



GRANTA

CASE STUDY /

Ansys + Rolls-Royce

“Global financial benefits have been certified at approximately \$10m per annum in time saved, optimization and reduced waste”

Amandeep Singh Mhay

Specialist – Materials Data / Rolls-Royce

Implementing Granta MI to drive multi-million-dollar savings through enterprise-wide materials information management at Rolls-Royce

Having fast, reliable access to all relevant materials information is important for Rolls-Royce engineers who need accurate and statistically valid property data as they seek to push materials to their limits in a highly regulated, safety-conscious environment.



"Using Granta MI Enterprise provides us with a 'gold source' for Rolls-Royces Material Intelligence, getting our diverse materials under control in one place."

Amandeep Singh Mhay
Specialist - Materials Data / Rolls-Royce

/ Company Description

Rolls-Royce is a pre-eminent engineering company focused on world-class power and propulsion systems.

/ Challenges:

Rolls-Royce faced challenges including large quantities of legacy data scattered across sources, and the management of complex workflows to capture, analyze, and use new data generated by testing, QA, and research. Without a systematic approach, tests were duplicated and 40% of all generated test data was not re-used after initial analysis.

Another key issue was traceability - the objective of ensuring that the pedigree of every material and the data behind every engineering decision was easily available.

/ Ansys Products used

- Ansys Granta MI Enterprise
- Granta MI: Restricted Substances

/ Engineering Solution

- Granta MI Enterprise is used as a 'single source' for verified materials information accessible by 2000+ engineers globally.
- Use of Restricted Substances Module for fast assessment of risk to regulation changes for vital materials and processes.
- Member of Granta's Environmental Materials Information Technology (EMIT) consortium to find practical solutions to regulatory challenges.

/ Benefits

- Certified savings of \$10m per annum through time saved, optimization and waste reduction.
- Creation of a globally accessible and controlled 'gold source' of materials information.
- Improvements in traceability maximizing the value from critical materials IP.
- Improved rates of test data re-use, reducing waste.
- Helping the materials team meet regulatory requirements on restricted substances.



Figure 1. Granta MI supports Rolls-Royce in managing their cutting-edge materials.



Figure 2. Rolls-Royce is a member of the EMIT Consortium.

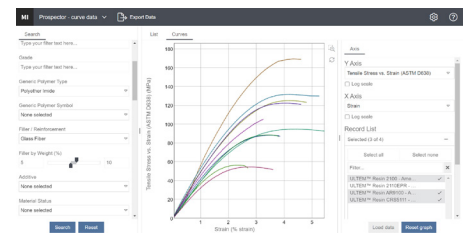


Figure 3. Comparing test results in a simple Granta MI web app.

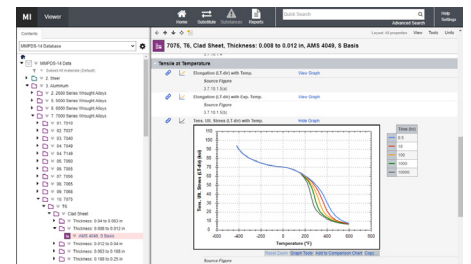


Figure 4. Browsing the aerospace handbook data.

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