

# September 2014 Volume 8, Issue 3

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## D3 Simulation Solutions

If you've ever considered Simulation for your product development, D3 can provide the tools, the training, the mentoring, and the solving for complex simulation challenges. To learn more, please consider attending our upcoming [Simulation Educational Seminar](#) in Kansas City, MO.

Our expertise covers the structural analysis of parts and assemblies. We have a number of solving tools for determining **deflections, strains, and stresses** in complex structures. We can also analyze **thermal and fluid flow** problems using computational fluid dynamics.

We can provide:

- Products - Simulation tools to meet your needs
- Training - Flexible learning of the tools in dedicated environments
- Mentoring - Assistance with using your tools and your models
- Solving - Outsource your challenges to a proven partner.

With our network of solution providers, we can help you solve your design challenges of today. When you have the need to know more about your design, contact your local D3 representative.



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## Special Offers

Congratulation to Grant Aden, our most recent **Facebook winner** for the "Cube" 3D Printer.

Want to be automatically entered into our next drawing to **WIN a FREE 3D Printer?** Simply 'Follow' us on Twitter!



Join us for a FREE Simulation Workshop on **September 16<sup>th</sup>** in Kansas City, MO



You're Invited to the CAM/Machining Open House on **October 8<sup>th</sup> - 9<sup>th</sup>** in Lee Summit, MO



Begin Posting G-Code in Just 15 Minutes After Downloading Free CAM



**"Your HSM CAM software has allowed us to cut the time to get parts by 4 months... Keep up the good work!"**

*-Gene Brown,  
Owner/Actuator Consultant -  
ADS-Aerospace, Wichita, KS*

[Contact Us](#) today to learn about our promotions and special offers on software, hardware, or training.


You can always visit our Website or Social Network pages to learn about promotions or special events. Click the icons below to visit the pages:



## Quick Links

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[Events Calendar](#)  
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## D3 Demonstrates Automation Abilities at Houston Conference

D3 Technologies is a proud sponsor of the **Steel Tank Institute (STI)** and recently had the opportunity to participate in the STI/SPFA Conference in Houston, TX. This was a chance for D3 to demonstrate and showcase our ability to automate the Quote-to-Design process to the **tank, storage container, and pressure vessel** markets in which we have had a lot of success. 



We want to thank all of our clients for attending the show and visiting our booth!

Contact [Daryl Price](#) if you would like more information on how D3 can automate your company's Quote-to-Sales process.

Daryl Price is the lead interface to D3's Automation team and serves our consulting teams, other Autodesk partners and Autodesk's sales teams in providing solutions around the world.

[2-Minute Video Sample of One of D3's Automation Approaches](#)

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## D3 Sees Rapid Growth in the CAM Industry



As a Master Reseller for Autodesk's HSM CAM software, we have progressively continued to make headway as we venture deeper into the machining industry. Jim Frick, D3's St. Louis Solution Executive, has recently taken on the title CAM Solution Executive. We now have both Inventor and SolidWorks experts on staff to help anyone looking to integrate HSM CAM into their workflow.

D3 has also recently partnered with Maruka Machining Corporation, a machining equipment distributor, which has served the manufacturing industry with the best metal cutting, plastic processing and fabrication equipment since 1968.

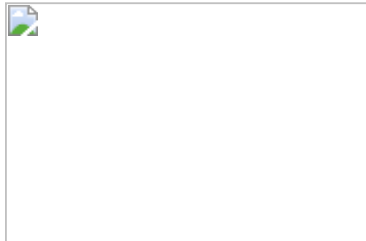
If you are interested in seeing how the latest Autodesk High-Speed Manufacturing (HSM) CAM software can be merged with CNC equipment, see [CAM & Machining Open House](#) in the Upcoming Events section of this newsletter.

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## Customer Success Story

**CUSH SUSPENSIONS**, a suspension system solutions provider for the heavy duty trailer and truck industry, recently took on a potentially large project for which they had to review old designs and think outside the box in order to reduce part count and optimize for customer requirements. To do this, they used **AutoCAD** for 2D sketching, **Inventor** for 3D modeling to validate form and fit, and finally, **Autodesk Simulation** to verify design integrity.

[Read the Full Article](#)



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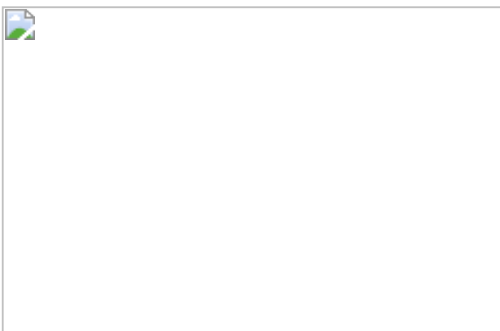
## Tech Blog: Sketching in Inventor 2015

When I first started using Inventor 2015 I could tell some things were different right away, from my very first part sketch. No, you're not crazy.. If you have been using Inventor long you probably have noticed some of them too. If you're like me, you'll want to play around with some of the new settings to figure out what works best for you.

For this newsletter's tech blog, I'm going to cover a few things you may want to check out. Hopefully I'll give you some good info that will keep you from banging your head against the wall too much.

[Read the Full Blog Here...](#)

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## D3's New Employees

D3 recently welcomed Business Intelligence Manager, Jared Moore, and Inside Account Representative, Adam Hulett, to the team.

### Jared Moore



Jared works out of D3's Springfield, MO headquarters. Here are some quick facts about Jared:

#### Education:

Jared graduated from Evangel University with a Bachelor's in Business Administration & a Minor in Computer Information Systems in December, 2013. Prior to Evangel, he attended a Junior College in Sacramento, CA for 5 semesters before transferring to Evangel.

#### Work History:

Before D3, Jared worked for Sperry Van Ness/Rankin Company where he had a mixture of multiple responsibilities, ranging from IT to marketing to Social Media. In the past, Jared has created Access Database for small business in California.

#### Position at D3:

As the Business Intelligence Manager, Jared's primary role is to update, maintain and meet the needs of the user with regards to our CRM system and help facilitate the implementation of new CRM projects in the future.

### Adam Hulett



Adam Hulett works out of D3's Springfield, Missouri headquarters. Here are some quick facts about Adam:

#### Education:

Adam has an Associate's Degree from OTC and a Bachelor's of Science Degree in Business Administration with an emphasis in Management from Columbia College.

#### Work History:

Adam doesn't have any past experience in the manufacturing industry, so everything at D3 is brand new to him. Prior to D3, Adam worked at Baisch & Skinner for four years, which is one of the largest wholesale florists in the Midwest.

#### Position at D3:

As an integral part of the sales team, Adam will be working as an Inside Account Executive (IAE). I will be working closely with assigned Solution Executives (SE) to service existing customers to meet and exceed company revenue and customer satisfaction objectives.

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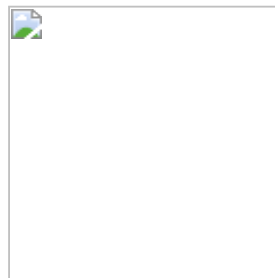
## Employee Spotlight

### Aaron Lancaster

Meet Aaron Lancaster, Marketing Coordinator at D3's Corporate office in Springfield, MO. Aaron started working at D3 Technologies last February, 2013, and specializes in marketing and graphic design.

[Click Here](#) to learn more about Aaron Lancaster and read the interview.

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Trade In Offer (2008 or Prior)

There's still value in your Autodesk software released in 2008 or prior. Trade in your non-current licenses and **save up to 30%** when you move to your choice of eligible 2015 Autodesk products with Maintenance Subscription by October 3, 2014.

Get current and enjoy having more advanced toolsets, more powerful capabilities and more efficient workflows, along with all the benefits of Maintenance Subscription. Whichever Autodesk products you use, the most cost-effective way to stay current is to move to the latest version today and subscribe.

Plus, you can take advantage of special financing rates as low as 0% or 2.9% for 24 months and 3.9% for 12 months on all purchases. But hurry—limited funding is available, subject to terms and conditions.

If you have any questions about this offer, please [contact](#) your local D3 representative.

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## Upgrade Offer

After **January 31, 2015**, upgrade licenses from previous releases will **no longer be available** for purchase. Now is the time to upgrade and add Autodesk Maintenance Subscription, to always have the very latest software at your fingertips.

Until **October 24, 2014**, you **can save more** AND **get more product choice when you upgrade**. You'll enjoy having more advanced toolsets, more powerful capabilities and more efficient workflows, along with all the benefits of Maintenance Subscription to help you stay competitive.

Plus, take advantage of **special financing rates** as low as 0% or 2.9% for 24 months and 3.9% for 12 months on all purchases. But hurry - limited funding is available, subject to terms and conditions.

If you have any questions about the upgrade offer or Autodesk pricing policy changes, please [contact](#) your local D3 representative.

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## Low Financing Rates

### Get 2.9% financing for a limited time\*

Autodesk Financing makes it easy to get the professional tools you need to stay competitive

With Autodesk® Financing, you can **finance up to 100%** of your Autodesk software investment - making it much easier to get the tools your business needs to get the job done. Plus, you can add Maintenance Subscription, enjoy all the associated benefits, and still qualify for this special financing offer.

To meet the specific needs of your business, Autodesk Financing provides:

- **Flexible payment terms**
- **Customizable options**
- **Low interest rates**

Act now. Promotion ends **October 24, 2014**, or when available funding has been allocated.

If you have any questions about the financing offer or Autodesk pricing policy changes, please [contact](#) your local D3 representative.

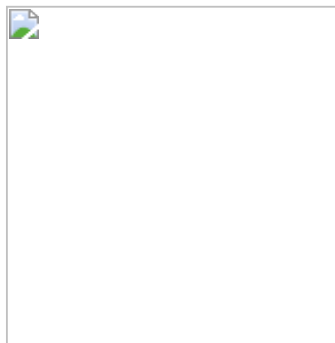
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## Pedal to the Metal: ProX™ 300 Metal 3D Printer

**3D Systems' ProX™ 300** makes additive manufacturing an industrial option for the production of **metal parts**. It is a high-performance, high-quality alternative to traditional manufacturing processes, offering **reduced waste, greater speeds** for production, **short set up times**, very **dense parts**, and the ability to produce very **complex assemblies** as a single parts.

This is a case study of how a company that works on tuning and racing cars used the ProX 300 to stretch car performance. Metal Technology Inc. (MTI) creates customized parts for sports cars in order to make them faster. English Racing was having trouble with exceeding tolerable oil pressure limits at high RPMs, and it was causing significant damage to the car's engine.

After several engines were destroyed, English Racing designed a new pulley that had a larger diameter, which would cause it to turn slower



and thereby lower the oil pressure. Though the solution was theoretically sound, the issue of manufacturing their part at low quantities for testing posed a problem. With traditional casting processes, part production would have been both time-consuming and costly, so English Racing searched for an alternative.



By working with Metal Technology Inc. (MTI), English Racing was able to 3D print their pulley on a ProX 300 direct metal printer by 3DS in 17-4 PH Stainless Steel. Using this method, creating the

final part only took 5 hours, and the Evo was on the track and testing three days later. A few months after their test print, the English Racing team ran the Evo at the Pikes Peak 1/2 mile top-speed event and placed first in the Sedan Class, reaching 184.9 miles per hour.

[Racing with the ProX 300 Metal 3D Printer Video](#)

To learn more, please contact [Barbara Miller-Webb](#) or visit the [3D Systems](#) website.

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## New Virtual Skillbuilders

Can't travel? Now you can learn right from your office! D3 is now offering virtual Skillbuilder classes FREE of charge. As a matter of fact, **ALL Skillbuilders are completely FREE for a limited time.**

Each Skillbuilder occurs on the **2nd Wednesday** of each month at **8:30 AM - 11:30 AM**. If your looking to get advanced training in a particular area of interest to you, check out our Skillbuilder schedule and register for a class today using the links below!

- [Skillbuilder Schedule](#)
- [Skillbuilder Class Descriptions](#)
- [Skillbuilder Registration](#)

If you have questions regarding D3 Skillbuilders, please [contact](#) your local D3 representative.

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## D3's Machine Shop is Off to a Successful Start

As some of you may already know, D3 launched its Machining Solutions division earlier this year to support and provide our customers with a means to have their designs machined. The shop has now been fully operating since late February, and we've had a lot of excitement from manufacturers in the area commenting on the convenience of having a local machine shop that can accurately machine and deliver their parts in a timely manner. We merged the latest in Autodesk's High-Speed Manufacturing (HSM) CAM Technologies with some great CNC equipment (including two CNC Lathes and two CNC Mills) and a skilled team of machinists.

Adding CNC machining capabilities fits perfectly into the direction D3 is going to best support our clients. During the validation phase of the design process, many of our customers have the need for physical prototypes to be machined to check fit, form, and function. We are able to provide these physical prototypes by using Autodesk's integrated HSM CAM to create all the G-code.

You can download the full 2.5-axis CAM software for Inventor or SolidWorks 100% free of charge at the following link: [Download Now](#) - Does not expire!



Learn more about D3 Machining Solutions here: [www.d3tech.net/products\\_machining\\_solutions](http://www.d3tech.net/products_machining_solutions)

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## Simulation (FEA) Seminar in Kansas City



**Join Us for a FREE Simulation Educational Seminar**

**September 16<sup>th</sup>  
8:00 AM - 5:00 PM CST**

Black on Burlington Conference Center ([view map](#))  
1321 Burlington St.  
North Kansas City, MO 64116

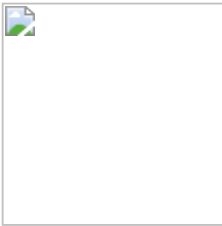


In this free seminar, we will be focusing on the application of finite element analysis (FEA) tools. Guests will be given expert tips on best practices and application to help make every engineer successful with simulation. After this software-independent seminar, attendees will be able to answer the following questions:

- How can I determine if I have over-constrained my model?
- Do my loads really represent real-world behavior?
- Part or Assembly?
- What is the best CAD model to start with? Can I over-simplify?
- When should I use Shells, Beams, Plane Stress or Axisymmetry?
- Do I need nonlinear?
- What result quantity is important for my material? My design criteria?
- Can I trust my results?
- Should I consider dynamic effects?

**Do you need Professional Development Hours?** Hurry, Seats are limited, so register today! **Lunch will be provided.**

**Note: this event has filled quickly in other cities and has been highly popular for any FEA user.**



**About the Instructor:**

Bart McPheeters has been a consultant, instructor, and engineer working with FEA in product design and analysis for over 20 years. He has taught many classes in practical finite element theory and the use of finite element software. Bart has been involved in education of novices through managers via a series of short classes he has compiled and taught through the Shock and Vibration Exchange. He has been involved in many consulting tasks involving the use of finite element analysis for design and sizing of parts for relatively simple static loads, dynamic loads and complex nonlinear analysis. Through his career as an application engineer, he has seen FEA applied in many new and different ways in many industries for many types of objects, from small parts to full ships. He has learned first-hand the importance of

properly applied simulation for accurate prediction and is the author of several technical papers on finite element analysis. Bart is currently a Senior Tech Specialist at Autodesk working with the Mechanical Simulation Task Force. Previously, Bart has worked with and instructed and/or consulted using CSA, MSC, NX and NEi Nastran, NEi Explicit MSC Dytran, MSC Marc, MSC Patran, ABAQUS, LS-Dyna, & FEMAP



**Door Prize:**

During the workshop, there will be a door prize drawing for a Google Nexus 7 32GB tablet. Everyone in attendance will have a chance to win!

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## Springfield Missouri Association of Manufacturers (MAM) Summit



### Come find us at this year's annual Missouri Association of Manufacturers Summit

**September 17<sup>th</sup>**  
**8:00 AM - 4:00 PM CST**

This year, the Missouri Association of Manufacturers will host the 11th annual Manufacturing Summit at the **Ramada Oasis Convention Center** in **Springfield, MO**.

We are delighted to announce this year's conference, "Top Guns" where keynote speaker Maj. Gen. Stephen Danner will present on Inspiring Leadership. Guests will also have choice of Breakout Sessions with topics ranging from technology to energy to finance and more. As well, we will have presentation of MAM's annual Founders Awards.

If you are interested in attending or learning more about the MAM Summit, [contact](#) your local D3 representative.

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## CAM and Machining 2-Day Seminar for Designers and CNC Programmers



D3 is excited to be partnering with Maruka USA, a leading distributor of the best metal cutting, plastic processing, and fabrication equipment, to co-host a **2-day open house and seminar on CAM and machining**. In this seminar, guests will get to see parts being cut and will be involved in discussions about the challenges of setting up posts and making changes to the model workflow.



### **AGENDA:**

**October 8<sup>th</sup>** - We will be meeting in the evening to showcase the machines and network  
**5:30 PM - 8:00 PM**

**October 9<sup>th</sup>** - The second day will be split between two seminar sessions for Programmers & Designers.  
**8:30 - 11:30** - CAM for CNC operators and Manual programmers. *(This session is intended for users who are familiar with the CNC process but new to CAD/CAM.)*

- Importing CAD files from multiple CAD systems
- Overview of Parts, Assemblies & Drawings
- Basic Part Modeling
- Defining Stock and Work Coordinate Systems
- Creating 2D Toolpaths
- Post Processing Toolpaths for your CNC

**11:30 - 12:30** - Break for lunch

**12:30 - 3:30** - CNC Programming for Designers & Engineers. *(This session is intended for users who are familiar with Inventor but new to CNC.)*

- CNC Tools
- CNC Programming Language (GCode)
- Machine and Fixture offsets
- Calculating Speeds and Feeds
- Defining Stock and Work Coordinate Systems
- Defining Toolpaths
- Post Processing Toolpaths for your CNC

### **LOCATION:**

1210 NE Douglas St ([view on map](#))  
1321 Burlington St,  
Lee's Summit, MO 64086

If you are interested in attending or learning more about the seminar courses, [contact](#) your local D3 representative.

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## Industrial & Tool Show - Springfield, MO

**We will also be at this year's  
Industrial & Tool Show in Springfield, MO**  
We will be at Booth #443



**October 8<sup>th</sup>-9<sup>th</sup>  
8:00 AM - 4:00 PM CST**

Ozark Empire Fairgrounds  
3001 N. Grant  
Springfield, MO

This year, the Missouri Association of Manufacturers will host the 11th annual Manufacturing Summit at the **Ozark Empire Fairgrounds** in **Springfield, MO**.

We are delighted to announce this year's conference, "Top Guns" where keynote speaker Maj. Gen. Stephen Danner will present on Inspiring Leadership. Guests will also have choice of Breakout Sessions with topics ranging from technology to energy to finance and more. As well, we will have presentation of MAM's annual Founders Awards.

If you are interested in attending or learning more about the MAM Summit, [contact](#) your local D3 representative.

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## 3D Systems 3D Printing and 3D Scanning Seminar

### Kansas City, MO

September 25<sup>th</sup>  
4:00 PM - 6:00 PM

**Black on Burlington Event Center** ([Show Map](#))

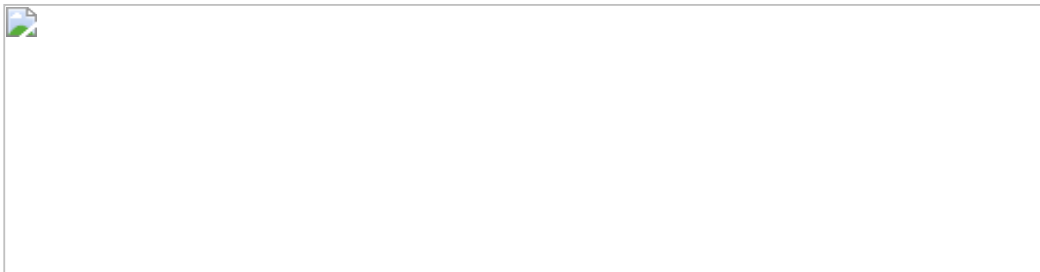
1321 Burlington St.,  
North Kansas City, MO 64116



This seminar will show you how our 3DPRINTING 2.0 initiative can help you Manufacture the Future and accelerate your design-to-manufacturing needs. Learn how to choose between vastly different technology options – key buying criteria including single-source advantages. Come learn:

- Latest developments in ColorJet 3D printing – now in full-color plastic
- Expanded capabilities in MultiJet 3D printing with simultaneous, multi-material composite printing
- Fab-grade performance of the newest SLA 3D printer enabling high volume manufacturing
- Production-grade SLS 3D printing delivering injection molding-like part quality
- Industrial-grade direct metal 3D printing with a large choice of metals and ceramics
- Low cost jewelry and dental 3D printing options
- How to choose the right 3D printer for any application, from a wide range of technologies and price points

Don't miss your chance to get an up close and personal view of the latest groundbreaking advancements in 3D printing and 3D scanning.



If you are interested in attending or learning more about this event, [contact](#) Barbara Miller-Webb.

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### About D3 TECHNOLOGIES

Founded in 1998, D3 Technologies is a consulting company that partners with manufacturers to help them leverage the latest in engineering technologies in order to design their products better and bring them to market faster. With multiple offices and training centers located all across the Midwest, D3 is a true partner that delivers solutions to help all manufacturing companies pursue continuous improvement goals to increase productivity and profitability. As one of the largest and most accomplished Autodesk Manufacturing Partners in North America, D3 focuses on 3D design, product data management/product lifecycle management (PDM/PLM), engineer-to-order (ETO), and configure-to-order (CTO) solutions. For more information on D3, please visit [www.d3tech.net](http://www.d3tech.net).



If you would like to know more about us, please visit our website: [www.d3tech.net](http://www.d3tech.net)



If you'd like to change the way we communicate with you, please [contact us](#) to specify which types of emails you'd like to receive or click on the link at the bottom of this email to have your name deleted from our mailing list.

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