

## Reducing cost and increasing efficiency at Molex through enterprise materials information management

Molex is a global organization with more than 1,400 engineers in product development; many of whom need materials information for routine decision-making. The Molex materials portfolio is weighted towards copper alloys, stainless steel metal strip, engineering plastics, and electro-deposited coatings. Managing information about these materials has long been recognized as an important strategic topic, and a system has been in place to support this activity for more than 15 years. However, in recent years, the company recognized deficiencies in this system and sought to replace it. These included the fact that it did not provide a 'single source of the truth' (metals and plastics specifications data and data for CAE were in disconnected databases).

Because the legacy system had been a custom development project, it was expensive and difficult to make changes—for example, to add new attributes, or roll out information on company preferred materials. In looking for a new system, Molex aimed to leverage materials data in CAD and PLM, and to support environmental compliance objectives. Speaking at a Granta Design webinar, Brett Rickett, director of Material and Process Technology at Molex, detailed why Molex selected GRANTA MI™ for their new system. Following an extensive vendor assessment and, at the time of the webinar, initial deployment of the system to 200 engineers had been completed. Legacy data had been transferred and roll-out to the remaining 1,200 engineers was approaching.

The biggest challenge in planning the roll-out had been in identifying those materials attributes that were most important to the user community. Planning the implementation with a core team that was cross-functional and globally-distributed was critical in analyzing such issues and getting the answers right. Access to the database is provided both via a web browser and (using the MI:Materials Gateway technology) from within Molex CAD and CAE software. The results have been greater integrity in capturing and storing data, and in presenting that data to the internal customers at Molex who need it in order to make decisions.

Asked about how the business justification for the system had been made, Rickett pointed out that its benefits fitted in with a lot of existing corporate initiatives. One example is a drive on the cost and efficiency in creating Bills of Materials, where he commented that benefits come "by taking out a lot of inefficient work activities in the product engineering community through having Granta serve as the source of information that gets rolled up into our NX® CAD system, and then into our PLM. Being able to take out all of the cost and effort there was a great way to be able to show Return on Investment."