



NAVALJEET SINGH

Mechanical Design Engineer

+91-7982289268,
+91-9811350085

navaljeet2@gmail.com

OBJECTIVE

A strong engineering professional with a B. Tech degree seeking a challenging and rewarding opportunity in an organization of repute which recognizes and utilizes my true potential while nurturing my technical and analytical skills.

ABOUT ME

A SOLIDWORKS CAD Expert having around 3.5+ years of experience in field of Mechanical product designing, Reverse engineering, Water Treatment Plant and CNC programming and operating.

Currently engaged in Designing Sheet metal, Machined and 3d printed parts, Generating technical drawings, Bill of material for the manufacturing of first Made in India Advanced Ventilator.

SKILLS

- **Computer Aided Designing** (SOLIDWORKS, Siemens UGNX, CATIA V5, Autodesk Fusion 360, Creo, AutoCAD)
- **Technical Documentation**
- **Rendering and animations** (Keyshot, SOLIDWORKS Visualize and Composer)
- **Finite Element analysis**
- **Additive Manufacturing** (FDM, SLS)
- **Computer Aided Manufacturing** (VMC and Lathe)
- **Operating power tools, Machines and welding** (Angle grinder, Hand grinder, Bench drilling machine, Lathe machine, Arc Welding and MIG Welding)

PROFESSIONAL EXPERIENCE

AgVa Healthcare, Design Engineer (Feb 2021- Apr 2022)

Agva Healthcare is inventor and manufacturer of world's economical ventilator. They had contributed majorly to Indian government into fighting COVID-19.

Responsibilities:

- Research and development of Medical equipment like Ventilator, Insulin Pump, Suction Pump and DVT Pump.
- Designing of Sheet metal parts, Machined parts, 3d printed parts, Generating technical documentation, Bill of Material and Standard operating procedure of first Made in India Advanced Ventilator.
- Generating renders for marketing purposes.

IRIS Hightech Pvt Ltd, Application Engineer (July 2019- Feb 2021)

IRIS Hightech is an authorized partner of **Dassault System SOLIDWORKS Corporation** in North India providing complete SOLIDWORKS engineering solutions in 3D Design for Product design, Data Management, Simulation, Electrical and Technical Documentation.

Responsibilities:

- Technical training and assistance as per client products.
- Engineering services like Product designing, Technical documentation, Reverse Engineering, Data Migration and Design Automation.

SEAMAK Group, Jr. Project Engineer (Nov 2018-Apr 2019)

Seamak Group is a leading provider of complete solutions for water and waste water treatment through various available technologies.

Responsibilities:

- Generating Reports and coordinating with UPSIDC for commissioning of Sewage water treatment plant in Trans Delhi Signature City, Uttar Pradesh.
- Supervision and report generation over Super sucker machines for cleaning of Sewage Systems leading to water treatment plant.

INTERNSHIPS

- CNC VMC and Lathe Programming and Operations at **Fine Tech Industries**.
- Supervision and Production planning for manufacturing of Food Processing Machines(Bread slicing machines, Mixer, Lifter) at **Sohal Industries**.

SOLIDWORKS CERTIFICATIONS

EXPERT - Mechanical Design
(C-ZN3MYC79BX)

PROFESSIONAL - Mechanical
Design (C-5BRKPVTCN8)

PROFESSIONAL – Weldments
(C-SB72EMQWDF)

PROFESSIONAL - Sheet Metal
(C-RLGN4AUKWY)

PROFESSIONAL – Surfacing
(C-4EGU2B653N)

PROFESSIONAL - Drawing
Tools (C-CYQNT7FJRU)

PROFESSIONAL - Mold
Making (C-3MJXP4DFE2)

PROFESSIONAL – Simulation
(C-GYB8CWNLKR)

SPECIALIST - Composer 20-21
(C-FB75Q3UXY6)

SPECIALIST - Visualize 20-21
(C-W6QYZUR5B9)

SPECIALIST - Inspection 20-21
(C-CU4YWS7JXH)

SPECIALIST - CAM 20-21
(C-PMHX72CB68)

PROJECTS UNDERTAKEN

Paras Hospital

- To design and 3D print N95 filter attachment for Decathlon Scuba Diving mask to be used as protection against COVID-19 while performing surgery
- Technical Documentation
- Rendering and Animations for marketing purposes

Jindal Rail and Infra Pvt Ltd. (Jindal Group)

- To design a fixture/mechanism to secure steel rolls on train while transportation
- Finite Element Analysis of the structure
- Technical Documentation
- Animations for presentaion purpose

Propick Automation Pvt Ltd.

- To design a Modular Belt Conveyor.
- Technical Documentation
- Animations for the assembly

Uncease Automation Pvt Ltd.

- To design Telescopic and start conveyors.
- Animations for the assembly

Rowing Bicycle Project (University Project)

- To design an Exercising Bicycle which enables the user to workout both Upper and Lower body parts.
- Manufactured the final design

Indexing Drilling Jig (Design Research paper)

- To design Jig for drilling radial at angular increments on Catia V5
- Technical Documentation
- Published research paper in IJSART Vol 4., Issue in March 2018

EDUCATION

B. Tech (Mechanical Engineering) (2014-2018)

Manav Rachna International University (7.4 CGPA) Faridabad, Haryana

12th C.B.S.E. (2014)

Guru Tegh Bahadur 3rd Centenary Public School (75.4%) New Delhi

10th C.B.S.E. (2012)

Guru Tegh Bahadur 3rd Centenary Public School (8.4 CGPA) New Delhi

HOBBIES

- Playing Basketball, Football
- Practicing Martial Arts
- Listening to Music
- Learning over YouTube
- Exercising at Gym