

# NASER HOSSAIN, PMP

Mechanical/Industrial Product Design Engineer/Manager  
Legal Permanent Resident (No Sponsorship Required)

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## SUMMARY

Mechanical Design Engineer, PMI certified technical Project Manager & Product Evangelist with 7+ years of experience in Project Management, Mechanical Design, Rapid Prototyping, Finite Element Analysis, DFMEA and Industrial Design. Authored 10+ patents in the field of medical devices, consumer product design and industrial innovation. Worked on 50+ medium to large-scale product design problems for biotech, consumer goods and industrial design industry leaders. Experienced in design methodology development and high stakes project execution. Successfully passed 5+ years in technical/design leadership roles with proven track record in continuous professional improvement. Expert in scale-up operations and executive alignment sprints.

## SKILLS

Designing for Mass Industrial Design	Injection Molding Consumer Product Design	Finite Element Analysis Design Thinking
Die Casting/Thermoforming	Design for 3D Printing	Non-linear Simulation
Fixture Design	Mold Design and Mold Flow Simulation	Intellectual Property Dev
Technical Mentoring	PDM/PLM/Engineering Documentation	Structural Analysis
Python/Visual Basic/Macros	Trello/Jira/Agile/MS Project/Asana	Material Innovation
CATIA/NX/Solidworks/ProE/Creo	ANSYS/ABAQUS/LS-Dyna	GD&T, Quality Control

## WORK EXPERIENCE

Position **Engineering Manager**  
Company Biotix Inc- A Mettler Toledo Company  
Location San Diego, CA  
Dates 02-2021 – Present

- Leading a team of about 11 engineers (ME/EEE/IE) in MX & USA to accomplish quarterly mfg KPIs
- Develop breakthrough products for the pipette tip/medical consumables and life sciences industry
- Hands on CAD/CAE projects to integrate user interaction & design thinking based concepts
- Leading product innovation and prioritizing "Voice of Customer" in design decisions worth \$10MM+
- Developing new solutions for Industry 4.0 automation & factory of the future SOA facility in MX
- Simulation/FEA based approach to reduce physical prototyping & CAPEX expenditure
- Application of lean principles in manufacturing & production to aid value stream mapping for Biotix
- ISO9001 and ISO13485 certified product development and engineering
- Ensuring compliance with FDA 21 CFR Part 820 during medical device design and quality control

Position **Packaging Design Manager (Previous roles: Sr Design Engineer, Simulation Engineer)**  
Company Niagara Bottling LLC  
Location Diamond Bar, CA  
Dates 03-2017 – 02-2021

- Recruited & lead a team of around 7 engineers/scientist in a dedicated R&D Ecosystem
- Scoped out and built DOE methods and testing setups for both R&D and Manufacturing teams
- In charge of all primary plastic packaging design/analysis for the entire company worth 25MM/year
- Leading with a hands on approach on ideation, prototyping, design, testing and rollout of consumer products using CAD/CAE tools and FEM/FEA methods for structural/topological optimization
- Responsible for lead time reduction in R&D workflow by 6-10% using industrial automation
- Oversaw materials and metallurgical research during 12+ major material innovation rounds.
- Coordinated introduction, negotiations and strategy meetings with 15+ vendors on a regular basis
- Applying GD&T and Statistical Analysis to streamline injection mold & tooling design.
- Spearheaded 10+ Design/Utility patent submission under the design group as contributing inventor.

Position       **Tooling Engineer II**  
Company       Schlumberger  
Location       Houston, TX  
Dates          10-2013 – 12-2016

- Directly managed the material selection, tool building and built testing for subsea oil extraction
- Lead instrumentation and tooling projects worth 5MM+ on North Sea and Gulf of Mexico
- Recruited, Trained and Managed a team of 3 junior engineers
- Assisted QC and Supply Chain with API 6A/17D qualification
- Defined the Finite Element Analysis principals of the entire company as a member of the FEA Board
- Performed finite element simulation on resin material

Position       **Lead Academic Liaison**  
Company       NASA (under NASA EPScOR program)  
Location       Baton Rouge, LA & Orlando, FL  
Dates          08-2012 – 02-2013

- Acted as “Lead Technical Liaison” for a \$750K+ academic project with NASA KSC
- Worked with shape memory alloy and superelastic/pseudoelastic polymer materials
- In charge of lean project management and internal feedback sprints on a bi-monthly basis
- Applied fluid mechanics simulation principals for “Prototype Proof of Concept”
- Built Thermal Barrier Coating system with numerically proven concept using plasma impingement
- Managed project finances and created reporting formats for quarterly presentations

Position       **Rotational Mechanical Engineer**  
Company       NAVANA CNG Ltd  
Location       Dhaka, Bangladesh  
Dates          01-2010 – 11-2011

- Recruited as one of the four mechanical engineers in charge of Navana’s 5MM CNG R&D Facility
- Designed mechanical fixtures and modules for easy CNG conversion of automobiles in local market
- Represented Navana CNG in the yearly “International Trade Fair” in Dhaka, Bangladesh
- Took part in a division wide KAIZEN event and successfully completed all the 2010 KPIs

## **EDUCATION**

M.S., Mechanical Engineering, 2013, Louisiana State University, Baton Rouge, LA, USA

B.S., Mechanical Engineering, 2011, Bangladesh University of Engineering and Tech, Dhaka, Bangladesh