RETOMO: THE KEY TO 3D-MODELLING FROM CT-DATA OF PHYSICAL OBJECTS

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KEYWORDS –
Computer Tomography, Mesh, 3D-Image processing

ABSTRACT –
Addressing the need of contemporary CAE community to embed new approaches, like Computer Tomography (CT) and the integration of its data into the CAE process, BETA CAE Systems brings forth new software, in order to support the role of CAE, especially concerning high-end complex structures with multi-material approaches.

This new software, RETOMO, has been introduced in order to provide the capability of improving CAE based design, by adding CT to the correlation process.

Due to the immense amount of different data definitions and the overall complexity to interpret material and geometry, the need for a robust –yet intuitive– tool was more than demanding. RETOMO comes as a solution to this, by processing CT data in correlation with CAE and CAD data and applying high-end methods to read, process, reduce, reconstruct and visualize the CT for the analyst/engineer.

The extension of high-end pre-processing tools, such as ANSA from BETA CAE Systems family products, to support this process offers a wide range of advantages, due to the extremely rich meshing functionality and file interfaces.