



CASE STUDY /

Ansys + Radiall

"A complex materials study using Granta Selector software now takes half the time of what we did before."

Jérémy Sautel.

R&T Advanced Materials Team Manager / Radiall

Developing a New Generation of Connector Using Smarter Materials Selection With Ansys Granta Selector.

/ Introduction

Using Ansys Granta Selector, Radiall rapidly identified new alloys and polymers for their new generation of high-performance electrical connectors. The time taken to perform a complex materials study was halved, making their materials experts more productive. Simultaneously, they reduced the risk of restricted substances in their products and exported simulation-ready data from the JAHM dataset, allowing their simulations to be more “relevant and accurate.”

/ Challenges:

Every material Radiall uses has different performance requirements, as well as manufacturing and quality standards. Materials decisions need to be exhaustive, repeatable and auditable.

Balancing competing property requirements (mechanical, thermal, electrical and chemical resistance performance) is necessary for developing and improving these components.

/ Technology Used

Ansys Granta Selector

/ Engineering Solution

- Ansys Granta Selector is used to identify new or alternative materials or for quick materials properties comparisons.
- Granta Selector provides a comprehensive materials database to assess every viable option — all in one tool.
- Integrates directly with Ansys products for easy materials application to simulations; also supports third-party CAD, CAE and FE applications.



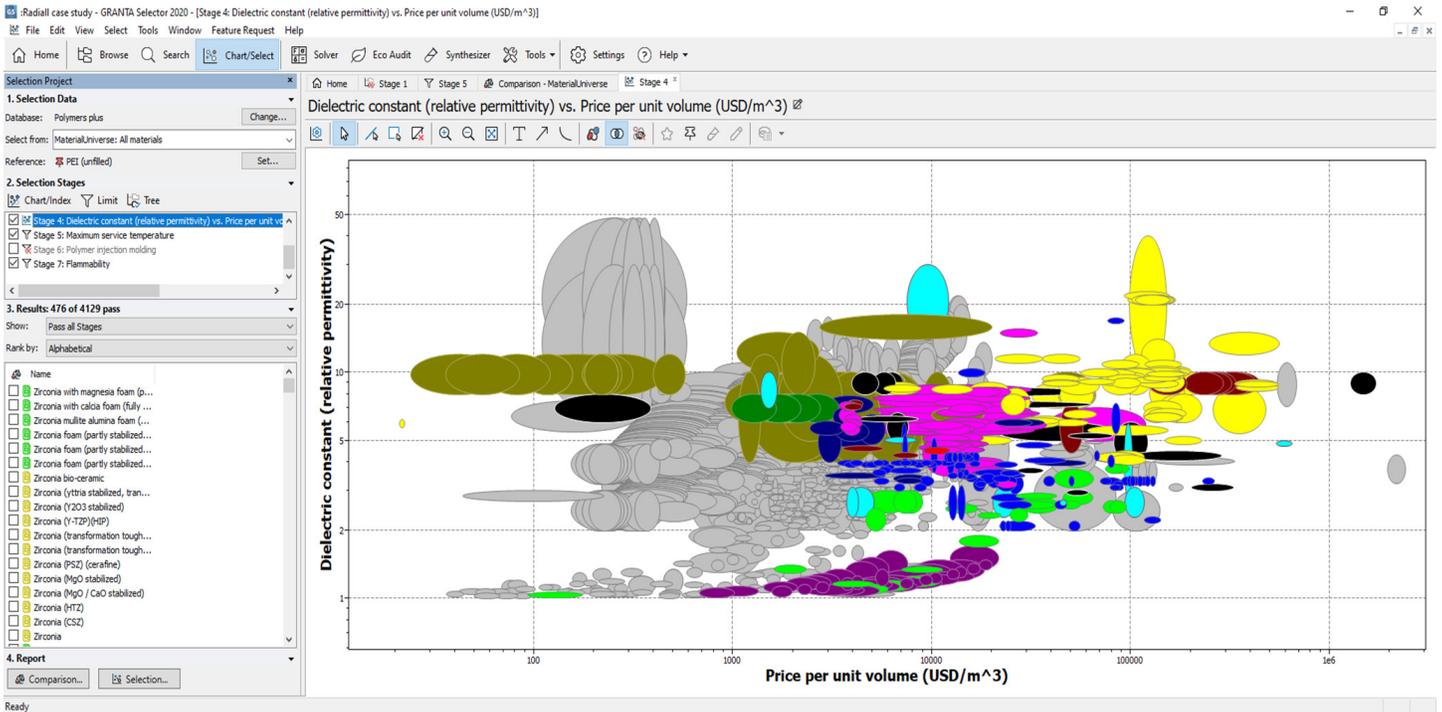
“Using JAHM curves in Granta Selector allows our simulations to be more relevant and accurate.”

Jérémy Sautel.

R&T Advanced Materials Team Manager
/ Radiall

Selector is used to help Radiall develop complex optical and electrical connectors





Using Selector to search for prospective materials for electrical connectors

“Using Granta Selector we’re able to do quick properties comparisons: mechanical, thermal, electrical and chemical resistance... but also have data on the manufacturing process.”

Jérémy Sautel.

R&T Advanced Materials Team Manager
/ Radiall

/ Benefits

- Using Granta Selector halved the time for complex materials studies and properties comparisons.
- A comprehensive materials dataset enabled new alloy and polymer identification for product development.
- Simulation-ready data from the JAHM dataset allowed for more “relevant and accurate” simulations.
- Audit evaluations were simplified because Granta Selector data follows international industry standards.

/ Company Description

Radiall is a high-tech company, producing complex optical and electrical connectors for demanding service conditions.

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