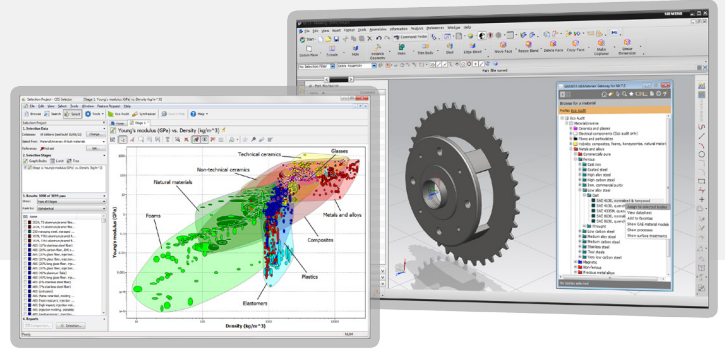


PRODUCT
OVERVIEW

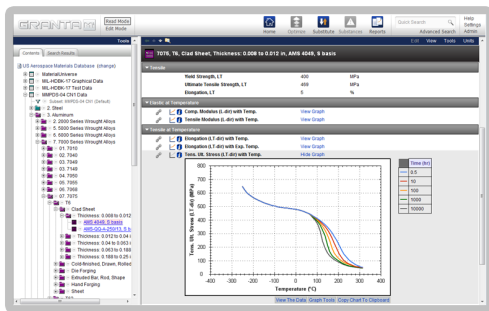
GRANTA
MATERIAL INTELLIGENCE

Granta Materials Data Products



Materials experts and engineers need high-quality, up-to-date, and domain-specific data on the properties and processing of metals, plastics, ceramics, and composites.

Such data informs critical decisions in design, materials selection and substitution, and meeting environmental regulations. Granta works with leading data providers to maintain an unrivalled catalog of materials reference data.



Data hosted in a GRANTA MITM database can be searched, browsed, and applied either via web apps (left), or within your CAD, CAE, or PLM systems (top-right). The CES Selector™ software (top-left) offers the option to use this data with a range of powerful graphical analysis tools.

A comprehensive library

MaterialUniverse™—Granta's unique database of engineering, economic, and environmental property profiles for 3,500 materials. Enables like-to-like comparison across the spectrum of material and processing possibilities.

Metals—Covering aerospace alloys, steels, creep and fatigue data, boiler and pressure vessel applications, powder metallurgy, and more. Sources include MMPDS, ASME, the German Steel Institute, Japan's NIMS, and TWI.

Plastics—Data enabling designers to analyze and compare the properties and processing of plastics and elastomers. Includes M-Base, CAMPUS®, and Prospector® plastics: well-respected spec sheets on tens of thousands of resins.

Composites—Composite data from manufacturers and leading research projects including CMH-17, NCAMP, and AGATE, plus Firehole Composites.

Simulation—Input data for CAE. JAHM Curve Data and CAMPUS provide temperature-dependent data for metals, ceramics, polymers, and more.

Additive Manufacturing—Comprehensive data on hundreds of additive manufacturing machines and compatible materials from the Senvol Database™.

Product Risk—Information on the environmental impact of materials and processes, on restricted substance risk, and on supply risk (e.g., critical materials).

Medical devices—Authoritative reference data on materials for cardiovascular and orthopaedic devices and on human biological materials.

Key benefits

A single source for the materials property and process data that you need, from the experts in materials information technology

Broad coverage of engineering materials (metals, plastics, composites...) and processes

Get data when and where you need it—through a web browser, on your PC desktop, or within your familiar CAD, CAE, or PLM software

Cost-effective, multi-user access

A complete solution: access and apply reference data alongside managed corporate data

Data modules listings

You can choose the combination of data modules that you need, and access this data within the GRANTA MI or CES Selector software or, via the MI:Materials Gateway, within your CAD, CAE, or PLM system.

Data module	Description
ASM Medical Materials	Authoritative data on materials for cardiovascular, orthopaedic, neurological, surgical, ENT, urological devices.
ASME BPV Code	Materials data for the power and process industries.
CAMPUS Plastics	>6,000 plastics grades; uses comparable ISO standards.
CAMPUS and M-Base Plastics	Extends CAMPUS Plastics with a unique applications database and 48,000+ commodity plastics.
ChemRes	Resistance of polymers to 190 chemical environments.
CMH-17	Test data for advanced composite materials.
Coatings	Coatings properties and restricted substance data.
Composites QED / Composite Design	Traceable composite data from the NCAMP and AGATE projects to support qualification, equivalency, and design.
Critical Materials	Understand materials supply risk, e.g., due to conflict minerals.
ecoinvent Key Materials Indicators	Key materials indicators and background information from ecoinvent.
ESDU MMDH	European design-strength data on aerospace metallic materials.
Firehole Composites	Data for continuous fiber reinforced polymer composites.
Human Biological Materials	Mechanical properties of human tissues, including bone, cartilage, ligaments, tendons, circulatory and dental tissues.
JAHM Curve Data	Temperature-dependent property data for more than 2,900 materials. Ideal as input data for simulation.
MaterialUniverse	Granta's unique dataset of engineering, cost, and eco property profiles for the full range of engineering materials.
Medical MaterialUniverse	MaterialUniverse with additional data that helps you to design medical or food contact products, devices, and supplies.
MMPDS	The authoritative source of alloy data for aerospace component design (previously Mil-Hdbk-5).
MI-21	Chemical, mechanical, and physical properties of metals and consumables.
NIMS Creep and Fatigue	Fully accessible raw metals data from Japan's National Institute for Material Science (NIMS).
Powder Metallurgy	600+ materials from the Global Powder Metallurgy database.
Product Risk	Restricted substances, their links to materials, and the legislation, regulations, and standards that regulate them.
Prospector Plastics	90,000 plastic property datasheets from 822 suppliers (Prospector was previously 'IDES Plastics').
Senvol Database™	Comprehensive database of Additive Manufacturing machines and materials.
Sheet Steels for Automotive	Data that helps preparation of simulation models for crash, stamping, and forming.
StahlDat SX	Properties for the register of European steels (Stahl-Eisen-Liste).
SteelSpec	Excellent coverage of US, European, and UK steels standards.

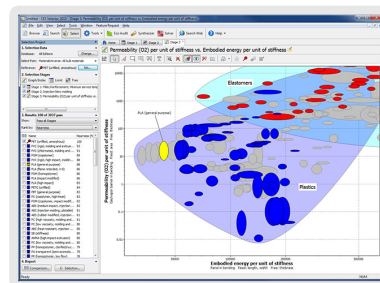
Using the data with Granta software

By accessing Granta's comprehensive library of materials data from within Granta's software tools, you benefit from a unique set of features not available through other routes (such as on-line databases or handbooks).

A single source for data on the full range of engineering materials.

Interactivity—access 'live' data: search, browse, and analyze.

Specialist tools to plot, compare, and select materials.



Speed and scalability—fast access to the data you need for individuals and across teams, departments, and enterprises.

Cost and licensing—practical solutions for multi-user access.

Integration—combine and compare reference data with your own managed company data.

Pedigree and traceability—capture your decisions and retain a link to the version of the data that you used to make them.

Access to original source documents—for relevant Granta databases, you can click through from the live data to PDF copies of the original handbook pages.

Use data in CAE through seamless export or even integrated apps within your simulation software.