#### SALIL K. CHIRKUTE

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# **Summary of Skills:**

Experienced Mechanical Engineer with strong diversified skills and competency in the mechanical design engineering by education and experience in

- Design & Development of mechanical tools, equipments and structures, customized design solutions involving mechanical design, DfM, DfX, Reliability and Maintainability aspects of product lifecycle.
- Finite Element Analysis (FEA) simulations using ANSYS software, & design by analysis
- Experience in managing the team of 8 engineers
- New Product Development Project Management involving complete product lifecycle. (Appearing for PMP, Project Management Professional certification, by Dec 2018)

# **Education**

Qualification	University/Institution	Year
Master of Technology (DESIGN, Mechanical)	Indian Institute of Technology Madras, India	Jan. 2002 (2000- 2001)
Bachelor of Mechanical Engineering	Nagpur University, India	June 1997 (1993- 1997)

#### **Experience**

Organization	Department	Designation	Duration
Schlumberger, Pune	Surface Well Testing	Team Leader / Senior Mechanical Engineer	Since Jan 2016
Schlumberger, Pune	Surface Well Testing	Modeling and Simulation Engineer	March 2010 ~ Dec. 2015
Neilsoft, Pune	Heavy Industrial Machineries & Equipments.	Associate Lead Engineer	July 2008 ~ Feb. 2010
Ferromatik Milacron India Ltd., Ahmedabad (Formerly, Cincinnati Milacron Ltd)	Design & Development	Sr-Executive - Design	Dec. 2003 ~ July 2008
Various companies, India	Research & Development.	Design Engineer	March. 2002 ~ Oct 2003

### A. Schlumberger

### (Since March 2010)

Schlumberger Limited (NYSE: SLB) is one of the world's largest oilfield services companies. Schlumberger employs over 105,000 people [more than 1 lakhs] of more than 140 nationalities working in approximately 80 countries. Its principal offices are in Houston, Paris, and The Hague.

### As a Senior Mechanical Engineer

(Since Jan 2016)

Responsible as Project Manager for new product development projects on development & commercialization of surface well testing equipments.

Currently working on development of plug & trash catcher project to separate plug drill outs from frac plug drill out operations. Previous projects sand separator, surge tank, scrubber separator.

As project manager responsible for managing the complete product life cycle development process with respective functions, from requirements analysis, conceptualization of design, design reviews, engineering calculations and product file tasks, vendor qualifications, manufacturing quotes reviews, manufacturing status follow-up, factory acceptance test, prototype test plan preparation & SME review, conducting prototype tests and commercialization of asset.

Also, responsible as **technical lead on design** of the asset involving requirements consolidation, design conceptualization & validation using finite element analysis, and engineering calculations.

# As a Team Leader (Additional Responsibility – 30%)

(Since Jan 2016 to June 2018)

Responsible for team of seven engineers to manage various rapid response projects, sustaining activities, quality inspections with responsible for team deliverables. Including Planning and supervision of team of surface well testing unit comprising rapid response, sustaining and quality engineers and designers. Identify and organize the best approach to executing the tasks required for the project. Team compliance of the applicable Product Development Process and all the relevant Standards and Procedures. Setting annual objectives and performs regular appraisals of performance for the assigned team.

# As Modeling and Simulation Engineer,

(March 2010 ~ Dec. 2015)

My responsibilities Summary:

- Design & analysis of the various oil and gas well testing equipments. Responsible to provide design solutions to field operations for customized requirements to design & develop the innovative mechanisms & tools.
- I am first to start inhouse design calculations on various offshore tools and structures design assessment
  involving complex non-linear buckling simulations and offshore standard calculations involving DNV and
  API standards. I have authored design books on design and analysis of various oil and gas tools &
  offshore structure design involving FEA simulations and various standards.
- Within SLB surface testing group, I am the Subject Matter Expert for design of various tools. I have
  established myself as a focal point subject matter expert within SLB surface group for various tools.
  Involved in various key company projects as project lead with clients like TOTAL, SHELL, Transocean,
  etc. involved in client rig visits and kickoff meetings. I was key contributor in various key customized
  design solutions as mechanical design expert.
- I have expertise in FEA simulations using ANSYS software involving contact non-linearity, non-linear
  buckling, elasto plastic non-linearity. In my SLB experience I have supported various complex FEA
  simulations for the downhole tools and offshore structures using ANSYS classic and workbench software.
  I have expertise in fatigue design calculations. I have used my FEA expertise on various projects in
  various wireline tools, subsea ported slick joint design as per stress linearization technique using Part 5 of
  the ASME Boiler and Pressure Vessel Code, Section VIII, Division 2.

### B. Neilsoft

(July 2008 ~ Feb. 2010)

An Engineering Consultancy Firm.

As Associate Lead Engineer, my responsibilities were -

- Finite Element Analysis of Machines Structural Components using ANSYS Classic and ANSYS Workbench: Linear Static, Non-Linear Contact, Non-Linear-Plasticity, Modal Analysis on Machine Assemblies and on Individual component.
- Fatigue Analysis using Stress Life Approach using FEA results.
- Failure Assessment on design using Fatigue Analysis and design to improve fatigue safety factor of design.
- Evaluation of Bolt Safety Factor in machine assemblies for Fatigue, Bolt Separation, Yield using frictional contact Pair between the clamped components.
- Weld Safety Factor evaluation on machine bases and structures using Finite Element Analysis.
- Design improvement recommendations to designers upon Analysis based on physics and mechanics of problem.

#### C. FERROMATIK MILACRON

(Dec. 2003 ~ July 2008)

Plastic Injection Moulding Machine Manufacturing Organisation.

As Sr. Executive, my responsibilities were -

- Design of Heavy Castings, Platens in Injection Molding Machine for repeated fatigue loads using Modified Goodman Diagram.
- Finite Element Analysis of Structural Components of Injection Molding Machines using ANSYS.
- Cost reduction by design on existing product line using finite element analysis.
- Failure Analysis of field failure parts and re design for most efficient strength to weight ratio using FEA.
- Making recommendations on design improvements to design engineers.
- Support to Design Engineers in Hand Calculations and Design Conceptualizations.
- Tools: ANSYS 11 Classic, Pro/ENGINEER Wildfire.

#### Highlights -

- Responsible for establishing FE Analysis practices in the Indian unit of organization.
- Have given heavy cost reductions by design in material cost in existing product line and designed good patentable casting design in new product development.

# D. Various Other

(March 2002~ Oct. 2003)

As **Design Engineer** with Research & Development, responsible for

- Stress Analysis of structural weigh bridge platform and re-design based on analysis, & various FEA of mechanical parts of weighing machine systems for stress and displacements etc.
- · Conceptualization and design of weighing scale machine components weigh bridges.
- Design of fixtures, jigs and dies. CE Marking of mechanical machineries.

### **Personal**

Nationality : Indian

Date of Birth : 14<sup>th</sup> November 1975

Sex : Male Marital Status : Married