

Krishna Arjun Kothapalli
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“Seeking challenging assignments in PV Module Manufacturing Operations, Product Designing & Development & Quality”

Business Skills Summary

- ✦ An astute professional with over **15+ years** of rich experience in **solar module manufacturing, and the Product Designing & Development of the new Product Introduction (NPI) Process.**
- ✦ Presently associated with Swelect HHV Solar Photovoltaics Pvt. Ltd. as an Assistant Vice President of Technology
- ✦ Member of Solar Photovoltaic Energy Systems Sectional Committee, **International Electrotechnical Commission (IEC) TC 82.**
- ✦ Member of Solar Photovoltaic Energy Systems Sectional Committee, **BUREAU OF INDIAN STANDARDS (BIS) ETD 28 India.**
- ✦ Extensive experience in the **Development of product test protocol, materials qualification, new product development, certification, product reliability, and Supplier evaluation.**
- ✦ **Creative and multi-disciplinary executive** renowned for appraising the prevalent production systems/ processes, identifying loopholes if any, and undertaking result-oriented measures for alleviating them and documenting the same.
- ✦ Spearheaded the entire production operations with a **key focus on top-line & bottom-line profitability** by ensuring optimal utilization of resources, and design validation activities at external testing agencies.

Proficiency Matrix

- ✦ **New PV Manufacturing line Setup** – Responsible for line design, calculation of TCO, selecting the machine supplier, and commissioning.
- ✦ Manufacturing operations of cumulative 2 GW module line – **Actively involved in training, ramp-up, production analysis and improvements, and MES.**
- ✦ **New material qualification:** Developing testing methods for solar cells, glass, EVA/POE, Backsheet Junction box, copper, etc.
- ✦ **Reliability:** Understanding of existing testing standards (**IEC 61215, IEC 61730, IEC 60904, IEC TS 62804, and UL1703**) and development of new tests to assure the reliability of products. Use of reliability monitoring plan (RMP) for different products. Extensive knowledge of **thermal cycling, damp heat, humidity freeze, PID, and other reliability tests for PV modules.**
- ✦ To plan and do the regular internal process and product audit as per the **ISO/IEC 17025** & take appropriate action.
- ✦ **Failure Analysis:** Worked extensively in the analysis of failures in PV modules.
- ✦ **New product development:** Practical knowledge of the ‘Stage Gate Process’ (complete cycle from concept to launchstage), FMEA for new product development.
- ✦ **Vendor Evaluation:** Responsible for establishing a system for Vendor Performance Evaluation and Vendor Quality ratings and Material Quality Improvement.
- ✦ **Cost and feasibility:** Analysis of new Product testing.
- ✦ Adroitly adopting **corrective & preventive actions** on the non-conformance of in-house as well as external rejection.
- ✦ Create, review, and update the job profiles, roles, and goals for the workforce at different levels.
- ✦ Implementation of Poke-Yoke to reduce company costs, better Quality Products; minimize process time and regular monitoring.
- ✦ Study & analysis of existing manufacturing processes & systems for identifying areas of continuous improvement and devising corrective/preventive strategies.

- ↺ Analysing non-conformances and improving in-house quality to meet the organization's requirements.
- ↺ Using software tools to layout and optimize PV ground-mounted systems.
- ↺ Performing electrical calculations (cable sizing, system sizing etc.)
- ↺ Creating electrical single-line diagrams, and connection diagrams for solar electric systems, using computer-aided design (CAD) software.
- ↺ Performing PVSyst modelling for system production estimates
- ↺ Developing optimal designs with SLD, PML, conduit and wire scheduling, routing and equipment plans

Major projects completed

1. Reliability Lab

Serving as a Quality manager for Lab NABL accreditation.

2. Failure analysis

Studied and simulated different junction box-related failure modes in solar modules. Lead a team of nine technicians in Fontana, CA for the rework of a large number of solar modules. Preparation of work instructions, training, and operation management were the main tasks.

3. Solar Power Plant design

Design of PV systems at KW to MW scale (Electrical – DC side), Solar Resource Data Assessment, Technical feasibility, and Energy Yield Assessment.

4. Task Force improvement

Served as an overall coordinator for the Task Force Improvement team. The reported increase in revenues around \$600K per annum. Process improvement, optimization of material consumption, revision of design specifications, and overall coordination were the main tasks.

Career Recital

I. Current Assignment

Organization : Swelect HHV solar photovoltaics Pvt. Ltd.
 Duration : April 2023 to Present
 Designation : Assistant Vice President, Technology

II. Current Assignment

Organization : TATA Power Solar System Limited
 Duration : Feb 2023 to April 2023
 Designation : Head of Engineering & Process

III. Current Assignment

Organization : RenewSys India Pvt. Ltd.
 Duration : Dec'2015 to Jan 2023
 Designation : Sr. Manager – Manufacturing

IV. Pre Assignment

Organization : Freyr Energy Services Pvt Ltd
 Duration : July'2014 to Dec'2015
 Designation : Sr. Engineer – Design

V. Pre Assignment

Organization : Solar Semiconductor Pvt. Ltd.
 Duration : Jan'2012 to July'2014
 Designation : Sr. Engineer – Quality

VI. Pre Assignment

Organization : Titan Energy Systems
Duration : May'2008 to Jan'2012
Designation : Engineer

Technical Qualification

- ↵ Passed B.Tech in Electronics & Communication Engineering from JNTU, Hyderabad in 2008
- ↵ Passed 03 Yrs. diploma in Electronics & Communication Engineering from SBTET, Hyderabad in 2005

Trainings taken & Expertise in area

- ↵ Laboratory Quality Management and Internal Audit as per IS/ISO 17025
- ↵ PFMEA, FMEA and 7 Quality Tools
- ↵ ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 Internal Auditing
- ↵ AutoCAD 2016
- ↵ PV Syst (PC software package for the study, sizing, simulation and data analysis of complete PV systems)
- ↵ Excellence in MS Excel, Word, PP

Personal details

- ↵ Date of Birth : 01st September'86
- ↵ Marital Status : Married
- ↵ Languages Known : English, Hindi and Telugu
- ↵ Key Strengths : Good Team player, Good Analytical skills, Good Interpersonal Skills

The details provided above are correct to the best of my knowledge.

Date:
Place:

(Krishna Arjun)