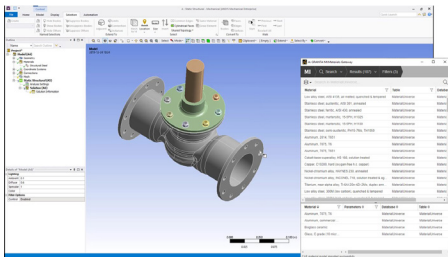


Ansys Granta MI™ for Simulation

Ansys® Granta MI™ enables users to save time and cost in simulation (CAE) with fast access to the materials data that analysts need, from directly within leading CAE software.

Ensure accuracy and avoid error with tools to manage and control material data – reducing repeat CAE projects by as much as 40%.

/ THE CHALLENGE FOR SIMULATION ANALYSTS



Access your corporate materials data from within your native simulation application

Simulation is now a standard component within the product development process. But accurate simulation needs accurate materials data.

Engineering organizations need to find this data or derive it from test data. This derivation can be complex, requiring analysis of large

volumes of test data to provide a strong statistical basis for properties across a full range of relevant conditions. The results are then processed to generate the parameters and coefficients that populate the materials cards recognized by Simulation (CAE) software.

It is important to perform these tasks in a systematic and managed way to avoid repeat analyses and to easily trace simulation inputs to their source. Once the best possible simulation data is available, it must be provided to simulation analysts quickly, easily as this single source of truth for materials. Ansys Granta MI meets these challenges.

/ A TRUSTED SOURCE OF MATERIALS INFORMATION

Efficient, accurate derivation of simulation data from materials testing

Granta MI is the leading system for materials information management in engineering enterprises, used by top manufacturers to manage materials data from testing, research, simulation and design.

Engineering can capture data from test programs, assembling the complete dataset needed to derive accurate simulation inputs. They can subsequently apply analysis tools for curve smoothing, averaging and model fitting using the Granta MI Mat Analyzer app.

To help calibrate models and validate analyses, users can compare test data and simulation results. To ensure that analyses are performed in a consistent and repeatable manner, users can control the inputs and algorithms applied. The Granta MI database captures the results for use in simulation or for further analysis.

/ KEY BENEFITS

- Reduce repeat CAE projects by as much as 40% with easy, controlled and direct access to the data that is needed.
- Direct access within Ansys Work bench, Ansys Minerva, Ansys Discovery, Abaqus™, ANSA, HyperMesh™ and NX™.
- Support and control data analysis, avoiding errors and maximizing simulation accuracy.
- Ensure traceability for simulation data and repeatability for simulation process.
- Protect investments in simulation and increase confidence in simulation results.

Fast access to simulation data, when and where users need it

Both Granta MI Enterprise and Pro enable integration with a wide range of leading CAE software.

	Granta MI Enterprise	Granta MI Pro
Ansys Workbench		
Ansys Minerva		
Ansys Discovery		
Siemens NX		
Altair Hypermesh		
Simulia Abaqus		
BetaCAE ANSA		
Python tools		

- MI Material Gateway
- Direct Ansys Integration
- Python Scripting Toolkit
- File-base transfer*

Granta MI open ecosystem support

The MI Material Gateway enables instant access to approved materials data for simulation directly within leading CAE software. Users can also search and browse the available materials, view datasheets, and import applicable CAE materials models directly to the CAE environment, complete with full traceability information. These tasks are performed interactively with no risk of error due to data transfer.

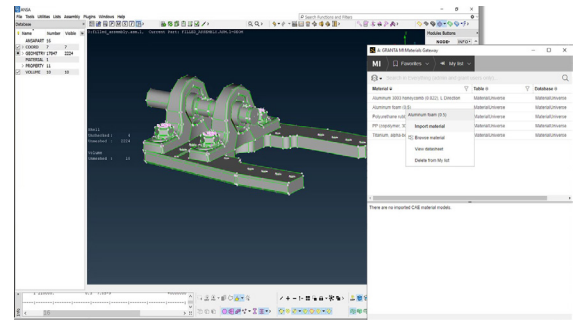
For CAE systems not yet supported by MI Material Gateway, integration is still fast and error-free — export materials cards from Granta MI to use within software such as LS-DYNA®, Nastran®, PAM-CRASH®, PAM-STAMP®, Patran®, and RADIOSS®.

Guaranteed traceability gives users added confidence

From test data to simulation software, Granta MI ensures data and results remain fully traceable. Test data can be captured with its full pedigree — for example, tensile test results can be linked to data about the material batches from which they were derived. This data remains linked to simulation models, enabling users to trace the whole history of the data and analyses that fed into a simulation. This gives confidence in simulation results, makes it easier to run further analyses later and protects the vital corporate IP embodied in simulation work.

WHAT DO YOU BUY?

- Granta MI - Enterprise Server is the core database system, including data import, export and analysis tools. MaterialUniverse™ and JAHM Curve Data are included.
- Granta MI - User enables users to access, query and use the data via web apps or via MI Materials Gateway.
- Advanced Materials Data - enables you to add from an unrivaled materials data library.
- Granta MI - Services are available to help users implement Granta MI and integrate with in-house tools and data sources.



Granta MI Material Gateway for ANSA - one of many integration options

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If you've ever seen a rocket launch, flown on an airplane, driven a car, used a computer, touched a mobile device, crossed a bridge or put on wearable technology, chances are you've used a product where Ansys software played a critical role in its creation. Ansys is the global leader in engineering simulation. We help the world's most innovative companies deliver radically better products to their customers. By offering the best and broadest portfolio of engineering simulation software, we help them solve the most complex design challenges and engineer products limited only by imagination.

Visit www.ansys.com for more information.

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