

John King III

Manufacturing Engineer | Waldo120@gmail.com

This page is written for Recruiters

What am I looking for?

- I highly prefer direct hire positions, but will consider contract and temporary positions.
- I will continue living in Santa Clara, CA.
 - **NOT** open to relocation
- I am willing to travel approximately 10%, about 1 week per quarter
 - **NOT** willing to travel $\geq 25\%$, 1 week per month
- I am open to any industry, but my experience has been primarily in medical device.
 - Most of my experience has been in catheters and other disposable medical devices.
- My focus is in Mechanical, but I am well rounded and have mechanical, electrical, and software experience.
 - I have limited circuit board / PCB experience, but am open to learning what does not crossover from my controls experience.
- Based on my experience I expect any future role to be:
 - Senior to Principal Level
 - NPI Manufacturing Engineer or similar
 - I am open to a Design / Mechanical Engineer position, but many hiring managers for design positions don't feel manufacturing experience carries over.
 - I am open to a sustaining position, as long as it will include continuous improvement.
 - I am also open to cradle to grave where it exists.
 - Other Good Fit Positions:
 - Test Engineer
 - Process Engineer
 - Mechatronics / Electromechanical Engineer
 - Fixture Engineer
 - System Engineer
 - I have no experience managing people, but I do have experience managing my projects and training people.
- I've never held a government security clearance, but I am open to getting one.
- I am a U.S. Citizen

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What can I offer you?

I'm a Manufacturing Engineer with 12 years of experience (9 years in medical device). Some of my top skills and experience are:

- Extensive hands on and machine shop experience throughout my career.
- High CAD proficiency, primarily Solid Works.
- Minitab and JMP experience with extensive statistical training.
- Design Control and experience as an internal auditor for ISO 13485 (ISO 9001 for medical devices).
- Cadence Project Management Certification.
- Writing process instructions and training operators.
- Versed in many programming languages (see skills).
- UDI labeling.
- Marking laser on plastics and metals.
- All stages of manufacturing product lifecycle.
- BSME with a concentration in Mechatronics and a minor in Math from Cal Poly San Luis Obispo.

Education

Cal Poly University, San Luis Obispo

Bachelor of Science in Mechanical Engineering
Concentration in Mechatronics
Minor in Mathematics

ASQ Silicon Valley Biomedical Division

FDA Notified Body and Internal Auditing
DOE (Design of Experiment)
Design Control
Project Management Certificate

Others

Medical Device Verification and Validation
CATIA Fundamentals training
GD&T Fundamentals

Statistical Training

JMP new user training
DMAIC (internal training at MPC) and 20-hour online Minitab course which together included: DOE, Response Optimization, Gage R&R, t-test, f-test, Confidence Intervals, Process Capability (Cpk, Ppk), ANOVA, Correlation, poka yoke.

Skills

Plastic Processes:

RF Tipping, RF Compression Molding, Embedded Marker Band, Micro Molding, Threading, Coils, Kink Resistant Tubing, Flaring, Shaped Tubing, Core Drilling, Bonding, Joining, Spiral Cutting, Medical Grade Adhesives, Disposables, Laser Marker

Materials:

Plastics: Pebax, PVC, Polyurethane, Peek, Polycarbonate, PTFE / Teflon, Silicone

Metals: Nitinol, S-7, H-13, W-1, SST 303/304, 6061, MIC 6, sheet metal

Coatings: Teflon, Magnaplate, Anodization, and Alodine

Programming:

Quicksilver Controls (motion control 2-axis encoder programming), LabVIEW, g-code, Moeller and Twido PLC's

Machine Shop:

Mill, Lathe, Grinders, Spade Drill, Polishing, Laser Marker, 3D Printer, Rapid Prototype Machine

Design Control:

ISO 13485, CAPA, ECO, NCA, DHF, DR's, NCR, BOM, Validation, and pFMEA

Software:

CAD: SolidWorks with EPDM, AutoCAD, GD&T, CATIA

Statistical: MiniTab, JMP

ERP: FileMaker, IQMS

IT Skill, MS Windows, MS Office

Electrical wiring and controls:

LVDT's, Strain Gages, String Pots, Relays, and Contactors

Labeling:

UDI Labeling, MicroScan Label Verification, Zebra thermal transfer printers, Bartender

Misc.:

Catheter Fluid Flow, Balloon Pressure, Tray Sealing, Pneumatics, Hydraulics, Pull / Tensile Test, Bend Test, Tolerance Stack Up, Project management, Thermal Camera, Tappi, EFD Dispensers, Automated Wire Stripper, ProjectLibre.

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Professional Experience

See my complete experience on my LinkedIn profile: <https://www.linkedin.com/in/waldo120/>

ReCor Medical

Senior Manufacturing Engineer (NPI)
03/2020 – 03/2021 (1 year, during Covid shutdown)
Medical Device In house Manufacturing

Responsibilities

- Collaborate with team to meet product quality, cost, and manufacturing requirements.
- Characterize NPI product performances.
- Define process corners and product process targeting from characterization results.
- Collaborate with team to meet NPI deliverables and milestones.
- Provide cost analysis based on requirements.
- Drive process and equipment validations.

Accomplishments

- Cartridge Tray Sealing
 - Process optimized through DOE.
 - Through testing to assure ready for validation.
 - Wrote and released validation protocol.
- Catheter fluid flow and balloon pressure.
 - Developed a test method to evaluate flow resistance.
 - Discovered flow resistance range the generator is capable of accepting while keeping balloon pressure and flow rate within specification.
 - Discovered range of flow resistances from previous manufacturing lots.

MedPlast / Viant

Manufacturing Engineer (NPI and Sustaining)
02/2016 – 07/2018 (2.5 years)
Medical Device Contract Manufacturer

Responsibilities

Worked on a stem cell separation device and sub-assemblies for surgical robots. Developed processes and fixtures for medical device assembly and secondary processes. Took projects from proof of concept through sustaining. Implemented cost saving ideas.

Accomplishments

- Ramped up manufacturing of cord blood stem cell separation disposable. Up to 10 operators on the production line with a customer demand of up to 6,000 devices per month on the packaged device level.
- Defined visual standards.
- Troubleshoot Keyence laser system, Komax wire stripper, and performed DOE on Belco Tray Sealer.
- Wrote protocol, report, and performed validation on new oven.
- Internal auditor to assure ISO 13485 compliance.
- Implemented UDI labeling projects.

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Professional Experience (continued)

Modified Polymer Components / MPC / Confluent

Development Engineer (NPI Manufacturing Engineer)

04/2012 – 02/2015 (3 years)

Medical Device Contract Manufacturer

Responsibilities

Responsible for taking projects from proof-of-concept to transfer. Duties included planning, designing, making initial samples, developing & documenting process, troubleshooting, pFMEA's, managing BOM's, validation, and ultimately transferring. Worked on components who's end use was; eurostimulation, endoscopy, surgical robots, cancer treatment devices, peripheral arterial disease, atrial fibrillation, catheter, stomach bypass, renal denervation treatments, and acoustic domes.

Used Solid Works on a nearly daily bases to design dies, tooling, fixtures, etc. Beta tested for Solid Works EPDM implementation. Ensured tolerance stack up wasn't an issue between tooling and material. Frequently used Moeller PLC's to control timing in the semi-automated manufacturing processes. Used machine shop to make fixtures and die's. Recommended DFM changes to customers. Used customer requirements to implement inspection and testing procedures like pull/tensile test, bend test, and proof test. Used Minitab to show process capability (Cpk, Ppk), suggest tolerance intervals to customers, and analyze/run DOE results. Used many coatings and materials. Some exposure to geometric tolerancing. Internal auditor to assure ISO 13485 compliance.

Accomplishments

- Brought in fiber LED system to allow inspection of internal features and defects instead of an x-ray scanner.
- Increased yield and visual quality by replacing a clamping system with a screw system.
- Made a dual layered 14" tapered OD and ID catheter possible by re-evaluating tolerance stack up.
- Created generic spiral cut rig and drawing that was used by fellow engineers to do their spiral cut jobs.
- Improved safety, upgraded, and fixed old Wraptor to work similar to new Wraptor.
- Became go to guy for Minitab questions and issues. Created flowchart for all employees to easily track down their desired command.

ConXtech

Test Engineer, Automation Manufacturing Engineer, Drafter, IT

01/2006 – 02/2012 (6 years)

Construction Automation

Responsibilities

Worked on electro-mechanical manufacturing and test fixturing. Managed and organized structural drawing standards. Maintained and improved ConXtech's IT infrastructure.

Accomplishments

- Synchronous lifting hydraulic controls: Designed, fabricated, and programmed Twido PLC controls for the synchronous hydraulic lifting mechanism on the ConXL robot weld system.
- DAQ and controls: Designed, fabricated, and programmed DAQ and controls using LabView for the ConX test frame. This allowed in-house testing of the ConX Frame.
- FARO Arm: Used a robotic arm to compare completed parts to their CAD model.
- SX Drawings: Organized and fixed a full set of best-known methods for structural drawings in AutoCAD to provide structural engineers with a standard to design from using ConXtech's system.