

Ansys + Baker Hughes

"We connected material data with CAD, CAE and PLM, enabling Granta MI: Enterprise to serve as a single source of truth for all engineering processes connected with material data."

Nicola Campo

Senior Director Model Based Enterprise / Baker Hughes



Ansys Granta MI: The Heart of Baker Hughes' Digital Transformation

This case study summarizes a multiyear rollout of Granta MI, which is at the heart of Baker Hughes' journey towards digital material management. Granta MI delivered high-fidelity digital design data, which spanned commercial and customized materials, helping customers engineer high performance products.

/ Challenges

Prior to undertaking their digital material management journey, Baker Hughes stored their valuable product design materials data inside numerous spreadsheets, which had no single repository, poor accessibility and no version control.

Additionally, material equivalence searches were performed on the web with no tracking of search criteria against design requirements. Material assignment was conducted as free text, printed on 2D drawings, with material design properties requiring manual transference into CAD/CAE/PLM.



/ Technology Used

- · Ansys Granta MI Enterprise
- · Granta MI:Materials Gateway for CAD and CAE
- · Granta MI: Workflow

/ Engineering Solution

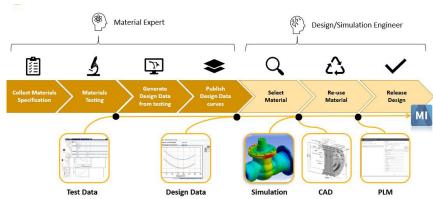
- Baker Hughes used Ansys Granta MI Enterprise to manage, within a single platform, the entire material data lifecycle for all commercial and custom materials.
- Granta MI: Workflow powered a standardized business process for material data review and approval.
- MI:Materials Gateway solutions integrated directly with CAD, CAE and PLM systems.

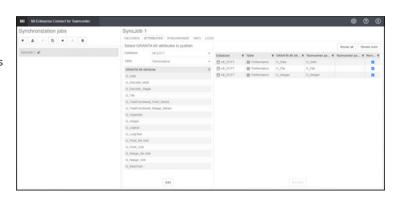
/ Benefits

- Digitalization of materials data into a single platform, with traceability, version control, security and easy access for end users
- Standardized workflow for creating and updating both commercial and custom materials
- $\cdot\;$ Faster and more controlled material equivalence searches
- Traceable materials easily found and assigned in CAD and CAE
- · Seamless integration with PLM for total material control

/ Company Description

Baker Hughes is an energy technology company with operation in 120 countries. They develop and deploy technologies to take energy and industry forward.







ANSYS, Inc.

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