

Julie Havlin

Vista, CA • 760-612-3456 • ja.havlin@gmail.com

SUMMARY

Versatile and solutions-driven **Electro-Mechanical and Graphic Design Professional** with over 20 years of experience in mechanical design, manufacturing engineering, and graphic design. Expertise in 3D modeling, product development, fixture design, and technical documentation across medical device, semiconductor, and consumer electronics industries. Proven leader and collaborator on domestic and international projects with deep knowledge of design standards, manufacturability, and cost-efficiency.

CORE COMPETENCIES

- **Design & Drafting:** 3D Modeling (SolidWorks, ProE/Creo, NX) • GD&T • Drafting Standards • Technical Documentation • BOMs • PDM/PLM Systems
 - **Engineering & Manufacturing:** Product Design • Prototyping • CAPA Remediation • Fixture Design • Verification & Validation • Material Selection • Root Cause Analysis
 - **Graphic Design & Labeling:** Adobe Illustrator & Photoshop • Label Design • Packaging Graphics • Manufacturing Artwork Coordination
 - **Tools & Processes:** SAP • DFMEA • Statistical Process Control • Six Sigma • ISO 9001/14001 • Inks & Solvents • Machine Shop & Fabrication
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PROFESSIONAL EXPERIENCE

Mechanical Design Engineer (Remote) – Cleveland Tool & Machine

May 2024 – Sep 2024

- Designed new industrial injection machines (wax/paste) from Final Sales Reports
- Created complete assemblies, subassemblies, and part designs
- Collaborated with vendors to source pneumatic and fluid control components

Sr. Mechanical Design Engineer – Tech Mahindra for ASML

Jan 2023 – Dec 2023

- Modified semiconductor cooling system designs in NX
- Developed work instructions and quality documentation for parts reuse and remanufacturing

Manufacturing Engineer III – IDC Technologies at Becton Dickinson

Nov 2021 – Jan 2023

- Led IQ/OQ protocol development and execution for production printers
- Supported CAPA investigations and test remediation activities

Sr. Mechanical Designer – Actalent at Acutus Medical

Apr 2021 – Oct 2021

- Designed and released production fixture drawings
- Created and tested prototypes using Formlabs and Stratasys 3D printers

3D CAD Designer – Mindlance at Beckman Coulter

Nov 2020 – Apr 2021

- Modeled training tools from images using SolidWorks and SME input
- Applied analytical skills to reverse-engineer dimensionally ambiguous components

Mechanical Engineer I – Indotronix at Becton Dickinson

Jun 2018 – Jun 2020

- Led marketing sample builds and lab coordination for new equipment
- Designed custom test fixtures and supported feasibility testing initiatives

Associate Engineer – MLS Technologies at Sommetrics

Mar 2018 – May 2018

- Designed PWB test fixtures and gel application tools
- Conducted tolerance stack-ups and created 3D prototypes

Mechanical Engineer II – Zenith Talent at Philips Respironics

May 2017 – Mar 2018

- Designed parts and test fixtures with GD&T, DFMEA, and BOM management

Drafter – Apex Life Sciences at ICU Medical

Feb 2017 – May 2017

- Created catheter designs and BOMs, including 3D-printed test samples

Electro-Mechanical Tech / Mech. Designer – Automation GT

Sep 2016 – Feb 2017

- Updated automation machine models and delivered/de-bugged systems in Mexico

Sr. CAD Designer – Integra Lifesciences / SeaSpine

Feb 2014 – Nov 2016

- Supported R&D team with ECOs and surgical instrument design in ProE/SolidWorks
- Created QC documents and implemented Agile PLM processes

PDM/CAD Engineer – Source Eng. Services at Cymer

Oct 2013 – Feb 2014

- Validated ProE data integrity for NX migration

Drafter/Designer III – General Atomics

Aug 2012 – Aug 2013

- Supported Engineering Liaison group with ER/ECs and BOM edits

CAD Designer – Alphatec Spine (Customs & Manufacturing)

Jan 2011 – Aug 2012

- Designed customized spinal instruments and jigs
- Converted CAD for merger integration and cost reduction

Electronic Designer I – Sony Electronics, Inc.

Apr 1993 – Jun 2009

- Supported Mechanical Design Engineering from concept through production
- Spearheaded artwork localization, saving weeks of lead time
- Sourced local suppliers, saving \$4M with innovative rework solutions
- Liaised globally on POP and label compliance and delivery

EDUCATION & TRAINING

A.S., Electro-Mechanical Design

Bachelor Studies – Graphic Arts (Major) / English (Minor), University of New Mexico

Professional Courses & Certifications:

- Spanish for Communication – Palomar College
- Six Sigma
- Statistical Process Control
- ISO 9001 & 14001
- Woodworking and Cabinetry – Palomar College