



ANJANI KUMAR GUPTA

C-203, Kanchan Eleena Society, Kemse Wasti, Wakad, Pune, 411057
8210240949 | a.guptackp2@gmail.com

OBJECTIVE

To enhance my professional skills, capabilities and knowledge in an organization which recognizes the value of hard work and trusts me with responsibilities, challenges.

PROFILE SUMMARY

- Graduate Engineer with strong experience of 5+ years in NPD & Reverse Engineering.
- Expertise in competitive analysis, digital benchmarking by 3D scanning, progressive scanning of product and generating CAD data from scanned data (.stl file or point cloud data).
- Experience in 3D scanning with Portable (Prince 335 Scantech) as well as Stationary Scanner (ATOS Triple II Scanner) and generating .stl file or point cloud data
- Expertise in Batch parts inspection for First Article Inspection
- Key Expertise in teardown benchmarking, VAVE, reverse engineering, concept design, Project management.
- 5+ Years of Expertise in various CAD software's (Autodesk Inventor, Solidworks, Creo 8.0)
- Primary responsibility is to Tear down the product & Competitive benchmark analysis for VAVE, find the scope for cost reduction, concept design and deal with all CFT member till fully syndication of idea.
- Sound Knowledge of various manufacturing processes, GD&T, DFMEA, etc.
- Skilled in Project management, Workload & Timeline management, co-ordination within Team and in collaboration of other departments for successful of Projects.
- Good analytical & problem-solving skill.

WORK EXPERIENCE

➤ **Atlas Copco India Ltd. (GECIA), Pune** **03/07/2017 – Till Present**

▪ **PROJECTS: Reverse Engineering of Core Components for Spare Parts – Turboexpanders @DUBAI**

- Understand the project requirement, planning for project execution at Onsite and Offsite location
- Complete the pre-teardown activities at assembly and teardown it to last component level.
- 3D scanning of assembly and all child parts to get mesh data on the top of to create CAD data.
- Executed complete Reverse Engineering process from Onsite Part Scanning, 3D CAD creation for Spare part Ordering, Inspection, Review and Assembly creation for 4 different turboexpanders
- Project monitoring and interaction with team for project execution.
- Quality checking of drawing and 3D model and ensure 100%FTR.
- Discuss PSR report with customer, ensuring smooth workflow.
- Support to resolve field, manufacturing, service, and quality issues, conduct quality audit
- 3D CAD files created for complex parts like Impellers
- Upload all files to PLM software's for accessibility to all

- Project Executed at Customer Location – Dubai, Indonesia
Tools :- Project Management, Enovia, Solidworks, GOM Inspect, Polyworks

▪ **PROJECTS: Reverse Engineering for Localization of Diffusion Pumps**

- Understand the project requirement, prepare detail plan for complete benchmarking, kick-off meeting with all CFT, support for new product development.
- Complete the pre-teardown activities at assembly level and teardown it to last component level.
- Assembly level analysis, complete 360° photogrammetry, gap & flushness measurement.
- 3D scanning of assembly and all child parts to get mesh data on the top of to create CAD data.
- Complete analysis of assembly that includes packaging details, mounting details, critical features, weld pattern and type analysis, material analysis
- Find out scope for VAVE, provide ideas for cost reduction, concept design for probable ideas and deal with all CFT member till fully syndication of idea.
- Find out the manufacturing process and explore the alternatives for localization.
- Providing necessary data to make the costing of each part to the costing team.

Tools :- Creo 8.0, GOM Inspect, Polyworks, Project Planning, Design and Drawing Review

▪ **PROJECTS: Resourcing of OFA parts for Localization & Legacy Conversion @Antwerp, BELGIUM**

- Executed Scanning of 50+ Cast and Machined parts to have a digital copy of Physical Parts
- Recreated/Adjusted manufacturable CAD 3D and 2D for resourcing w.r.t. to standards using Scan Data
- Concluded on Deviations in Physical parts w.r.t. to either Process Deviation or any casting/machining error done by Supplier
- Taking Advantage of Casting, Machining, Coating knowledge while creating manufacturable CAD files like Sand Casting, KTL Coating etc.
- Received appreciation from Customer for Good Quality with On-time Delivery work.
- Upload all files to PLM software's for accessibility to all
- Project executed at Customer Location - Antwerp, Belgium

Tools :- Autodesk Inventor, Enovia, GOM Inspect, Polyworks, Design and Drawing Review

▪ **PROJECTS: Competitive Benchmarking and Teardown for ONV pumps vs QE pumps (4 series)**

- Created Detailed Planning for Stagewise progression of Task
- Report creation for Pre and Post Teardown analysis of QE pumps including standard part identification
- Prepared report based on test results and leaflet details for comparison of pumps
- Discuss and implement modification on QE pumps taking reference of ONV pumps
- Cut the samples for various metallurgical tests like chemical composition, hardness, Charpy (impact izode), microstructure, surface roughness etc. and prepare the reports.
- Abstracting the conclusions from dimensional measurements, metallurgical test results and visual observation in the final reports.

Tools:- Microsoft Project Planning, Project Management, PPT, Dimensional Analysis

▪ **PROJECTS: Reverse Engineering of Nitrogen Piston Booster for Localization**

- Created Detailed Planning for Stagewise progression of Task
- Created Detailed Report for study of Part Level and System Level Reverse Engineering
- Progressive Scanning of each and every part of assembly and generating manufacturable CAD data from Scanned Data
- Discuss weekly PSR report with customer, ensuring smooth workflow.
- Find out scope for VAVE, provide ideas for cost reduction, concept design for probable ideas and deal with

all CFT member till fully syndication of idea.

- Quality checking of drawing and 3D model and ensure 100%FTR.
- Created final Comparison reports for Pre and Post Teardown
- Upload all files to PLM software's for accessibility to all

Tools:- Autodesk Inventor, Autodesk Vault Professional, GOM Inspect, Polyworks, Design Review

▪ **PROJECTS: Inspection and Verification reports of parts for Sourcing Support**

- Detailed report preparation for fitment problems in assembly due to issue in Hose pipes, Frame body, etc. using Scan Data of Physical Parts.
- Inspection reports created for various Casting, Plastics, SS parts, etc. for manufacturing process deviations.
- Created statistical analysis report for 250 casting parts for quality check for Casting Supplier by Scanning Physical parts and creating comparison reports – PpK and CpK values

EDUCATION DETAILS

➤ **National Institute of Advanced Manufacturing Technology (Formerly NIFFT), Ranchi**

Year: July 2013 – Aug 2017

Study: B. Tech (Manufacturing Technology), Ranchi University

➤ **Sri Chaitanya Educational Institute, Vizag**

Year: June 2011 – July 2013

Study: Intermediate 10+2 (PCM), CBSE

➤ **S.E.RLY.M.H.S.S (English Medium), Chakradharpur**

Year: June 2010 – June 2011

Study: SSC 10th(General), ICSE

SOFTWARE SKILLS

- Autodesk Inventor
- Solidworks
- Creo 8.0
- UGNX
- 3DExperience Enovia
- Autodesk Vault
- Polyworks
- GOM Inspect Professional
- Atos Professional
- Scan Viewer
- Autodesk Recap
- GeoMagic DesignX
- MS Office Suite

DEVELOPMENT SKILLS

- Critical Thinking and Problem Solving
- Decision Making
- Teamwork and Collaboration with CFTs
- Project Management & Leadership Quality
- Professionalism and Strong Work Ethics
- Good Oral and Written Communication Skills