Marcus R. Vance

+1 (555) 382-9014 marcus.vance@email.com Detroit, MI Available for 2nd/3rd Shift

Professional Summary

Detail-oriented CNC Machinist with over 8 years of experience programming, setting up, and operating 3-, 4-, and 5-axis milling centers and lathes. Proven track record of holding tight tolerances down to ± 0.0002 inches on complex aerospace and automotive components. Recognized for reducing job setup times by 20% and maintaining scrap rates below 0.5%. Expert in G-code editing, master-model setups, and troubleshooting mechanical/tooling issues on the fly.

Certifications & Licenses

NPMI Certified CNC Milling: Setup & Operations
National Precision Manufacturing Institute (2019)

NPMI Certified CNC Turning: Operations
National Precision Manufacturing Institute (2018)

PMSA 10-Hour Safety Certification
Precision Machining Safety Association (2017)

State Certified Journeyman Machinist
State Department of Labor (2016)

Technical Skills

Machining Systems:	Vertex 5-axis Vertical Mills, Nexa Multi-Axis CNC Lathes, Meridian Turning Centers.
Control Panels:	Nimbus Precision Controls, Synapse Touchscreen Interfaces, Vertex CNC Controllers.
Programming & CAD/CAM:	Apex CAM Systems, Meridian Design Software, manual G-code and M-code editing.
Metrology & Quality:	Micrometers, vernier calipers, dial indicators, bore gauges, height gauges, Optical Comparators.
Blueprint & Tolerancing:	GD&T (Geometric Dimensioning and Tolerancing) proficient, reading blueprints, CAD models.
Materials Worked:	Titanium, Inconel, Stainless Steel (304/316), Tool Steel, Aluminum (6061/7075), brass, plastics.

Professional Experience

Senior CNC Machinist — *Vertex Aerospace*
Detroit, MI — 2021 – Present

- Program, set up, and operate Vertex 5-axis vertical machining centers to produce high-precision turbine components.
- Perform complex setups involving custom fixtures, multi-jaw chucks, and sine plates; minimized average setup times by 22% through standardized tooling blocks.
- Read and interpret complex aerospace blueprint packages using GD&T symbols to determine machining sequences, tool paths, and offsets.
- Consistently held tolerances of ± 0.0002 inches on aerospace-grade titanium and Inconel alloys.
- Instructed and mentored 4 junior machinists in G-code troubleshooting, tool wear offset adjustment, and setup verification.

CNC Setup Machinist / Operator — *Nexa Manufacturing*
Warren, MI — 2018 – 2021

- Set up and ran high-volume production jobs on Nexa turning centers and Meridian vertical mills.
- Adjusted feed rates, spindle speeds, and tooling offsets to maintain parts within QA specifications; reduced scrap rate from 1.8% to 0.4%.
- Selected and mounted cutting tools, inserts, and tool holders in tool turrets; calibrated tool-setter probes for automated height offsets.
- Monitored tool wear and replaced inserts/boring bars, ensuring continuous runtimes and zero damage to expensive cast-iron workpieces.
- Collaborated with quality control inspectors using Coordinate Measuring Machines (CMM) and optical comparators to verify initial article quality.

CNC Machine Operator — *Meridian Parts & Assembly*
Livonia, MI — 2015 – 2018

- Operated dual-spindle CNC lathes and Vertex 3-axis mills in a high-speed automotive component assembly plant.
- Loaded raw steel and aluminum blanks into fixtures, initiated machining cycles, and unloaded finished workpieces.
- Conducted in-process dimensional inspection using micrometers and thread gauges on a 1-in-10 sampling rate.
- Cleaned, deburred, and packaged finished parts; maintained a clean and safe work area in compliance with 5S standards.

Education & Vocational Training

Associate of Applied Science in Machine Tool Technology
Specialization in CNC Programming and Precision Tooling

Meridian Technical Institute, Warren, MI
Graduated: May 2015