

## Round table discussion



A lively round table discussion followed (pictured above), for which Hannah Carver was joined on the panel by:

- Dr Mark Blagdon, Materials Characterization Technical Specialist at **Jaguar Land Rover**
- Jeremy Mansfield, Senior Engineer at **Doosan Babcock**
- Amandeep Singh Mhay, Engineering Manager at **Rolls-Royce**

All of the panellists are project leaders for materials information management projects that use the GRANTA MI software.

The discussion was split into two parts, first answering the question: "What materials information issues keep you awake at night?" The panel identified a number of issues that have motivated their organizations to manage materials information more systematically. These included: the "incredibly difficult" challenge of knowledge transfer when senior engineers retire, taking with them a lot of implicit knowledge about materials and their use for specific applications; the risks associated with uncontrolled materials data; engineers using data without fully understanding its pedigree or context; and the need to maintain materials data—for example, as incremental improvements in manufacturing processes such as forging lead to 'design allowable' values becoming out-dated.

Materials information management can mitigate these fears by gathering corporate materials knowledge into one place and making it both controlled and accessible, by ensuring traceability for all of the information captured, and by providing tools to manage the materials information lifecycle. So the second part of the discussion asked panellists to identify the major gains that they have experienced from such projects. Mark Blagdon of Jaguar Land Rover cited more robust design based on more reliable data, quicker prototype sign-off, and improved failure analysis due to availability of data and knowledge. Amandeep Mhay spoke of the lower risk of incidents of using incorrect data during design, and pointed to a Rolls-Royce analysis presented at previous Granta webinars and seminars which showed total productivity savings of £6.9m per annum from materials information management. Hannah Carver reiterated the importance of traceability for data to AWE. And

Jeremy Mansfield likened the benefits to the well-known 'aggregation of marginal gains' strategy applied by the British Olympic Cycling team, arguing that many small improvements in productivity, insight, and customer service add up to a significant strategic impact.