



About Swadha

A recent study by the International Energy Agency revealed that Electric motors are the largest consumers of electricity and account for 45% of global power consumption. In this environmentally conscious world, it becomes the responsibility of the industry to ensure ecological, environmental and economic concerns of industries.

One such step is to manufacture motor drives that can reduce motor power consumption by up to 60%. Understanding this need of the market, Swadha Energies, an incubated company at IIT Madras, has developed a revolutionary patented system combining IoT, Motor Speed Controller, Sensors & Cloud, thereby providing a brain to the motor making it smart and intelligent.

Swadha Energies began their journey by designing motor control Unit (MCU) for HVAC systems. As a high consumer of power, it was only logical for Swadha Energies to initiate their R&D with HVAC systems. After nearly 2 years of Research and Development, it developed a viable product for the market and commercialized it successfully.

Post its phenomenal success in HVAC industry, Swadha is venturing into Solar Pumps to be used in Agriculture – a market that could be profoundly impacted by the innovation. The possibilities of this innovation of motor drivers are endless: Air Conditioning, Pumps, Electric Vehicle, Industrial Motors, Elevators, Home Appliances etc are to name a few.

Education Qualifications / Background

- B.Tech in Electrical, Electronics. M.Tech, MS, PhD in Power Electronics, Electrical Machines

Relevant & Total Years of Experience

- 12 To 15 years of experience in all kind of benchmark practice of Power Electronic.
- Min 3 years of experience as Deputy Head of the department.
- Current working as Head of Department would be desirable.

Technical Vision/Business Development

- In depth knowledge of Technical Skill of Motor drivers, Induction motor, Grid Tie Inverters, Power electronics etc.
- Basic awareness of electrical motors like Induction motor, BLDC, PMSM, SRM etc.
- Procedural understanding for certifications in respect of electronic devices like (BIS)Bureau of Indian Standard, CE ,FCC, TUV, IS , OSHA etc.
- Well verse with various motor control algorithms and data analysis.



Work on new innovations at sustainable cost parameter

- Assist CEO to develop a technical strategy which includes goal setting, consider multiple options and analysing the risk.
- Responsible as a business partners and fulfils that by aiding acquisition efforts, building the company's presence and voice.
- Guide and support the R & D team in developing and updating the products to ensure future of the company.
- Consistently evaluates technical efficiency and makes changes as necessary
- Carry out the Basic and Detailed engineering for the entire Major and Minor modifications, for Product improvement, viz. Capacity enhancement, energy optimization, Troubleshooting & EHSQ (Environment , Health ,safety and Quality) standards.
- Ensuring BEP (Basic Engineering package) & associated drawings in place for the entire product at requisite place, to assist in meaningful improvements, at any given point of time.
- Custodian of all the current & historical Operating data for the product.
- Custodian of the statutory approval of documents in respect of product.
- Preparation of the R& D, product development & data analysis Budget; monitoring of Budget Vs. Plan Vs. Actual, on the monthly basis.
- Co-ordinate and monitor the Major/ Minor product modifications assigned & ensure the c jobs completion within budgeted time and cost. Conduct performance check of these modifications to assess achievement of desired results and devise further improvements.
- To lead the establishment of Technical services and monitoring the effectiveness using IMS & software.
- High focus on the Process Automation.
- To authorize the counter measures suggested & review the effectiveness of counter measures taken for critical/ repetitive problems, using 7 QC tools.
- Ensuring company Integrity is maintained, all the time.
- To lead the team in continual improvements into IMS (Information Management System); working within IMS domain only.
- Capex execution within budgetary limits (QCDSEM – Quality, Cost, Delivery, Safety, Environment & Morale)

Product Development

- Responsible to initiate, plan, Design, Monitor, Control and closure of the product.
- To do technical evaluation of newer product & Instrumentation and provide procurement assistance to purchase department.
- Responsible for implementation of motor drivers, considering both Electrical and Mechanical domain.
- Identify risk that directly impacts the success of project and ensure to minimise its effect.
- Responsible for company's technology direction (R&D) with a focus on commercialization outcomes.



Best utilization of Software Architecture & Database

- Making optimum utilization of the resources, for continual enhancement of the Product design.
- To do best utilization of software architecture & database to get best result to achieve company's goal & vision.

Research and Development - Design, Development and validation

- Responsible to conduct research and development before a new product developed.
- Research and development includes determining product specification, product cost and production time line too.
- Ensure that the new developed product must meet the product guidelines and regulatory specifications.
- Responsible to resolve a problem with an existing product that malfunctions or to find a new solution if any problem arise.
- Responsible to implement new product and gather all information in respect of same on regular basis to ensure proper functionality.
New vendor development and management.

Statutory Compliance& Certificate

- Percolating the need of statutory compliance & certificate at the highest priority in whatever company does.
To lead the establishment of Benchmark practices built during design stage.

Self and Subordinate Development on a continual basis

- To identify, plan and facilitate domain and managerial training to the individuals in order to develop the new skills.
- To lead the team in making customized domain training module to provide in-depth knowledge of equipment and plants.
Ensuring all the team members in Process Technology have robust knowledge on required software& product.