

Derek Sealy
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(718) 902-8065 (cell)

Education

- Master of Science, Mechanical Engineering, May 2020
Kennesaw State University – Kennesaw, Georgia
- Bachelor of Science, Mathematics, May 2014
Morehouse College – Atlanta, Georgia

Work History

Mechanical Engineer II

January 2025 – Present

JLG Industries. Hagerstown, MD

- Use Creo to assist in product development process by creating and revising mechanical designs for heavy equipment
- Collaborate with manufacturing and suppliers to make continuous improvement changes to product designs

Senior Mechanical Product Engineer

December 2023 – January 2025

Volvo Group. Dublin, VA

- Utilize CAD packages to perform clash analysis and determine feasibility of custom vehicle orders
- Design and perform testing for specialized vehicle parts to ensure safety regulation compliance
- Provide cost analysis and quoting to customer for vehicle builds

Product Development Engineer

April 2021 – December 2022

Stanley Black & Decker. Towson, MD

- Designed, developed and launched new-to-market power tool accessories with projected \$2 million incremental revenue
- Used CATIA to create 2D and 3D engineering documents and determined tolerances and stack ups to optimize part manufacturability
- Developed FRACAS and DFMEA to ensure reliability during new product development path
- Reduced team's prototype turnaround time by 93% by installing, maintaining, and incorporating 3D printing technology in engineering lab
- Conducted weekly meetings with teams such as marketing, industrial design, manufacturing, as well as customers to ensure that product met customer demands while also achieving cost targets

Product Support Engineer

March 2019 – August 2020

DIhBOWLES (tier 1 OEM automotive supplier – plastic injection molded parts). Columbia, MD

- Reduced manufacturing defects and improved existing product designs by determining root cause of failure for warranty returned injection molded parts
- Designed and performed testing (DVP&R) and validated changes in manufacturing processes
- Performed implementation testing as part of an 8-member team to retrofit camera-washing technology into luxury vehicle platforms. Successful proof of concept led to increased company business

Engineering Technician

October 2016 – March 2019

DIhBOWLES (tier 1 OEM automotive supplier). Columbia, MD

- Designed and 3D printed custom jigs and fixtures using Creo for product inspection and troubleshooting
- Set up and performed tests to ensure product designs abided federal motor vehicle safety standards (FMVSS)
- Conducted process capability studies and used statistical process control to ensure quality during manufacturing process
- Contributed to advanced product quality planning (APQP) by compiling validation reports to be included in production part approval process (PPAP) package submissions

Skills

- Potential Failure mode and effects analysis (FMEA)
- PTC Creo and CATIA CAD Packages
- Windchill PLM – Engineering change notices
- Ability to read and create technical drawings (GD&T)
- Root cause analysis (five whys, fishbone, etc.)