Spring Cohort 2015

Pier 9 CNC Shop Introduction

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CNC Overview
CNC Overview
Tools, Software, & How to Learn
CNC Overview
Tools, Software, & How to Learn
How To Use It (Benefit)…
CNC Overview
- Equipment
- 8,000
- 700
- Manufacturing Teams
- “Pier 9 University”
CNC Overview
Tools, Software, & How To Learn
CAM Software for Haas CNC Mill

- [cam.autodesk.com](http://cam.autodesk.com)
  - Inventor HSM Pro 2015
    - Download trial version & use codes to activate
    - Inventor Professional
  - Fusion 360 CAM
    - Cloud-based CAD/CAM software
  - Both great for beginners
CAM Software for Haas CNC Mill

- **Delcam**
  - FeatureCAM
    - Powerful and widely used
  - **ArtCAM**
    - Engraving, signage, and coin making
    - Recent AiR Moon Carvings

- Download trials and see Tool Library Instructable for network license information.
CAM Software for Haas CNC Mill

- Post-Processors
  - Copy from network drive – Folder ‘CNC Data’
How to Learn the Haas CNC Mill

- **Step 1**
  - Complete steps 1 – 12 in Learn CNC The Hard Way Instructable
  - Schedule time with Dan or Joey to review tool paths

- **Step 2**
  - Take Haas CNC mill
  - [http://vimeo.com/channels/shoptraining](http://vimeo.com/channels/shoptraining)

- **Step 3**
  - Cut example part
Haas CNC Lathe
CAM Software for Haas CNC Lathe

- cam.autodesk.com
  - HSM Works inside SolidWorks
    - CNC Laptops
- Delcam
  - FeatureCAM
How to Learn the Haas CNC Lathe

- **Step 1**
  - NextGenCAM.com
    - HSM Works Turning
- **Step 2**
  - Take Haas CNC lathe course
- **Step 3**
  - Cut example part
CAM Software for DMS Router

- cam.autodesk.com
  - Inventor HSM Pro 2015
    - Download trial version & use codes to activate
    - Inventor Professional
  - Fusion 360 CAM
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CAM Software for DMS Router

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How to Learn the DMS Router

- Step 1
  - NextGenCAM.com
    - 3D tool paths
- Step 2
  - Take ShopBot class
- Step 3
  - Cut example part
CNC Overview
Tools, Software, & How to Learn
How To Use It (Benefit)…
How To Use It (Benefit)…

- Be prepared
  - Watch videos
  - Take notes
  - Take the class
  - Generate tool paths at your desk
  - Handout for CNC (requirement)

- Report broken tools – Dan, Joey, or Martin
How To Use It (Benefit)…

- Distractions while CNC machining
  - What does that look like?
- Machine rapid speeds
  - 5% rapid at all times
- Get a lot of rest
- Enjoy the process & take your time
Review
What Is the CNC Shop...
What Is the CNC Shop…
What Are the Tools & Software…
What Is the CNC Shop...
What Are the Tools & Software...
How To Use It (Benefit)...

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