

Travis Little

Machinist, CAD Designer, Engineer

Castle Rock, CO

travis.r.little@gmail.com

+1 719 680 2718

Springs Fabrication, LLC - Machinist III

January 2023 - Present

Colorado Springs, CO

- Set up and run three-axis vertical and horizontal mills and lathes.
- Produce one-off parts on a daily basis.
- Write simple programs at the machine controller.
- Modify unproven programs to make good first parts.
- Work with project managers when drawings, work orders, and customer designs are unclear.

Superior Metal Products - Prototype Machinist

February 2021 - January 2023

Littleton, CO

- Set up and run 3-Axis vertical mills with Fanuc controls.
- Proofread and edit G-Code.
- Troubleshoot problems with part geometry, feeds and speeds, and tool paths, and tool selection.
- Write simple programs either at the machine or using CIMCO editor.
- Experienced machining a variety of materials including exotics like Inconel, titanium, mild and hardened steels, stainless and others.
- Held most tolerances of +/- .005 for most features and +/- .0005 for bores and flatness.
- Train on MasterCAM 2020 when first articles are in inspection.

Woodward - Machinist I

March 2018 - March 2021

Ft. Collins, CO

- Set up and run 3 & 4-Axis vertical CNC mills and Swiss lathes.
- Set up and run manual 3-Axis mills and 2-Axis lathes.
- Read and interpret process and engineering drawings using GD&T.
- Inspect the first part of each new run to make work offset, tool height and geometry adjustments to bring all features to nominal dimensions, and random samples thereafter.
- Inspect finished parts per engineering drawings for conformity using calipers, height gages, micrometers, indicators, plug and thread gages, specialized checking fixtures, and CMM reports.
- Removed all products that failed to meet specifications and wrote reports of non-conformance detailing the out of tolerance feature.
- Worked with Manufacturing Engineers to troubleshoot and solve non-routine problems.
- Answered to Production and Quality managers to meet tight deadlines.
- Performed routine maintenance of machines such as removing chips, cleaning, refilling oil and lube reservoirs, adding coolant and checking concentration, performing minor repairs.
- Maintained a clean and well-organized work environment using 5S principles.
- Machines used: Makino, Haas, Mori Seiki, and Leadwell 3 and 4-Axis mills, Haas and Makino 2-Axis lathes, 5-Axis Citizen lathes, band saws, drill presses, and hand deburr tools.

Epocs Manufacturing - CNC Machinist

March 2017 - March 2018

Longmont, CO

- Set up and run Haas and Leadwell CNC machines using Haas and Fanuc controls.
- Read and edit G-Code at the machine.
- Knowledge of GD&T and how to inspect parts with basic hand tools (calipers, micrometers, etc.), optical comparators, quadra checks, and CMMs.

Weatherford Intl. - Design Engineer

Aug. 2014 - March 2015

Powell, WY

Worked as part of an engineering design team that designed, built, and tested downhole tools in house.

- Analyzed customer requirements detailed in the Engineering Design Requirement (EDR).
- Modified or redesigned tools based on customer needs.
- Checked layout for fit, form, and function as well as tolerance stack up.
- Worked closely with the in-house, third party machine shop to ensure manufacturability.
- Assembled and tested each tool for verification purposes prior to release for field trials.

Weatherford Intl. - Manufacturing - Design Engineer

Aug. 2007 - Oct. 2009

Grand Junction, CO

Worked as the in-house engineer in a small manufacturing facility (25 employees).

- Designed mobile surface equipment (both skidded and trailer mounted).
- Controlled production drawings and revisions through Engineering Change (EC).
- Revised old drawings to meet current standards including Bill of Materials (BOMs).
- Prepared Request for Quotations (RFQs) for use in equipment and vendor selection.
- Followed P&IDs in the creation of piping spools and production drawings.

Colorado School of Mines May 2007

Golden, CO

Bachelor of Science - Mechanical Engineering

Front Range Community Aug. 2017

College Longmont, CO

Precision Machining Technology

Programs Used

Pro/ENGINEER (now PTC Creo Elements/Pro), SolidWorks, Siemens NX/Unigraphics, AutoCAD 2014, Mastercam, SURFCAM, CMM-Manager, MathCAD, Pro/Mechanica, Windchill, MS Office (Word, Excel, PowerPoint, Outlook)

Willing to relocate to: Wyoming - Colorado - Idaho Falls, ID

Authorized to work in the US for any employer

Work Experience

Machinist III

Springs Fabrication - Colorado Springs, CO

January 2023 to Present

- Set up and run three-axis vertical and horizontal mills and lathes.
- Produce one-off parts on a daily basis.
- Write simple programs at the machine controller.
- Modify unproven programs to make good first parts.
- Work with project managers when drawings, work orders, and customer designs are unclear.

Machinist

Woodward, Inc. - Fort Collins, CO

March 2018 to Present

- Set up and run 3 & 4-Axis vertical CNC mills and Swiss lathes.
- Set up and run manual 3-Axis mills and 2-Axis lathes.
- Read and interpret process and engineering drawings using GD&T.
- Inspect the first part of each new run to make work offset, tool height and geometry adjustments to bring all features to nominal dimensions, and random samples thereafter.
- Inspect finished parts per engineering drawings for conformity using calipers, height gages, micrometers, indicators, plug and thread gages, specialized checking fixtures, and CMM reports.
- Removed all products that failed to meet specifications and wrote reports of non-conformance detailing the out of tolerance feature.
- Worked with Manufacturing Engineers to troubleshoot and solve non-routine problems.
- Answered to Production and Quality managers to meet tight deadlines.
- Performed routine maintenance of machines such as removing chips, cleaning, refilling oil and lube reservoirs, adding coolant and checking concentration, performing minor repairs.
- Maintained a clean and well-organized work environment using 5S principles.
- Machines used: Makino, Haas, Mori Seiki, and Leadwell 3 and 4-Axis mills, Haas and Makino 2-Axis lathes, 5-Axis Citizen lathes, band saws, drill presses, and hand deburr tools.

CNC Machinist

EPOCS Manufacturing - Longmont, CO

March 2017 to Present

Set up and run Haas and Leadwell CNC machines using Haas and Fanuc controls.

Read and edit G-Code at the machine.

Measure and inspect parts using basic hand tools and the CMM for more sophisticated parts.

Prototype Machinist

superior metal products - Littleton, CO

March 2021 to January 2023

Prototype Machinist

- Set up and run 3-Axis vertical mills with Fanuc controls.
- Proofread and edit G-Code. Experienced in proofing out unproven programs.
- Troubleshoot problems with part geometry, feeds and speeds, and tool paths, and tool selection.
- Wrote simple programs either at the machine or using CIMCO Editor.

- Experienced with a variety of materials from inconel, mild and hardened steels, aluminum, and some plastics.
- Held most tolerances at +/- .005 down to +/- .0005 for critical features.
- Train on MasterCAM 2020 when first articles are in inspection.

Contract Mechanical Designer

SUNDYNE - Arvada, CO

July 2015 to September 2015

Responsibilities

Hired under a short-term, three month contract to complete a few small design projects for the packaging of custom pumps and compressors.

- Picked up Siemens NX/Unigraphics 9.0 and became able to model and draft using this program in a short period of time.
- Designed standard and custom pump and compressor packages to customer specifications such as API, ANSI, NACE, and ATEX
- Modeled and designed packaged equipment and construction of centrifugal pumps and compressors.
- Designed and revised P&IDs, General Arrangement 3D models and 2D drawings, pump and compressor skids.
- Used JD Edwards and had some experience with PDM/PLM software (namely Siemens Teamcenter).

Accomplishments

Learned a new CAD package using online training from the Siemens website.

Picked up small pump design work initially with little instruction then moved on to larger kit work or packaging of auxiliary equipment for pumps and compressors under very limited instruction or guidance and then proceeded to making complete 3D models and 2D customer and manufacturing drawings.

Skills Used

I demonstrated the ability to pick up and learn a new job function under very little guidance or "hand-holding".

I utilized my previous experiences in designing packaged equipment, searching for parts using JD Edwards and Siemens Teamcenter, and making 3D CAD models and 2D drawings.

Design Engineer

Weatherford Intl - Powell, WY

August 2014 to March 2015

Worked as part of an engineering design team that designed, built, and tested downhole tools in house.

- Analyzed customer requirements detailed in the EDR.
- Modified or redesigned tools based on customer needs.
- Checked layout for fit, form, and function as well as tolerance stack up.
- Worked closely with the in-house, third party machine shop to ensure manufacturability.
- Assembled and tested each tool for verification purposes prior to release for field trials.
- Collected results from the data acquisition system and created tool performance graphs.
- Discussed and documented test methods, performance, and results and made recommendations based on test data.
- Used AutoCAD LT 2014 heavily and also used PTC Creo Elements.

Field Engineer II

Baker Hughes Pressure Pumping - Dickinson, ND

October 2011 to October 2011

I managed and performed all necessary QA/QC checks before the job started, collaborated with all players to create the best possible strategy, monitored the job progress while the service is being performed to ensure total customer satisfaction.

- On-site QA/QC champion.
- Main point of contact for all technical questions regarding hydraulic fracturing chemistry.
- Open communication and team player among customer reps and equipment operators on the ground.
- Advised the customer of all equipment problems and recommended course of action.

Field Engineer

Frac Tech Services, LLC - Vernal, UT

June 2010 to October 2011

Worked in the Field Services sector of the Oil & Gas industry as an engineer in hydraulic fracturing.

- Tracked consumable material (water, sand, chemical) usage during the job.
- Recorded the job using FracPro PT during the job and compiled into post-job reports.
- Generated field tickets and acquired signatures upon completion of every job.
- Modified pump schedules at a moment's notice.
- Built my own spreadsheets in compliance with federal regulations to cut down data entry for each client to a quarter of the original time.

Design Engineer

Weatherford Intl. - Manufacturing - Grand Junction, CO

August 2007 to October 2009

Worked as the in-house engineer in a small manufacturing facility (25 employees) to evaluate parts, assemblies and construction to remedy equipment failures and boost reliability of existing surface equipment at work in the field.

- Involved in all projects from "cradle to grave" from concept, construction, commissioning, and post-production support.
- Aided in redesigning Weatherford's Closed Loop System renowned for their "green" operation by using natural gas as the working fluid rather than air or nitrogen in workover operations.
- Controlled production drawings and revisions through Engineering Change Request (ECR).
- Revised old drawings to meet current standards including Bill of Materials (BOMs).
- Prepared Request for Quotations (RFQs) for use in equipment and vendor selection.

Project Experience:

Weatherford Downhole Tools - Worked independently to research, design, build, and test downhole tools such as retrievable packers, bridge plugs, frac balls, and composite plugs used in the completion and production of oil and natural gas wells. Also conducted in house testing and evaluation of third party vendor products prior to use in customer wells.

Weatherford Foam Units - Came onboard to diagnose and cure lingering issues with newer units as they were found. Studied materials, constructions processes, manufacturer's recommendations, industry specs and standards, consulted with field technicians, fabricators, and internal customers to come up with creative solutions to age-old problems. Documented and standardized materials and construction of these units as they were being built through the use of 3D models to 2D construction drawings complete with individualized Bill of Materials (BOMs).

Weatherford Closed Loop Systems - Collaborated with field techs, equipment operators, supervisors, engineers, drafters, vendors, and fabricators to redesign Weatherford's "Greenhouse Gas System" for BP and Conoco-Phillips. Worked with the Project Manager to update existing designs to include larger pressure vessels, compressors, and process piping. Controlled the design layout and production drawings checking for fit, form, and function. Contacted vendors, set specifications for trailers, fuel tanks, and process piping. Prepared Request for Quotation (RFQs), set schedules for deliverables, updated the customer of manufacturing's progress and made design changes upon customer's request.

Senior Design - As part of a four-person team, I studied biodiesel production methods and small to medium-scale biodiesel production facilities to design our own biodiesel production facility suitable for small farm co-op use. My specific duties included researching vegetable oil extraction methods from the base feedstock, oil extraction equipment capabilities, interfaced with team members to plan the facility layout, and collaborated to design the facility's plumbing.
(Project won Senior Design Trade Fair)

Baker Hughes, Pressure Pumping - My primary function was QA/QC either by direct hands-on control or by working with or managing others to ensure proper job execution. In addition to quality control, I also monitored and recorded each job as it was being performed and compiled the data into post-job reports delivered to the customer before rig down was complete.

Programs Used

Pro/ENGINEER (now PTC Creo Elements/Pro), SolidWorks, AutoCAD 2014, SURFCAM, Math Cad, Pro/Mechanica, Ariel Performance Program, Windchill, FracPro PT, Jobmaster
MS Office (Word, Excel, PowerPoint, Outlook)

Software Experience:

Education

Precision Machining Technology in Machining

Front Range Community College - Longmont, CO
August 2016 to August 2017

Bachelor of Science in Mechanical Engineering

Colorado School of Mines - Golden, CO
May 2007

Skills

- Creo
- CNC Programming
- Mechanical Design
- CAD
- SolidWorks
- Mechanical Engineering

- GD&T
- Manufacturing
- Drafting
- Calipers
- CNC Lathe
- Micrometer
- CAM Programming
- AutoCAD
- Geometry
- Quality inspection
- Blueprint reading
- 5S

Links

<http://www.linkedin.com/in/travislittle>

Certifications and Licenses

NIMS CNC Operator - Level I

Present

National Institute for Metalworking Skills, Inc. - Level I obtained for CNC machine operator.