



May 31, 2001 minutes

The meeting of the Madison Area SolidWorks® Users' Group (MASWUG) was held on May 31, 2001 at the Sheraton Hotel. 53 people attended from 30 companies and organizations.

Introductions

David Strait from GE-Lunar, President of MASWUG, welcomed the group. David introduced our theme, working with outside vendors, and thanked Computer Aided Technology, Inc. for the use of their computer and projector. David also solicited for ideas and presenters for our next meeting.

Using SolidWorks with Virtual Gibbs

Mike Motl from Placon discussed the use of Virtual Gibbs for NC programming in a SolidWorks environment. At one time, molds were essentially made by hand, then NC programs were developed using G code. Now, SolidWorks files are passed on to Gibbs using the Parasolid format, where shrink factors are applied. Mike is most impressed by the ability of Gibbs to program complex parts quickly.

Short Cuts to get Early Machined Prototypes Fast

Tom Smith from NC Directions, Jerry Smith from Grove Machine & Tool, and Ron Palvermacher from Matrix Product Development discussed how to get parts from design to machined prototypes as quickly as possible. When working with Jerry and Tom, Ron likes to model the part, create a simple drawing and an e-Drawing for critical dimensions and other notes.

Tom pointed out the programmer and machinist need the right information, including: Material, Size, Accurate Geometry, Tolerances, Special Processes, and at least one dimension per drawing to check size. The Machinist Handbook is a good reference for standard methods and processes.

Jerry would also like accurate information for machining the part. It is also nice to have a reference point to locate the part on the machine tool. Using MasterCam, Jerry can directly accept SolidWorks files.



e-Drawings II

Brian Harrison from SolidWorks Corporation talked briefly on the next version of e-Drawings, which may be out in late summer. Highlights include: Dragging parts in an assembly, Sectioning, Rotating in HLR mode, Markup and Measure.

Importing and Exporting Files from Different CAD Systems

Jeff Wong from Paradigm Design & John Matson from Matrex Mold outlined how they liked to share design information. Jeff likes to put only the critical dimension, along with notes, specifications and sheetmetal bend allowance on drawings and prefers to send the drawings in PDF format due to it's small file size. Other tips include; color code models for revisions and machined faces, place PEMs in sheetmetal parts as features, sending assemblies to vendors, and using FTP instead of e-mail as a faster way to send files over the Internet.

John likes 2D data for BOM (bill of material), tolerancing, non-NC machined parts, and wire EDM. He likes 3D data, in IGES or Parasolid format, for NC programming and quotations. The assembly is appreciated for checking fits and clearances.

E-Drawings for Fast Quotes, IGES for Solid Model Transfer

Toralf Strand from Springs Window Fashions examined the method they use for getting quotes from vendors. Getting quotes used to be a big job. Now, because of e-Drawings and e-mail, it is relatively painless. It is also much quicker than the old method of printing drawings, folding and mailing them to the different vendors. After the vendor has been selected, e-Drawings are used for drawing data and IGES is used for geometry.

Quasi-paperless Communication with your Machine Shop

George Skupniewicz from ThermoNicolet and Mike Everson from Middleton Machine looked at how they are moving to faster machined prototype parts. George stressed how important a quick turnaround is when developing new products. He would also like order of magnitude price estimates.



Mike described the use of standards in facilitating communications. Using a set standard for designating tapped holes from drilled holes etc., perhaps by color, and modeling tapped holes the tap drill size.

Using SolidWorks Information to Produce Label/Artwork

Mike Jablonski from ThermoNicolet described how he is able to get the size and shape of product labels from SolidWorks sketches to Adobe Illustrator. Mike cuts and pastes the sketch geometry onto a drawing and exports the drawing to Adobe Illustrator using dxf. After adjusting for scale, the geometry is ready to be used to define the label.

Using SolidWorks for Service Department Needs

John Leja from GE-Lunar discussed using SolidWorks drawings in PDF & EMS formats for field service manuals. In the future, SolidWorks data could also be used in Computer Based Training.

Submitted by MASWUG co-secretary: Mike Alex