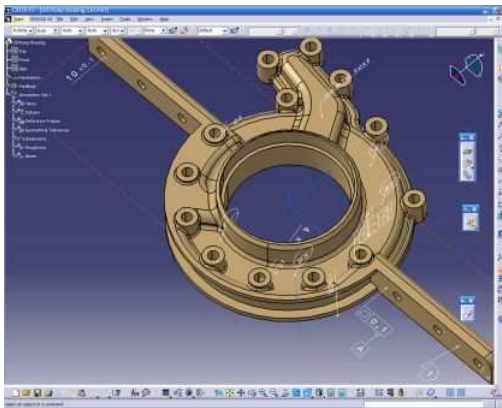## Integrating dimensioning and tolerancing into 3D models : Catia V5 FTA Module

Santa Barbara, California, USA and Lyon, France - July 2nd 2007 - Datakit, a Cad Data Exchange Leading Company, demonstrates its ability to master Catia V5 FTA module.

More than just trendy terms, PMI, FTA and MDB are all key parts of a new approach to design where 3D and 2D work together in new ways. Not only is the concept attractive, but the picture is gradually becoming clearer. For the last 4 years, Datakit has been working with software vendors to enable the exchange of this data encapsulated in 3D models.

Datakit initially focused on these issues in response to requests from customers to develop a way of reading texts and flag-notes from the CATIA V5 Part design module. Since R10, the company has gradually extended this know-how to the whole CATIA FTA module, and supports the latest R17 version. Datakit processes the data manually or with the CATIA V5 wizard, supporting partial or complete datum elements, geometrical tolerances, roughness symbols, dimensioning data (simple, stacked, cumulated, coordinate dimensions), noa, captures and views. All the entities present in a drawing are integrated into the 3D model and recovered in graphic form (as symbols) or semantic mode. The CATIA V5 wizard facilitates the identification of the data created in the FTA module and prevents the creation of unsatisfactory data mistakenly identified by CATIA V5 as GDT! Yet the sheer number of choices offered to users makes it hard to recover all the frames and arrows pointing to the related geometry, and position them correctly. Datakit has devoted four years to completely mastering the FTA module, but this effort is now being rewarded with clear leadership and a breadth of perspective that will provide a basis for developing solutions in the near future for Unigraphics NX or to convert annotations from Pro-E.

David Prawel of Longview Advisors Inc, a CAD Industry veteran and 3D software expert, says that the ability to use this data is a major issue for the whole industry: "The lack of GD&T and other PMI data in CAD models has plagued manufacturing efficiency for more than a decade. Without this information, manufacturers have been forced into the time-consuming task of manually integrating their process plans with CAD designs and creating their own PMI.
Integrating PMI and other related information with 3D CAD models has recently been gaining new momentum, due to new urgency from various large manufacturers, and to the emergence of STEP second edition, which promises to provide an architecture that enables delivery and visualization of these data. Datakit appears well positioned to capitalize on this trend and deliver on the growing need for PMI support throughout product lifecycles."

For Datakit, this new development is a considerable engineering challenge, but also a new opportunity to demonstrate its unique ability to manage complex entities!