

/ MATERIALS	GRANTA MI ENTERPRISE	GRANTA MI PRO	GRANTA SELECTOR	GRANTA EDUPACK	MATERIALS DATA FOR SIMULATION
MATERIALS DATA MANAGEMENT					
Granta MI Database - "Gold Source" System to Store Corporate Materials Information	●	●			
Manage Specialist Materials Data Types	●	●			
Manage Meta-Data and Context for Materials	●				
Traceability for All Materials Data	●	●			
Favorites List: Personal, Public	●	●	▲	▲	
Access Control	●	▲			
Version Control	●				
Multiple Unit System Support	●	●	●	●	●
Admin UI to Setup and Configure Database	●				
Template Data Structures for Key Materials Use Cases: Metals, Composites, Additive Manufacturing	●				
Template for Simulation		●			
Toolbox for Import, Export, Manipulation of Materials Data	●	▲			
Web App for Fast Upload of Materials Data	●	●			
Browse Materials Data	●	●	●	●	
Edit and Update Materials Data	●	●	▲	▲	
Search and Query Materials Data	●	●	●	●	
Represent Property Data in Interactive Charts	●	▲	●	●	
Comparison Tables and Comparison Charts	●	▲	●	●	
Generate Reports on Selected Materials Records	●				
Export Data to Excel and Third Party Software	●	▲	●	●	
Personalize System Homepages and User Profiles	●				
Configure Web App UI for Specific User Groups	●				
Private Cloud with Azure	●	●			
Single Sign On	●	●			

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- 7 = Ansys Granta Materials Data for Simulation
- 8 = Ansys Additive Suite
- 9 = Ansys Composite Cure Simulation
- 10 = Ansys SPEOS for NX & ANSYS SPEOS for Creo Parametric
- 11 = Ansys SPEOS
- 12 = Ansys SPEOS & Ansys SPEOS for NX
- 13 = Ansys CFD Pro - Ansys Fluent with a reduced set of capabilities
- DMP = Distributed-memory parallel
- SMP = Shared-memory parallel
- MAPDL = Mechanical APDL
- Explicit = Autodyn
- RBD = Rigid Body Dynamics
- Aqwa = Aqwa

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MATERIALS DATA ANALYSIS					
Interactive Plotting of Data: Scatter, Contour, Error Bar, Surface, Plotly, Semilogx, Semilogy, Loglog	●				
Custom Curve Fitting	●				
Cross-Table Comparisons of Materials Data	●				
Scripting Toolkit for Python	●				
DATA FLOW MANAGEMENT					
Design and develop material data flow	●				
Execute material data flows - Processes, Approvals, Notifications	●				
INTEGRATION WITH CAD, CAE, PLM					
Ansys Workbench	●	●	▲	▲	■
Ansys Discovery	●	●	▲	▲	■
Ansys Minerva	●				
Abaqus	●	●			
ANSA	●				
HyperMesh	●	●			
Creo	●	●			
NX	●	●			
Windchill	●				
Teamcenter	●				
Material Card Connect - Automated File Export	●	▲			
File Export (CATIA v5, SOLIDWORKS, and others)	●	▲	▲	▲	
RESTRICTED SUBSTANCES					
Data Structures to Support Restricted Substance Analytics, Store Specs, Materials, Legislations, Substances, Parts	●				
Report on Restricted Substance Risk for Materials and Process Portfolio	●				
Build and Edit Bills of Materials within a Web App	●				
At-a-Glance Restricted Substance Compliance for a BoM	▲				
Run Reports Across Multiple BoMs	▲				
Integrate Restricted Substance Reporting with PLM, CAD	▲				

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MATERIALS SELECTION & RELATED TOOLS					
Reference Data for Materials Selection on PC/Laptop			●	●	
Interactive 'Ashby Charts' of Materials Property Space	▲		●	●	
Systematic Materials Selection Methodology			●	●	
Filter Materials Based on Property Profile	●	●	●	●	
Filter Materials Based on Links to Other Materials / Processes / Objects	▲		●	●	
Materials Substitution and Equivalency - 'Find Similar'			●	●	
Performance Index Finder			●	●	
Engineering Solver - Convert Engineering Requirements to Materials Properties			●	●	
Synthesizer - Predict Properties of Hybrid Materials			●	●	
Part Cost Estimator			●	●	
Selection Reports and Export of Charts for Presentations			●	●	
Eco Audit for a Product or Conceptual Design			●	●	
Early stage batter pack design, configuration and performance evaluation - incl. battery cells database			●	●	
DATA LIBRARY FOR INDUSTRY					
Core MaterialUniverse™ Data	●	▲	●		▲
Core JAHM Curve Data	●		●		
Advanced Metals Data	■		■		
Advanced Polymers Data	■		■		
Advanced Composites Data	■		■		
Advanced Medical Data	■		■		
Advanced Aero Data	■		■		
Advanced ESDU Aero Alloys	■		■		
Advanced Additive Manufacturing Data	■		■		
Advanced Eco Design	■		■		
Advanced Electromagnetic Data					●

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TEACHING RESOURCES					
Granta EduPack Level 1-3 Teaching Databases				●	
The Elements Teaching Database				●	
Materials Science and Engineering Teaching Database				●	
Sustainability Teaching Database				●	
Bioengineering Teaching Database				●	
Architecture Teaching Database				●	
Lecture units				●	
Student exercises				●	
Videos				●	
Micro-Projects				●	
White Papers				●	
Case Studies				●	
Active Learning Toolkits				●	
Data Booklets				●	
Sample Project Files				●	
Phase Diagram Tool				●	
Medical Devices Teaching Database				●	
Design Teaching Database				●	
GRANTA MI - ADDITIVE					
Traceability and Capture of Additive Manufacturing Data	●				
AM Data Analytics	●				
Integration with CAD CAE and PLM Systems	●				

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