

SUMMARY

- Experienced Manufacturing Engineer with overall 2 years of Manufacturing & Medical device Industry experience. Enthusiast in Manufacturing, R&D of medical devices and techniques to help serve the healthcare industry.

WORK EXPERIENCE

Manufacturing Engineer at Zimmer Biomet

Oct 2020 – Present

- Initiate and execute new document changes to **Work Instructions of all equipment on the manufacturing floor** to ensure smooth manufacturing process flow, verify as per current manufacturing practices, create new WIs and provide training to the operators as a part of remediation activities.
- Route all the updated/created WIs in the Zimmer's **routing and eQMS software** for approval.
- Initiate and execute **process validation activities on the updated/newly created WIs and perform PQ on all the equipment.**
- For future projects – Responsible for updating **Gage R&R, Sampling Plans as per the CTQ remediation process.**

Manufacturing Engineer at Terumo Aortic

Sep 2019 – Oct 2020

- Initiate and execute document changes to **DHR, MI, WI, QI, RI forms, EMR, MOP in eQMS Software**, provide training to operators
- Perform and execute **IQ/OQ Validation Protocol and Report** on equipment such as **Vision System, CNC Lathe, Micro-scope reticle, Pouch Inspection Camera, Particle traps; Create and update Stent Graft Assembly product drawings and model in SolidWorks.**
- Perform and execute **Process Validation Re-Assessment on all company products, updates to DFMEA, PFMEA, Work Instructions, SOPs, and/or provide training as CAPA based on NCRs reported.**
- Assist Engineers in development of robust processes/root cause analysis by **using DOE, Gage R&R, ANOVA, Sampling Plans and process capabilities techniques**, analyse and investigate in house non-conformance data, quality problems reports. Design and update Building facility and Clean room layout in **Draftsight** for the audit.
- **Design and update new labels, create TMV, artwork** for product boxes and perform failure tests, 4-year aging test for **component qualification, perform qualification** of fishing line protocol and report it in **laboratory notebook.**

Manufacturing Engineer (Internship Program) at The Orbital Corporation of Tampa

Dec 2018 – May 2019

- Designed assembly design layout and Fabricated cable assemblies, wiring harness using SolidWorks, evaluated part drawings, assembly drawings and developed product routing.
- Performed quality inspection, electrical testing, continuous process improvement, and assisted with material procurement.
- Assisted in updating and maintaining production schedules, work order routing, BOMs using the MRP system and utilizing lean principles for improving process efficiency.

Design and Manufacturing Engineer at G.P.M Hydraulics

Jun 2016 – July 2017

- Monitoring honing and machining processes for optimum quality honed tubes and piston rods
- Material scheduling and planning for streamline machining operations.
- Researched for skiving and burnishing machine, collaborated with the design team and designed the various Systems/Components of the machine such as Tool Holder, Tool support, Gear Box, Machine Bed etc. which decreased the production time when compared to the honing machine

Manufacturing Project Associate at Voltas LTD

Aug 2015 – Nov 2015

- Collaborated with the Maintenance department team and inspected various Vapor Absorption Machine (VAM's).
- Analysed various techniques on VAM's such as JIDOKA, KANBAN Cards to reduce rework cost. Reduced rework cost from 22% to 19% and reduced rework time by 7%

EDUCATION

University of South Florida

Aug 2017 - May 2019

Master of Science in Mechanical Engineering

Mumbai University

Aug 2012 - May 2016

Bachelor of Engineering in Mechanical Engineering

TECHNICAL SKILLS

Design/Simulation Software: Minitab, DOE, SAP, Software, ETQ, SOLIDWORKS, ANSYS, CATIA, MATLAB, AUTOCAD

Theoretical Knowledge: DMAIC, 21CFR820, Laser Marking, DFSS, Micro-Abrasive Blasting, 5 Ws, Lean Manufacturing, Sheet Metal Fabrication, CNC, CMM Machining, DFM, NPI, Ultrasonic Welding, 8D, Microsoft Office Suite

ACADEMIC PROJECTS

Six Degrees of Freedom Robotic Arm

Aug 2018 - Dec 2018

- Designed a six D.O.F Robotic Arm with one revolute joint and five prismatic joints, fabricated using 3-D Printing.
- Simulated movement from one position to the desired position using transformation matrices in MATLAB

Stress Concentration Minimization in Rectangular Plate

Aug 2018 - Dec 2018

- Reduced maximum stress by 2% in a rectangular plate by adding holes of various sizes at locations in axial direction using ANSYS.
- Designed the aluminium plate and analysed stress graphs to achieve minimum stress concentration factor.

Hydraulic Arm

Aug 2017 - Dec 2017

- Modelled and fabricated a Hydraulic Arm for testing suitability of various hydraulic fluids used in the industry.
- Calculated and compared viscosity, viscosity index, density and various properties of water glycol, canola oil and mineral oil.

CERTIFICATIONS

- Certified SolidWorks Professional (CSWP)
- A Hands-on Introduction to Engineering Simulations
- Design and Development of Medical Devices