**DFMA 2019 Images & Captions**



Image 1. New **CAD calculators** allow users to utilize more cost driver information directly from a 3D model. Over 200 data inputs across 27 process groups and over 100 machining operations include this new feature. Should-costing of parts is faster and easier for designers, cost engineers, and purchasing personnel. *Image courtesy Boothroyd Dewhurst*



Image 2. New **graphical windows, charts and reports** make comparisons between legacy designs and new concepts easy to analyze. The blue section of the pie chart on the right highlights the savings achieved through a DFMA redesign. Parts and assemblies can all be compared for time and labor, along with costs for manufacturing piece parts, manufacturing tools, assembly tools, assembly processes and all material aspects of product development. *Image courtesy Boothroyd Dewhurst*