conference provides an opportunity to interact with industry experts, end users and LSTC developers. LSTC expects the conference to be held regularly and become a platform for researchers and engineers exchanging ideas and advocating new developments.

We aim to encourage the communications between software developers and users and among users themselves. Users in academia and industry would have a chance to share their research and experience. People from LSTC would have a chance to share their new developments. We welcome all LS-DYNA users to share their knowledge by submitting papers.

Conference Hosts:

Livermore Software Technology Corp.
Dalian Fukun Technology Co., LTD

Conference: Oct. 16th-18th, 2013

Training courses: Oct. 15th-16th, 2013

Location:

Yinfan Hotel, 135 JinMaLu Road, Dalian Development Zone, Dalian, China.

Conference website:

http://www.lsdyna.cn http://www.dalianfukun.com/conference

Contact us: chinaconf@lstc.com

 **FACEBOOK**

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Oasys

http://www.linkedin.com/groups/Oasys-LSDYNA-Environment-Software-4429580?gid=4429580&trk=hb_side_g

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 **NEWS FEEDS**

ETA: http://eta.com/company/news-eta?format=feed&type=rss

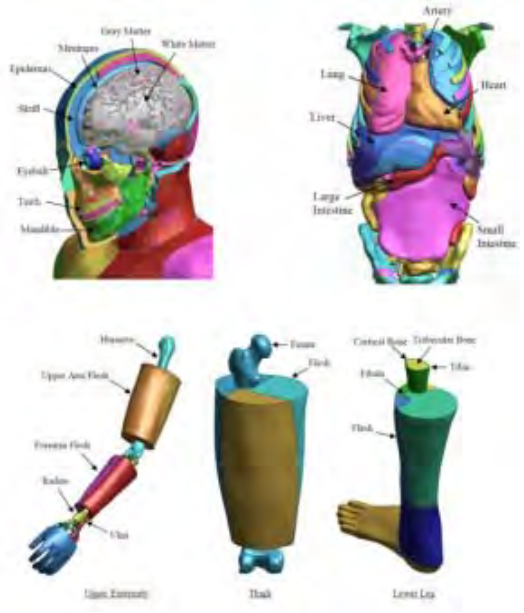
Total Human Model for Safety - THUMS

LSTC is the US distributor for THUMS

About

The Total Human Model for Safety, or THUMS®, is a joint development of Toyota Motor Corporation and Toyota Central R&D Labs. Unlike dummy models, which are simplified representation of humans, THUMS represents actual humans in detail, including the outer shape, but also bones, muscles, ligaments, tendons, and internal organs. Therefore, THUMS can be used in automotive crash simulations to identify safety problems and find their solutions.

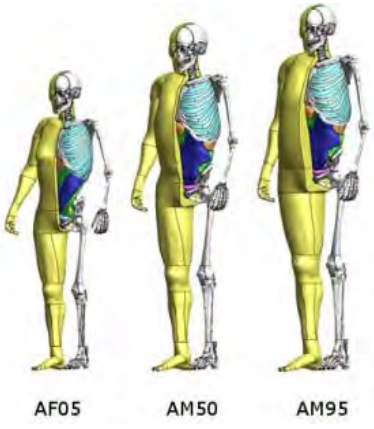
THUMS is limited to civilian use and may under no circumstances be used in military applications.

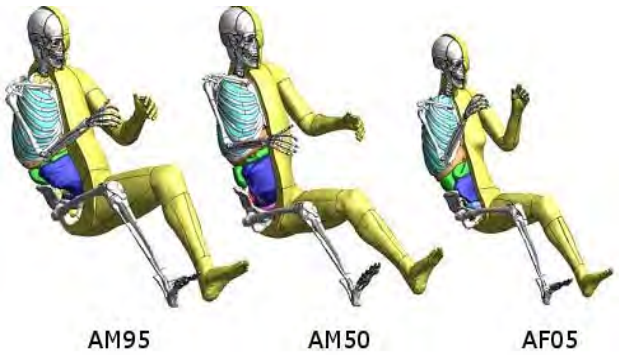


Model Details: Each of the different sized models is available as sitting model to represent vehicle occupants and as standing model to represent pedestrians.

The internal organs were modeled based on high resolution CT-scans.

LSTC is the US distributor for THUMS. Commercial and academic licenses are available.
For more information please contact us at THUMS@lstc.com .





THUMS®, is a registered trademark of Toyota Central R&D Labs.

HPC on-demand for academic users

Run your LS-DYNA simulations and pay for what you use on a turn-key environment

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- Large number of cores available

For more information please visit: www.gompute.com

Price for computing-core/hour (CCH). Licenses and account set up are not included. Pricing valid only for universities, academic centers and research institutes. The following are trademarks or registered trademarks of Livermore Software Technology Corporation in the United States and/or other countries: LS-DYNA, LS-OPT, LS-PrePost, LS-TaSC. Gompute is owned and operated by Gridcore AB, 2012 All rights reserved.

GOMPUTE
A GRIDCORE COMPANY

Gompute User Meeting 2013
April 23rd -24th, 2013
8th Gompute User Meeting
Scandic Crown Hotel,
othenburg Sweden.

Meetings:
Tuesday the 23rd 8 am until 5 p.m.
Wednesday 24th, 9 am until 4 pm.

Evening event takes place at:
Villan Chalmers
Tuesday 23rd of April at 7 pm

The Gompute User Group Meeting is a conference oriented to the simulation industry which provides an opportunity to professional users and providers to share knowledge and meet personally. Here you can find more about simulation software, high performance computing hardware and other people experiences in the field of simulation.

Scope of the Meeting: The use of numerical simulations for the evaluation of prototypes and processes is a growing industry which allows time shortening of development. This takes place in many different areas as Continuum Mechanics, Computational Chemistry, Electromagnetics, Risk modeling, Rendering, etc. Commercial implementations of such a tool has gained in maturity and reliability and the Simulation Industry is a growing market which naturally prompts other associated areas such as High performance computing hardware and System integration.

The intention of the Organizing Committee for Gompute Users Meeting 2013 is to gather all relevant actors in the Simulation Industry in the Nordic countries:

1. Engineers (Fluid Dynamics, Stress analysis, Electromagnetism)
2. Scientific users
3. Decision makers for HPC investments
4. Contractors
5. Academics
6. Users in general

Topics to be covered by the convention are:

1. Simulation Tools (both commercial and free), this includes: Fluid Dynamics, Stress Mechanics, Visualization, Mesh generation, Model Optimization, etc...
2. Simulation Techniques
3. Computing Hardware
4. Linux for High Performance Computing.

Registration: This event is free of charge. To register for the event please visit: www.gompute.com

We hope to meet you at Gompute User Meeting!

Publication Date: August 15, 2013 | ISBN-10: 1856176339 | ISBN-13: 978-1856176330 | Edition: 7

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The Finite Element Method Set: The Finite Element Method: Its Basis and Fundamentals, Seventh Edition

The Seventh Edition of this influential and market leading book delivers the most up to date and comprehensive reference on the basis of the finite element method (FEM) for engineers, applied mathematicians and computational software professionals. The new edition is a complete reference to the basis of the FEM and to finite element analysis (FEA), covering linear elasticity and field problems in the detail required by graduate level engineers, researchers and all professional engineers involved in FEA based engineering analysis.

Written by an outstanding team including O.C. Zienkiewicz, widely recognized as one of the most influential developers of the FEM, the book provides the most authoritative reference to the fundamentals of the method, and covers the latest developments and approaches in this dynamic subject. It is supplemented by software and detailed worked examples to reinforce understanding.

Provides a comprehensive introduction to the basis of the FEM, focusing on building the core knowledge, mathematical and analytical tools that successful applied FEA demands
Changes to this edition include a significant rearrangement of the presentation to enable a clearer presentation of the development of the finite element method

Six major new chapters and sections on 2-D problems, steady-state field problems, 3-D elasticity and field problems, mesh generation, electromagnetic applications, discontinuous Galerkin method, developments in meshless techniques

Editorial Reviews: '...this is a book that you simply cannot afford to be without.' - International Journal of Numerical Methods in Engineering

About the Author: Former Chair at the International Centre for Numerical Methods in Engineering, Spain - Emeritus Professor of Engineering, University of California, Berkeley

Product Details: Hardcover: 768 pages
Publisher: Butterworth-Heinemann; 7 edition (August 15, 2013) Language: English
ISBN-10: 1856176339 ISBN-13: 978-1856176330

Time-Domain Finite Element Methods for Maxwell's Equations in Metamaterials (Springer Series in Computational Mathematics	*Jichun Li*
Finite Element Analysis: A Primer (Engineering)	*Anand V. Kulkarni - V.K. Havanur*
Finite Element Methods for Engineers	Roger T. Fenner
July 2013 Finite Element Mesh Generation	*Daniel Lo*
January 2013 The Finite Element Method: Theory, Implementation, and Applications (Texts in Computational Science and Engineering)	*Mats G. Larson -, Fredrik Bengzon*
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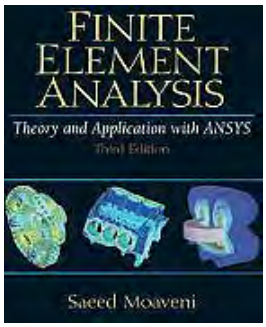
Elementary Continuum Mechanics for Everyone: With Applications to Structural Mechanics (Solid Mechanics and Its Applications)	*Esben Byskov*

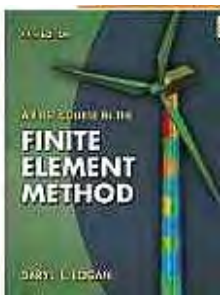


Finite Element Analysis Theory and Application with ANSYS (3rd Edition)

Saeed Moaveni

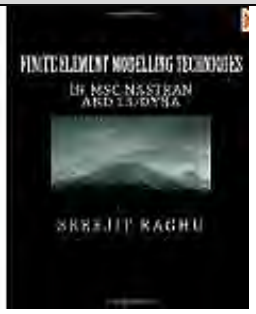
Practical Stress Analysis with Finite Element

Bryan J Mac Donald



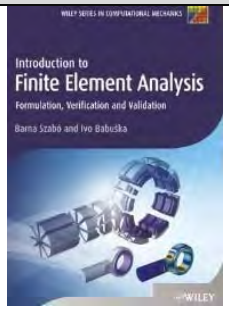
A First Course in the Finite Element Method

Daryl L. Logan



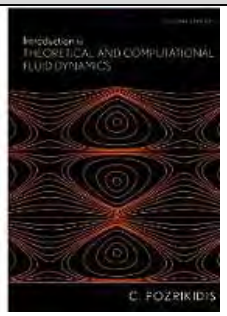
Finite Element Modelling Techniques in MSC.NASTRAN and LS/DYNA

Sreejit Raghu



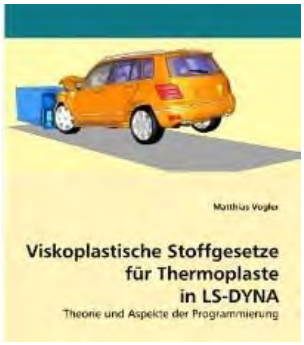
Finite Element Analysis/formulation & verification

B. A. Szabo



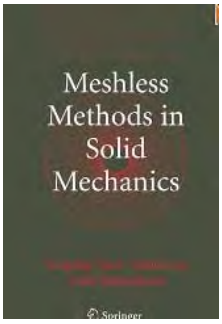
Introduction to Theoretical and Computational Fluid Dynamics

C. Pozrikidis



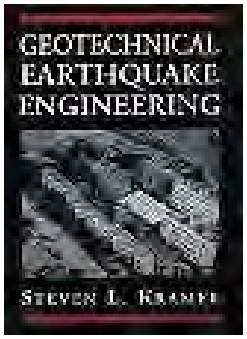
Viskoplastische Stoffgesetze für Thermoplaste in LS-DYNA: Theorie und Aspekte der Programmierung

Matthias Vogler



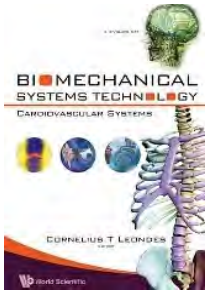
Meshless Methods in Solid Mechanics

Youping Chen



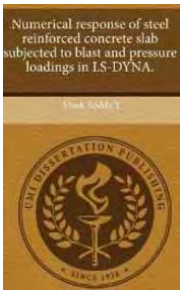
Geotechnical Earthquake Engineering

Steven Lawrence Kramer



Biomechanical Systems Technology: Computational Methods

Cornelius T. Leondes

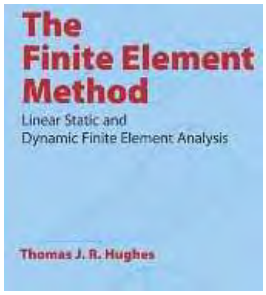


Numerical response of steel reinforced concrete slab subjected to blast and pressure loadings in LS-DYNA.

Vivek Reddy

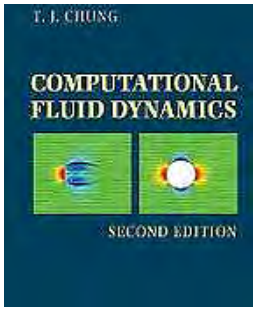
Formulas for Mechanical and Structural Shock and Impact

Gregory Szuladziniski



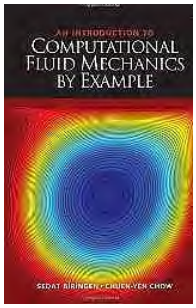
[The Finite Element Method]

Thomas J. R. Hughes



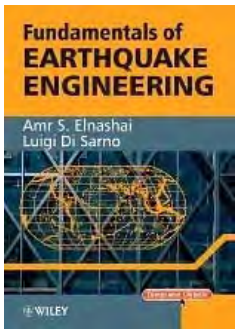
[Computational Fluid Dynamics]

T. J. Chung



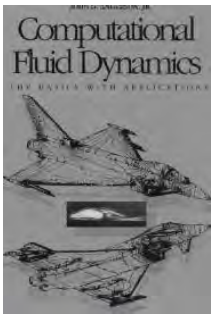
[An Introduction to Computational Fluid Mechanics by Example]

Sedat Biringen



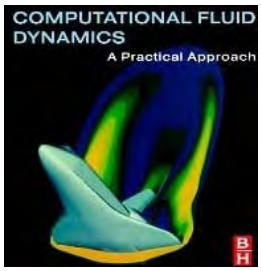
[Fundamentals of Earthquake Engineering]

Amr S. Elnashai



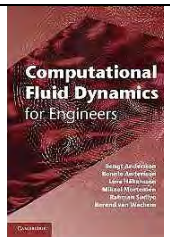
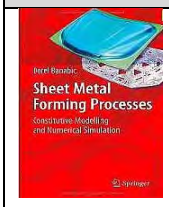
[Computational Fluid Dynamics]

John David Anderson



[Computational Fluid Dynamics: A Practical Approach [Paperback]]

Guan Heng Yeoh

			
Theories, Methods… **Ping Hu, Ning Ma, …**	**CFD for Engineers**	**CAE design and sheet metal forming…** **Li Fei Zhou Deng**	**Applied Metal Forming**
			
Micro Metal Forming (Lecture Notes in Production Engineering)			

9th EUROPEAN LS-DYNA USERS' CONFERENCE

Conference location: Manchester Central Convention Centre, Manchester, UK

Conference website: http://arup.cvent.com/euroconference

The 9th European LS-DYNA Users' conference gives those in academia and industry a chance to present their work to colleagues and to catch up on the latest developments in the software.

Date & Location

Manchester Central Convention Complex, UK on 3rd and 4th June 2013.

Manchester is situated in the centre of the UK with one of the world's best connected international airports and efficient road and rail links.

Registration

Registration is now open; to reserve your place please visit the conference website.

Registration deadline: 10th May 2013

Preliminary Agenda

The deadline for abstract submission has now passed and we are making final adjustments to the full agenda. In the meantime, for information of session topics please see the preliminary outline agenda on the website.

Social Event

Manchester is a beautiful city with a fascinating history and the walking tours are your chance to find out more about your surroundings. For more information on the tours available please see the social event page of the website.

Training Courses

We are pleased to welcome a number of renowned LS-DYNA experts to teach the post-conference training courses. Please see the training course page of the website.

Special Guest Speaker

We are delighted to announce Chris Boardman MBE as our special guest speaker. The Olympic gold medalist now uses his experience and insight to create the critically acclaimed and medal-winning range of Boardman bikes.

For more information please see the Keynote Speakers page of the website.

Gala Dinner

The Gala Dinner will take place at the Museum of Science and Industry. The museum brings to life innovation and invention from science and industry through the ages even offering rides on 'Planet', a reproduction steam locomotive.

You can book your place when you register for the event.

Welcome Reception and Social Event:
Sunday 2nd June 2013

Conference: Mon. 3rd & Tues. 4th June 2013

Gala Dinner: Monday 3rd June 2013

We look forward to seeing you to Manchester!