

# Josh Nieman

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nieman.design

## WORK EXPERIENCE

### **Melton Machine & Control Company, Washington, MO — Mechanical Design Engineer**

June 2017 - PRESENT

Experienced designer & project manager of manual, automatic, and robotic manufacturing processes, machines, tooling & gaging/metrology equipment, serving many industries.

Develops new products to market. Leads research, experimentation, testing and reporting of new technology. Works with vendors to keep apprised of new/best products. Analyzes data to evaluate cost effectiveness of design choices including labor, materials, schedule, etc.

Identifies, executes, leads continuous improvement projects, reducing costs of design & manufacturing. Performs preliminary/final design reviews with the customer. Reviews customer engineering & specifications. Maintains communication with customer contacts to ensure buy-in on solutions & clear expectations of performance & schedule.

### **Homeyer Precision Manufacturing, Marthasville, MO — Engineering**

January 2014 - June 2017

Led preliminary & critical design reviews. Performed verification & validation of tooling & product designs. Continuous improvement initiatives to improve manufacturing automation, efficiency, quality. Managed Aerospace customer products, inspections, sales projections.

Created & audited company manufacturing processes, compliance standards (ISO9001, AS9100), & training manuals. Accountable for all drafting of shop & engineering drawings.

Performed manufacturing planning, tooling design, & support of production: 3/4/5 axis VMC, HMC, CMM, vertical lathes, brake press, surface grinding, heat treating, toolmaking, wire EDM.

### **Red Jacket Firearms, Baton Rouge, LA — Lead Machinist**

June 2011 - July 2012

Responsible for precision machining dept: sourcing materials/tooling, maintenance, setup, calibration, production planning, operating CNC & manual mills, lathes, testing & evaluation.. Collaborated on product design; DFM/A. Gov/BATFE-compliant inventory management.

Continued education: frequent training with local, regional, & world-renown firearms and small unit tactics instructors. Represented company, catalog products, and prototypes in local, regional competition environments (USPSA) soliciting feedback & promoting sales.

Supported the company as featured in top [Discovery Channel](#) TV show: *Sons of Guns*, Collaborating on product goals, designs, filming under dramatically tight deadlines.

### **CASE International, Inc, Lafayette, LA — Lead CAD Designer**

March 2006 - December 2013 (one year leave for Red Jacket Firearms, above)

Worked with professional engineers to design complete oil & gas drilling fluid production facilities, offshore drilling platforms, civil/site development, communication tower design, & architectural design projects. Originated/implemented company CAD standards, libraries of templates & details and other engineering efficiency resources and automation.

Responsible for software management, CAD drawing organization, implementing drafting automation & standards. Transitioned company oilfield & architectural project design from legacy AutoCAD 2D methods to modern Plant 3D and Revit model-based design.

## SKILLS

### Software Experience

**CAD:** Autodesk Inventor, AutoCAD Plant 3D, Fusion360, Solidworks, NX8, CATIA V5

**CAM:** Fusion 360, OneCNC, Polyworks, Mastercam

**Languages:** .NET, python, Arduino C++, SQL, Javascript

### Hardware Experience

**Manufacturing:** Manual & CNC Mills, Lathes, Gantry & Romer Arm CMMs, Surface Grinding

**Metal Fabrication:** MIG/TIG welding, CNC Press Brakes, Waterjet, Flat & Tubing Laser

**Automation:** Offline Robot programming, post-processor development, pneumatic, electric, hydraulic tooling, RaspberryPi, Arduino optical and spatial sensor integration

## EDUCATION

### East Central College

CAD/D 2001-2003

Precision Machining

2004-2005

### University of Central Missouri

Engineering Technology,

Mechanical 2003-2004

## COMMUNITY INVOLVEMENT

### Boy Scouts of America

Pack & Troop 442: Cubmaster,

Assistant Scoutmaster,

Merit Badge Counselor