



FB1800

Woodworking & Fabrication: Technology Meets Tradition-Unique Methods And Workflows

Steven Widom CTO – Widom Associates support@widom-assoc.com
www.youtube.com/widomtech

Introduction

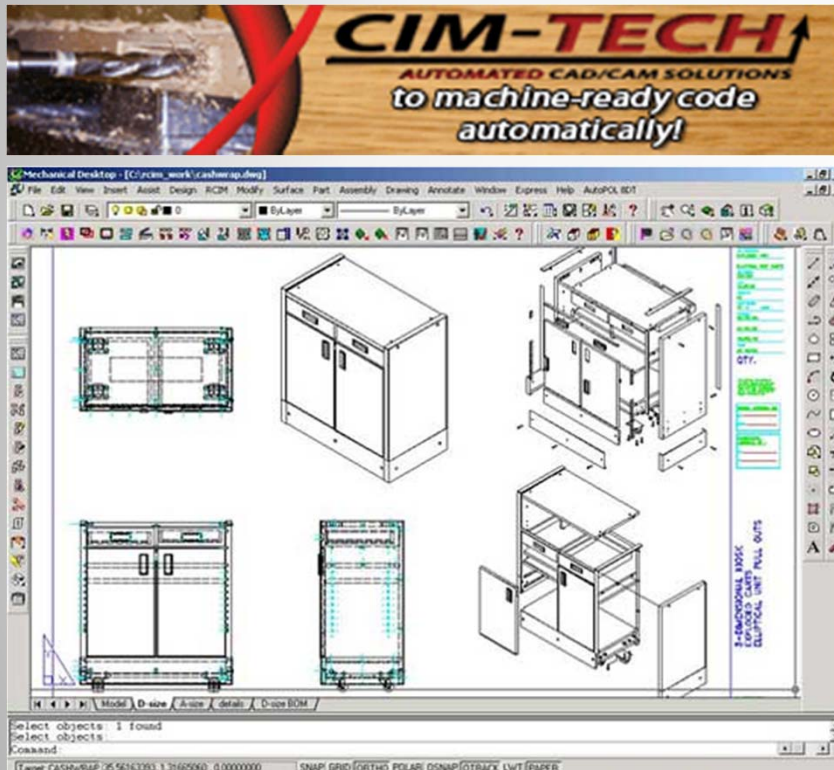


- Steven Widom - CTO Widom Associates
 - User - Autodesk products since 1984 “AutoCAD 2.5”
 - Certified Inventor Professional
 - 26 years teaching and consulting in the Autodesk channel
 - 40 years professional woodworker – fabrication furniture / millwork
 - Multi year teaching – fine woodworking – American Craft Council
 - You Tube channel dedicated to the usage of Inventor in the wood trades
 - Speaker Autodesk University , user groups / trade groups
 - Lectures
 - Webcasts

- Guests:

Cim-Tech - Developers of Solid Cim/Router Cim - CAM for woodworkers

Kenny Belfatto – AE kennyb@cim-tech.com



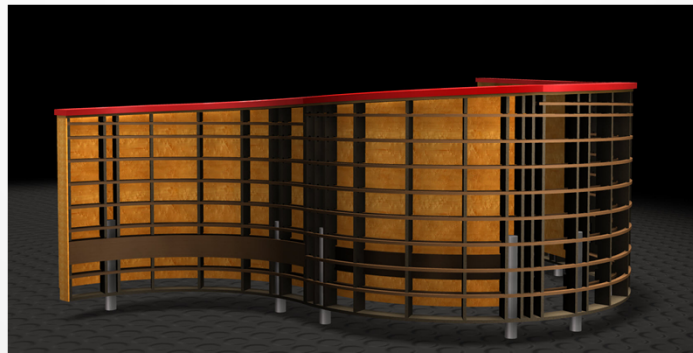
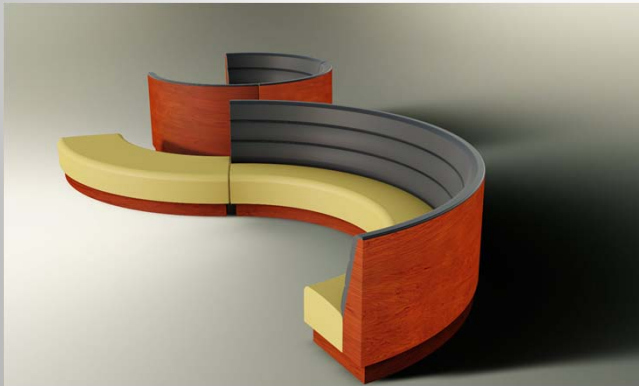
Solid-CIM 3D® won the 2012 IWF Challengers Award®.



Technology meets tradition - Class objectives:

At the end of this class, you will be able to:

- Evaluate the usage of Inventor for many wood and metal fabrication projects
- Evaluate the usage in panel optimization for CNC fabrication
- Determine new methods and workflows that will enable accurate quality design
- Define additional methods of utilizing Inventor on all designs
- Decide if Inventor will be an asset for you and your design / CAM departments
- Define different approaches to manufacturing / Increase speed and efficiency
- Realize ease of use of Inventor / utilizing a single truth model



Technology meets tradition - Class objectives:



Technology meets tradition - Class objectives:

- Modeling techniques for woodworking
- Joinery or no joinery
- Development for approval / before 3d fabrication
- Assignment of materials – solid stock – plywood – grain Direction
- Treatment of edge conditions – Edge Banding
- Cut list / bill of materials - exporting to other applications / MRP
- Assignment and placement of hardware & joinery – the full model
- Logic for change & standardization
- Development software
- Standardization in all aspects
- Sharing of data
- Cross application workflows
- Developing the truth model
- Inventor directly to CAM

Technology meets tradition - Class objectives:

Cut list bill of materials



Woodwork BOM

Product View | Rename Configurations | Setup

BOM Management

Bom Title
Order code: Cabinet Right
Order name:
Customer:
Designer:

Code	Final code	Name	Final name	Qty	Length	Width	Thickness
Cabinet Right	Cabinet Right			1			
Top Draw	Top Draw			1			
Back Panel	Back Panel			1	24 3/4 in	17 in	1/2 in
Bottom	Bottom			1	16 13/16 in	16 1/2 in	3/4 in
Floating Shelf	Floating Shelf			1	16 5/8 in	16 1/4 in	3/4 in
Intermediate Stretche	Intermediate Stretc...			1	16 1/2 in	4 in	3/4 in
Side Left	Side Left			1	24 3/4 in	17 7/8 in	3/4 in
Side Right	Side Right			1	24 3/4 in	17 7/8 in	3/4 in
Top Stretcher Back	Top Stretcher Back			1	16 1/2 in	4 in	3/4 in
Top Stretcher Front	Top Stretcher Front			1	16 1/2 in	4 in	3/4 in
Drawer sliders [20 kg] L+R 350	Drawer sliders [20 kg] L+R	Drawer sliders [20 kg] L+R	Drawer slid...	1			
Pocket Assembly	Pocket Assembly			2			
shel support-24	shel support-24			2			
CONNECTING BOLT L34	CONNECTING BOLT...	CONNECTING BOLT L34	CONNECT...	6			
MINIFX CAM D15 H18	MINIFX CAM D15 H...	MINIFX CAM D15 H18	MINIFX CA...	6			
Minifix Cover Cap	Minifix Cover Cap	Minifix Cover Cap	Minifix Cov...	6			
PHP D5	PHP D5	Plate holder bushing	Plate holder...	12			
Plate holder pin 5x16mm	Plate holder pin 5x1...	Plate holder pin 5x16mm	Plate holder...	2			
WOOD PIN 8x30	WOOD PIN 8x30	WOOD PIN	WOOD PIN	18			

Modeling Techniques - Standards

Solid body modeling

Bottom up modeling

Top down modeling

✓ *Hybrid – solid body, adaptive, top down*

Creative fabrication

Negative shape drilling & cutting

Material assignment & grain direction

Edge Banding

Ilogic development

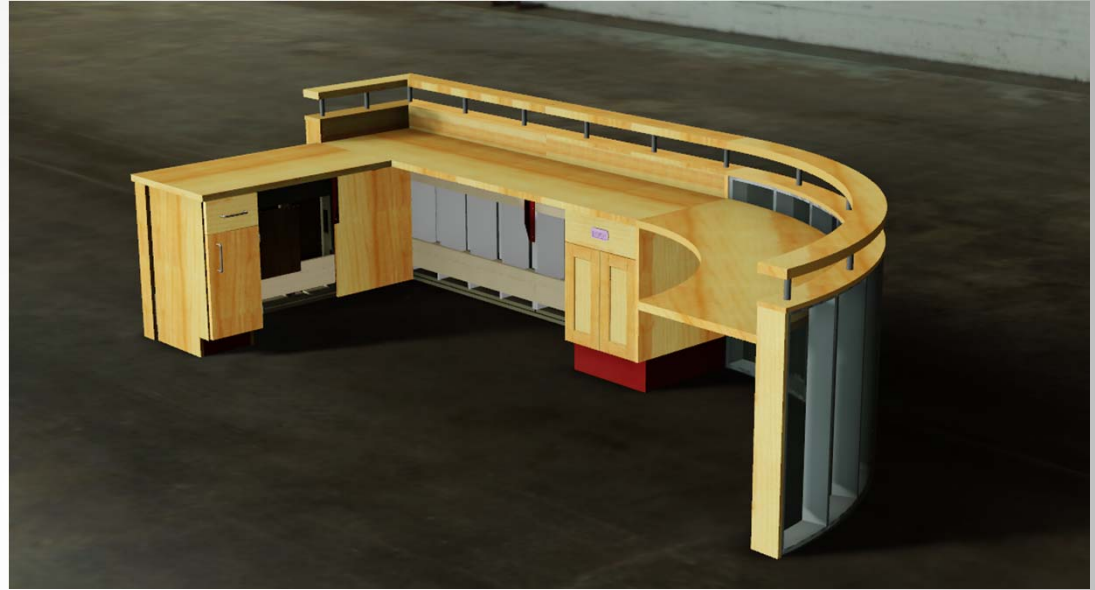
Standards development

32mm development

Hardware insertion for the entire model

Attaching any library item / Super Imates

Universal tools



Technology meets tradition - Class objectives: CAM Integration

Autodesk to Acquire Delcam for \$276 Million

By Karen Koenig | Posted: 11/08/2013 9:45AM

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Delcam's products for the woodworking industry include ArtCAM CAD/CAM software.

SAN RAFAEL, CA - 3D software firm Autodesk Inc. said it will acquire Delcam Plc for \$276 million (£172.5 million). Delcam is a leading provider of CAD/CAM software to the woodworking and other industries, with products that include ArtCAM, PowerMILL and SolidWorks.

Autodesk (NASDAQ: ADSK) issued the announcement Nov. 7. [Autodesk said it plans to use its non-U.S.-based cash for the Delcam \(LON: DLC\) transaction, which is expected to close the first quarter of 2015.](#)

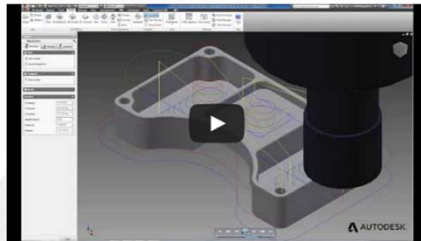
"Today we are taking an important step on our path toward delivering a better manufacturing experience," Carl Bass, Autodesk president and CEO, said in a statement. "Together Autodesk and Delcam will help further the development and implementation of technology for digital manufacturing."

The move expands the California-based Autodesk's offerings to the global manufacturing marketplace. Headquartered in Birmingham, UK, Delcam has more than 30 offices worldwide, approximately 600

Autodesk Inventor HSM

Autodesk® Inventor HSM™ Express is a free CAM solution that is seamlessly integrated inside the design environment of Autodesk® Inventor® software.

The integration allows Inventor users to take advantage of the workflows and tools they expect when programming CNC toolpaths for machining projects.



[GET INVENTOR HSM EXPRESS](#)



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