

IMRAN SIKANDAR

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### CAREER OBJECTIVE

- A challenging and an innovative career where I can utilize my technical, managerial and leadership skills

### ACADEMIC QUALIFICATIONS

- MS in Mechanical Engineering wayne State Univ., Michigan USA May 2001 Apr 2004
- BE in Mechanical Engineering NED Univ. of Engg. & Tech., Karachi Jan 1994 Aug 1998

### CAREER PROFILE

- One and a half year's experience at **TMC** in the field of **QA/QC** as **Deputy Manager**
- Three Years experience at **SGS Pakistan Redwood Division** as a **Quality Assurance Engineer**
- Experience with **CAD** and **FEA** tools like **IDEAS**, **Mechanical Desktop**, **Solid Edge**, **Nastran**, **Abaqus** and **Ansys**.
- Team member, which started the **TMC** car project from scratch and finished to completion
- Knowledge of **Quality/Reliability** tools like **APQP**, **PPAP**, **DFMEA**, **PFMEA**, **5S SPC**, **QFD** & **GD&T**
- Knowledge of crash energy management, advance vehicle restraint system and use of **alternative materials** in vehicle part manufacturing.
- Assisted in the designing of **TMC assembly line, paint-shop and PDI**. (Test line)
- **Simultaneously** Supervised operations related to **PID**, **PDI** and **Paint shop**.
- Familiarity with **Automotive** inventory control system.
- Familiarity with **Jigs** and **fixtures** development related to inspection, drilling and welding.
- Hands on knowledge of sheet metal **stamping operations**, Sheet metal **presses** and **dies** developments.
- Knowledge of **CNC** machining centers, **G&M** code programming along with **CAD data** translations.
- Strong **technical**, **Business writing** and **communication** skills
- Willing to travel and **relocate** anywhere in Pakistan.

### WORK EXPERIENCE

Deputy Manager Quality Control **TMC Pakistan (Pvt.) Ltd.** Oct 2004 Jun 2006 (Present)

- Prepared Dimensional and Functional Inspection Reports of parts using Precision Measuring Instruments and Inspection Tools.
- Analyzed process, tooling and inspection facilities of vendors and provided suggestion where ever required for improvement in the quality of parts.
- Investigated infrequent problems on assembly line and recommended Corrective Actions
- Assisted in selecting appropriate vendors on comparison of **OTS** parts development plan.
- Using the principle of Cause effect analysis and **5S** in collaboration with the technical consultants reduced the production bottle necks and increased daily production from 1 car/day to 3 cars/day
- Converted the **RHD** Alif car to **LHD** for export purposes.
- Used **PERT** for scheduling and updating project completion reports.
- Lowered the **NVH** response of a single cylinder engine and optimized the exhaust assembly noise and harshness levels by using flexible coupling. Enhanced mounting Positions & U bolt.

- Using FEA redesign the 5 hole plate eliminating the bending problem that arose as a result of U-Bolts torque testing at recommended levels, during assembly of leaf springs on the chassis
- Studied, optimized and developed hardware of complete TMC alif car from M.B.I
- Conducted Material Testing to verify different characteristics using testing equipment e.g. tensiometer, UT Machine, Rockwell/Brinell Hardness Tester, Surface Roughness Tester etc.

Q.A Engineer

**SGS Pakistan (Private) Ltd.**

Oct 1998 – May 2001

- Developed the Quality assurance system in accordance with ISO 9002 standards and Meter Calibration services for SGS Pakistan Redwood division.
- Performed Field audits, Internal Audits issue CAPR, CAR and divisions SWOT analysis
- Issued work instructions, safety instructions and MSDS Redwood inspectors.
- Calibration of Upright cylindrical fixed roof, Floating roof, Horizontal bullets and Road tank lorries for various Oil exploration, Oil Distribution, and Power Plants.
- Performed Ultrasonic thickness testing and LEL testing on storage tanks
- Worked as a Project engineer in the “Development of an Ultrasonic thickness corrosion monitoring system at British Petroleum’s facility at Turk, Sindh.

### **M.S.M.E “PROJECTS” AT WAYNE STATE UNIVERSITY, DETROIT MICHIGAN U.S.A**

#### **Reliability & Estimation**

- Performed FMEA and QFD techniques on car radiator cooling fan and tested Car bracket to failure using weibull distribution

#### **Robustness and Product development in product engineering**

- Using Ford Taurus Car crash data optimized the energy absorption. 50” Percentile Dummy HIC. NIC by using ANOVA

#### **Non-linear FEA using abaqus in flipchip packaging**

- Prediction of the fatigue life of solder balls in completely filled clean & non clean flip chip package under a thermal load from -40 to 125 C using Hypermesh & Abaqus as the solver.

#### **Finite Element Methods**

- Failure Analysis and design optimization of a car Door bracker by considering Maximum von Misses Criteria, using Hypermesh as the Pre/Postprocessor and Nastran as Solver.

#### **Non Destructive Evaluation Techniques**

- Studied various ultrasonic, acoustic emission and machine vibration monitoring techniques.

#### **Mechanics of Composite materials**

- Design of Carbon Epoxy Laminate with the validation of the Tsaii-Hill Theory.

### **UNDER GRADUATE PROJECTS.**

- Design & Simulation of 4 Stroke C.I Engine with Variable Load using FEA.
- Prepared a report on the Inventory Control & QA/QC system of Honda Atlas Motorcycles.
- Developed report on truck engine thermodynamic calculations at HINO Pak motor company

### **PROFESSIONAL AFFILIATIONS**

Society of Automotive Engineers (SAE)

American Society of Mechanical Engineers (ASME)

Pakistan Engineering Council (PEC)

Institute of Engineers Pakistan (IEP)

### **COMPUTER SKILLS**

Engineering Software

1-DEAS, Mechanical Desktop,

Simulation Software

Working Model 2-D Engine Dyno & 3-D Studio R-4

Office Automation Packages

Ms Office, Excel, Power point, Ms –Project & MINI-TAB

Operating Environment

DOS, UNIX, Windows XP/2000 and NT

**REFERENCES**

- To be furnished upon request.