

MecSoft Across America 2018

Introduction

When we say here at MecSoft Corporation that we are *Your CAM Partner* we mean exactly that! We strive to ensure that you experience resounding success using our CAM software. We're here for you from day one and on every CAM project. We are also very proud and excited to be able to showcase a small sample of our customer's work each year. These projects not only exemplify how craftsmanship and the right CAM software can merge to produce a beautiful product, they also exemplify each company's American success story!

What's Inside

- Read the real true story behind each company, the success they have achieved in their industry and see their projects coming together from start to finish.
- Learn by example. Read about the CAM toolpath strategies used, the CAD geometry and techniques employed, what materials are cut and the machine tools used to cut them.
- Companies and completed projects from the Manufacturing, Mold & Die Design and Woodworking industries are represented.

AlibreCAM at Granberg International

VisualMILL at OESH Shoes

Mold & Die at Conley Manufacturing (RhinoCAM)

VisualCAM for SOLIDWORKS at The Warren Group

RhinoCAM and Cello Making at Christopher Dungey Cello Maker Inc.

RhinoCAM at Lohmann Woodcarving Company

We start off close to home with <u>Granberg International</u>, a second generation, family-owned company and a world leader in the design and manufacture of chainsaw accessories, located in Pittsburg, CA.







AlibreCAM at Granberg International

They say that "Necessity is the mother of all invention." Well, Erik Granberg, President and CEO, tells the story of how his father, Elof Granberg, started the company in the 1950s after experiencing the difficulty of clearing timber on a ranch the family had just purchased in British Columbia.

That necessity led to the invention of the first portable chainsaw blade sharpener that is sold today worldwide! <u>Hear Erik tell the story here!</u> We recently sat down with Erik Granberg to learn more about the company and its use of <u>AlibreCAM</u> software from MecSoft Corporation.



Read More:

AlibreCAM at Granberg International (In Depth Case Study)

XY Instancing of Toolpaths in AlibreCAM (MecSoft Blog)

AlibreCAM Helps Manufacture the Alaskan® Sawmill (MecSoft Blog)

Machining Accuracy with AlibreCAM at Granberg International (MecSoft Blog)

Next we'll head across the country to the eastern Atlantic coast and see what's happening at OESH Shoes in Charlottesville, VA.





VisualMILL at OESH Shoes

<u>Dr. Casey Kerrigan</u> is a Harvard Medical School graduate with a master's degree in Kinesiology (the study of body movement). Dr. Kerrigan is known internationally for her peer-reviewed published research on gait (the study of walking & running) and the effects of footwear on the joints in the body. She published her <u>first research paper in 1998</u> demonstrating a link between high heels and knee arthritis. She subsequently discovered that even a small heel elevation, as well as a lot of other features in traditional shoes, similarly increase impact on the joints.

Casey's research, along with her years of clinical experience treating the wide variety of problems linked to poor footwear, led her to develop and launch <u>OESH Shoes</u>, where she and her team designs and manufactures her footwear with the help of <u>VisualMILL from MecSoft Corporation</u>. We recently sat down with Dr. Kerrigan to discuss her remarkable contributions to the footwear industry and her use of our VisualMILL software.



Read More:

VisualMILL at OESH Shoes (In Depth Case Study)
VisualMILL Helps OESH Shoes Design Production 3D Printers (MecSoft Blog)
Machining a Thermoplastic Heater Block in 2½ Axis using VisualMILL (MecSoft Blog)
Women in CAM: Dr. Casey Kerrigan & OESH Shoes (MecSoft Blog)
MecSoft User Spotlight: OESH Shoes (Video)

Next we go to the upper midwest and Great Lakes and visit <u>Conley Manufacturing</u> located in Shelby Township, just north of Sterling Heights, Michigan.





Mold & die at Conley Manufacturing

<u>Conley Manufacturing</u> produces machined tool & die components for the automotive and aerospace production markets. Companies like Boeing, Cessna, Honda Jet, Ford, GM and Chrysler turn to Conley Manufacturing for specialized jigs, SPC (<u>Statistical Process Control</u>) checking fixtures and CMM (<u>Coordinate Measuring Machine</u>) holding fixtures. The company also machines inserts for plastic injection mold tooling.

Al Grifka, CNC Manager for Conley Manufacturing, has been machining tool & die components using RhinoCAM for the past 5 years. Al comes from a family of engineering expertise. His father is an engineer with Chrysler Corporation and three of his cousins are all tool & die machinists with the top three automakers. We recently sat down with Al to discuss his use of RhinoCAM CNC software from MecSoft Corporation.

Read More:

Mold & Die at Conley Manufacturing (In Depth Case Study)

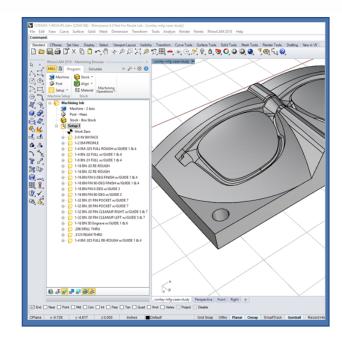
Machining a Mold Parting Lines (MecSoft Blog)

Mold Machining at Conley Manufacturing (MecSoft Blog)

Electrode Core Machining (EDM) at Conley Manufacturing (Video)

MecSoft User Spotlight: Conley Manufacturing (Video)

Al Grifka, CNC Manager at Conley Manufacturing discusses Tool & Die with RhinoCAM



We continue our discussion of Mold & Die with a trip to the south west to visit the <u>The Warren Group</u> located in Santa Fe Springs, California.





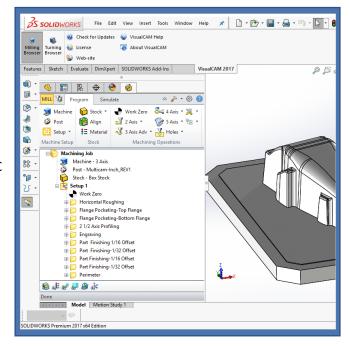
VisualCAM for SOLIDWORKS at The Warren Group

<u>The Warren Group</u> designs and manufacturers prototype and production packaging solutions for the industrial, automotive and consumer products industries. For the past seven years, TWG has relied on <u>VisualCAM for SOLIDWORKS</u> to program the toolpaths they need to drive their two 5'x10' <u>Multicam</u> CNC machining centers.

Edgar Mota has been with TWG for the past seven years working in production as a CNC Operator and currently in engineering as a Lead Designer. We recently sat down with Edgar to learn more about the company and how it uses VisualCAM for SOLIDWORKS in their engineering and manufacturing process.

Read More:

VisualCAM for SOLIDWORKS at The Warren Group (In Depth Case Study)
Packaging Design & Manufacturing at The Warren Group (MecSoft Blog)
Thermoformed Packaging Molds at The Warren Group (MecSoft Blog)
MecSoft User Spotlight: The Warren Group (Video)



Let's take a trip now to the upper north west and visit Christopher Dungey Cello Maker Inc. in Grand Junction, Colorado.





RhinoCAM and Cello Making at Christopher Dungey Cello Maker Inc.

<u>Christopher Dungey</u> started his career in 1978 with a music degree playing double bass performances. However, Chris was quickly captivated by the art and fine craftsmanship of the very instruments that he loved to play.

So much so that in 1979 Chris applied, and was accepted to the prestigious 3-year program at the Newark School of Violin Making in Newark England where only 4-5 international students from around the world are accepted each year. After completing the program Chris moved to Los Angeles working for a couple violin shops performing repair and restoration on some very high-end and expensive instruments (Stradivarius, Guarneri and Amati) during the day while building his own instruments at night and selling them wholesale. Soon musicians were contacting him directly to commission the creation of their own Christopher Dungey Cello!



Read More:

RhinoCAM and Cello Making at Christopher Dungey Cello Maker Inc. (In Depth Case Study)
Handcrafted Cellos at Christopher Dungey Cello Maker Inc. (MecSoft Blog)
RhinoCAM assists in Cello Making Craft (MecSoft Blog)

For the final stop in our MecSoft Across America 2018 tour we head back to the Great Lakes state to visit with <u>Lohmann Woodcarving Company</u> located in Covington, Michigan.



LOHMANN WOODCARVING COMPANY

RhinoCAM at Lohmann Woodcarving Company

Jim Lohmann of <u>Lohmann Woodcarving Company</u> has been practicing woodcarving by hand for the past 45 years, getting his start in the Boston area, and then moving to Chicago. Today, Jim works from his workshop in Covington, Michigan, where he has been practicing his craft for the past 30 years. For centuries, the "tools of the trade" of a master woodcarver have been and still are pencil & paper, hand-forged chisels and unmatched artistic craftsmanship.

Jim still carves by hand & chisel but has also evolved his craft with the use of state-of-the-art digital technology. Today, you are just as likely to find Jim 3D sculpting in <u>ZBrush</u>, 3D modeling in <u>Rhino</u> and cutting 3 and 4 axis toolpaths in <u>RhinoCAM</u>!



Read More:

RhinoCAM at Lohmann Woodcarving Company (In Depth Case Study)
3D Mesh Editing & Machining (MecSoft Blog)
Restoring George Washington (MecSoft Blog)
Decorative Wood Carving (MecSoft Blog)

We hope you enjoyed our 2018 installment of *MecSoft Across America!* Stay with us as we continue to build the future, one CAM user at a time! Brought to you by <u>MecSoft Corporation - Your CAM Partner!</u>