ANSYS GRANTA MI™ drives best practices for minimizing substance risk and providing practical analytics, reporting and decision-making tools. Manage critical information on company materials and processes. Integrate this with comprehensive reference data on restricted substances to assess risk in materials portfolios. Quickly identify risk in legacy products and provide guidance in design, avoiding compliance problems, delays and cost.

**The problem**

Every major manufacturing organization is aware of the risks associated with restricted substance use—legal liability, non-compliance costs, costly delays and redesign, potential product recalls and inability to create or service products as materials become obsolete. Minimizing these risks is difficult because:

- It is difficult and expensive to fill gaps in company knowledge, such as keeping up with new and updated regulations and gathering data from suppliers.
- Internal company information needed to monitor, analyze and mitigate restricted substance risk is disorganized.
- Materials, processes and specifications are the source of most restricted substances issues; few systems can manage this information.
- Bills of Materials (BOMs) are in diverse formats and not linked to data or tools that facilitate risk analysis, reporting or declarations.

**Key benefits**

- Avoid business risk due to restricted substance regulations such as REACH and prevent multi-million dollar expenses, delays and reputational damage.
- Base decisions on robust data about the materials and specifications that drive use of restricted substances.
- Analyze BOMs for legacy designs.
- Consider compliance during design, where change costs least and delivers the biggest impact.

**Case studies**

An aerospace OEM’s project to find which specifications used an at-risk chemical saw dramatic reductions in the time taken to perform a query, delivering better results.

A medical device manufacturer saved months of development time by avoiding the need to requalify a component.
The GRANTA MI Restricted Substances solution

Rapidly fill knowledge gaps with unique reference information

GRANTA MI’s unrivaled, regularly updated knowledge base covers: thousands of restricted substances; 100+ international legislations, regulations, lists and standards; extensive property data on materials and specifications; and specialist information on coatings. Materials are linked to substances that they contain. Connect to the latest legislation to understand which materials regulation impacts. Keep up-to-date and fill knowledge gaps to assess risk and determine where supplier data is missing.

De-risk your materials and processes

Use GRANTA MI — the leading system for enterprise materials information management — to build a database of company materials, substances, coatings and specifications. Robust tools help manage complex information as it is updated. Link related data to each other and to reference data. Store and connect the different descriptions of materials needed during product development — from generic data used in conceptual design to grade-specific supplier data for declarations on products. Run live reports to understand, for example, which specifications contain substances in the latest REACH candidate list. Find new material options to mitigate risks. Build lists of preferred materials to guide decision making.

Fast analytics for parts and BOMs

How do users quickly assess the risks associated with their legacy products when a regulation changes? Or perform ‘what if’ analysis on product designs, avoiding restricted substance problems from the outset? GRANTA MI stores BOMs representing designs or in-production components. And, with the upgraded MI:BOM Analyzer app, you can edit these BOMs and run reports. See risk factors at a glance and understand the impact of modifying a design. Users can also quickly generate compliance reports. Queries and reports are run on a single component or across multiple components to find where a particular substance is used within a company’s product portfolio. Leveraging the GRANTA MI Services team enables users to implement and integrate GRANTA MI with their PLM and CAD solutions faster than ever.

The EMIT Consortium

The GRANTA MI Restricted Substances solution was developed in collaboration with members of the EMIT Consortium such as Airbus Helicopters, Boeing, Emerson Electric, Honeywell, Pratt & Whitney and Rolls-Royce.

What do you buy?

GRANTA MI - Enterprise Server provides the core database system, data import and export tools and the MaterialUniverse dataset covering 3,500+ generic engineering materials.

GRANTA MI - User enables users to access and query the system and to report via user-friendly web apps.

GRANTA MI - Restricted Substances provides specialist substance and legislation data, access to the MI:BOM Store and the MI:BOM Analyzer app and reporting capabilities specific to restricted substance risk analysis.

GRANTA MI - Services are available to help you implement GRANTA MI and integrate with in-house tools and systems such as CAD and PLM.