**RESUME**

**SANJAY AGGARWAL**

**Contact:** 8800782455 **E-Mail:** sanjay.aggarwal.8@gmail.com

**Seeking challenging assignments for a carrier encompassing professional & personal advancement**

**ACADEMIC DETAILS**

2010 M.tech (Mechanical Engineering- Specialization in Turbo Machines) from **SV NIT, Surat**. CGPA **9.02**

2007 B.E. (Aeronautical Engineering) with 59% from ‘The Aeronautical Society of India’, New Delhi.

2001 HSC with 63% from CBSE board, Chandigarh

1999 SSC with 67% from CBSE board, Chandigarh

**PROFILE SUMMARY**

* Offering 11yrs of experience in design & new product development of Consumer goods- HVAC & Refrigeration-cold room units & Heat Exchangers/ radiators for Industrial cooling & Turbo machines
* Works on Concept, planning, design and operational execution stages as per requirements.
* Strong ability to create / interpret engineering drawing layouts in accordance with appropriate standards and design rules.
* Hands on exposure in Business Process mapping, Profit simulation & Data analysis in detail.
* Good knowledge of CFD Analysis, includes Part design, meshing in preprocessor & using adequate boundary conditions, post processing for optimized results
* An effective communicator with excellent management, strong analytical, problem solving & organizational abilities

**CORE COMPETENCIES**

* Work in line with operations & supply chain teams to implement new Products as per schedule & process requirements.
* Follow Complete Product development of new product as per NPI, Skilled in conceptual design & testing process, Energy calculation to meet QCD of projects
* Critically evaluating information gathered from multiple sources, decomposing information into details & abstracting up from low-level information to a general understanding
* Good Data Handling & segment-based analysis
* Good Knowledge of the manufacturing processes involved for basic research and technical proposals for new product development, specification study & finalization.
* Flexible - ability to react quickly and work accurately to meet internal and external deadlines
* Possess good knowledge of NPI process

**ORGANISATIONAL EXPERIENCE**

**Since Feb’21~ present: Asst. General Manager- Johnson Controls-Hitachi Air conditioning India Ltd. (Kadi, Gujarat, India)**

**Since Jan’20~ Jan21: Sr. Manager- Johnson Controls-Hitachi Air conditioning India Ltd. (Kadi, Gujarat, India)**

**Key Result Areas**

* Lead PAC unit’s development of different capacities & Performance qualification for both heating & cooling cycles for different global regions and as per regional test conditions & requirements.
* Leads a team of 4 members, responsible for Product development of commercial HVAC units for Global Market,

assign tasks & coordinate with team for daily project updates & work issues.

* Works on reliability testing in labs for controls software logic validation.
* Prepare NPD documents as per development process requirements.
* Works on product cost & gap analysis to meet targets in co-ordination with Global purchase team. Responsible for Overall project Cost deliverable.

**Since Jun’18~ Dec’19: Manager- Johnson Controls-Hitachi Air conditioning India Ltd. (Kadi, Gujarat, India)**

**Key Result Areas**

* Worked on New Product Development of commercial HVAC units for Global Market
* IDU selection from global company JV’s for different capacities as per PV requirements through competition comparison
* ODU component selection & cycle finalization in coordination with global teams.
* Test logic validation for performance optimization
* Understanding regional certifications & standards required for product qualification
* Product cost estimation for two Global locations from manufacturing prospective & for Business case

**Since Apr’18~May’18: Manager- Commercial Refrigeration at Carrier Air conditioning & Refrigeration Pvt. Ltd., Gurgaon, Haryana**

**Since Mar’15~Mar’18: Asst. Manager- Commercial Refrigeration at Carrier Air conditioning & Refrigeration Pvt. Ltd., Gurgaon, Haryana**

**Key Result Areas**

* Development of commercial equipment’s/systems of different capacity as per customization for both LT & MT application
* Coordination with operations & supply chain teams to implement new Products
* Developed units for ripening cold room system as per NHB standards of desired capacity.
* System testing including Compressor qualification & reliability testing
* CFD simulation using ANSYS 17, Air flow optimization & parametric study in Vertical Refrigeration cabinet for a Global Project
* Worked on Chest freezers & Chest Coolers that includes new part development & testing as per quality & desired standards.

**Major Projects**

* 10kW MT IDU for ripening application
* 13KW MT CDU ( in R404 & R22) for Banana Ripening application
* 4KW LT IDU for Cold room application
* 2.5 KW LT IDU for Cold room application
* 2KW LT CDU Compressor & system qualification
* CFD Air flow simulation in Vertical Display refrigeration cabinet

**Since Mar’14~Feb’15: Dy. Manager- Product Design & Development at Lloyd Electric & Engineering Ltd., Haridwar, UK**

**Key Result Areas**

* Design of Heat Exchangers-Oil coolers & Radiators of Bar & Plate Technology for Industrial cooling using UNILAB software.
* Design reviews and verification of product.
* Evaluate the feasibility of selected concepts to meet functional requirements
* Solving Client Quarries & looks after customer needs for that segment
* Cost Calculation & BOM finalization for production against drawing detail released

**Aug’10~ Mar’14 Senior Engineer II-R&D (Air conditioners & Refrigeration**) **at LG Electronics India Pvt. Ltd., Greater Noida, UP**

**Key Result Areas**

* Job Profile includes new design concept & Product development of cooling components, FF & DC Refrigerators, COP/Energy calculation to meet QCD of projects
* DRBFM Analysis, Complete involvement in PV, DV, PP, MP stages of product development
* Carried out Air conditioners units’ calorimeter testing for Optimized Heat Balance. Work in accordance to appropriate norms to meet QCD of projects & BEE regulation.
* Other Activities includes support in GERP implementation
* Product & part cost finalization, ASP profit target setting with sales team
* Process improvement and cost reduction (CI) initiatives, cost innovation in compliance with statutory quality standards, competition analysis, part cost analysis, RMC, Bill of Material (BOM)
* Carrying out monthly commodity/RM moving plan & timely project reporting to HQ Korea and interfacing with other related departments

**Jul’07- Jun’08 Graduate Engineer -** **CFD at Turbo machines lab- CLOCTER, National Aerospace Laboratories, Bangalore, Karnataka**

**Key Result Areas:**

* Conducted analysis of mixed flow compressor at design and off design conditions and stage analysis of Centrifugal Compressor at off-design conditions
* Carried out 2D CFD Analysis of Airfoils to calculate lift & drag coefficients of airfoils & flow characteristics behind them

**CERTIFICATION**

* Certification Certified **Six Sigma Green Belt** by LG Electronics, Korea

**ACADEMIC PROJECTS**

**Project Title Design and Analysis of a Straight and Sweep Blade Propeller for Regional Transport**

***Major* Application (RTA) (carried out at NAL, Bangalore) (M. Tech project)**

**Project Title CFD Analysis of Centrifugal Compressor Stage Analysis & Mixed Flow Compressor**

***Minor* Rotor Flow Analysis & (At NAL, Bangalore)**

**TECHNICAL SKILLS**

Analysis Packages **Coil PC** for Heat exchanger design, ANSYS 17-Fluent, Gambit

Other Minitab for Six Sigma, Microsoft Word, Excel and PowerPoint

**PROFESSIONAL MEMBERSHIP:**

* Graduate Associate Member of The Aeronautical Society of India (AMAeSI), New Delhi

**ACCOLADES**

* Efficiently secured All India Rank 61 in Gate 2008 and All India rank 137 in Gate 2007
* Bagged various awards & recognition at school & college level
* Won 1st award in Paper presentation Competition within organization in Sep 2017
* Member of Winning team(5 members) of UTC All India Engineering Competition 2016

**PERSONAL DETAILS**

Date of Birth: 8th September, 1984

Address: House No. 3307/1; Sector 40D, Chandigarh-160036

Languages Known: English, Hindi and Punjabi

Location Preference: North India

Passport: Available