

Example applications:

- Avoid cost by selecting the optimal polymer grade
- Increase innovation by exploring the 'universe' of possible polymers for your application
- Identify replacement materials
- Optimize quality and meet environmental regulations by finding substitutes for poorly-performing, obsolete, or restricted materials

Industrial relevance

Aerospace, energy, defense, medical devices, manufacturing, materials production, and other engineering enterprises



CES Polymer Selector

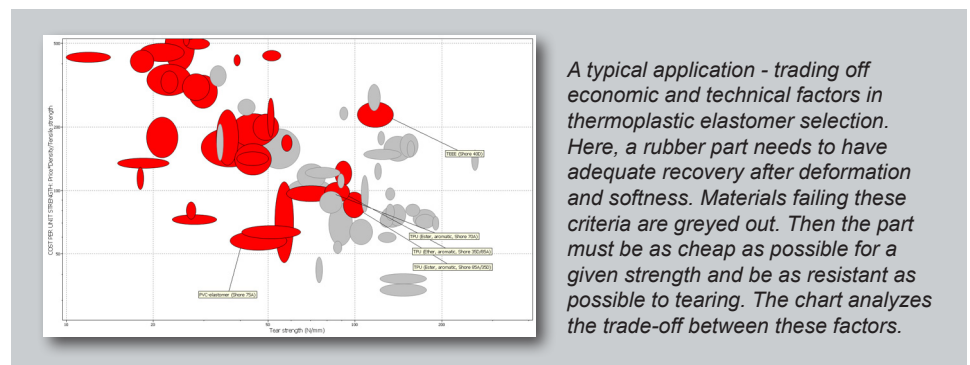
What do you get when you combine data from CAMPUS, IDES, RAPRA, Moldflow and Granta with Ashby's materials selection methods?

Answer: The CES Polymer Selector, a uniquely powerful design tool for plastics material selection. CES Polymer Selector is a specialist edition of Granta's CES Selector, combining everything that the plastics user or manufacturer will need in a single package.

Product designers increasingly need to prove they have followed a rational path in materials selection with respect to performance, cost, processability and eco-impact. CES Polymer Selector is the tool that lets you do this.

Core tools and data

Core CES Selector tools and data are described in the 'CES Selector' product overview. Combined with plastics data (below), these allow you to analyze and select from the widest possible range of polymeric materials.



Plastics data series

The information resources available with the CES Polymer Selector edition are:

MaterialUniverse—3,700 datasheets, of which 700+ cover polymeric materials, containing 50 properties and covering thermoplastics, thermosets, elastomers and composites. This data module from Granta is unique, because there are no 'holes' in the data - property values are either populated with known, referenced data or with values estimated using Granta technology. Unlike most materials databases, MaterialUniverse includes relative pricing information for all of its materials. As a result, you can use it to screen all available classes of polymer for your application. The following specialist polymer databases then support in-depth analysis of candidate materials.

ChemRes—ranks the MaterialUniverse polymers based on their resistance to over 190 different chemicals and solvent environments.

CAMPUS—datasheets on over 5,800 commercially available grades from 21 producers including Bayer, BASF, Dow, DuPont, and Ticona.

IDES—77,000 plastic resins datasheets from 725 vendors, offering a large number of ASTM and ISO standard properties.