

# **Job Description – Mechanical Engineer (Brisbane)**

**Department:** Engineering

Reports To: Brisbane Hardware Engineering Manager

#### **SUMMARY**

This position is to perform a wide variety of complex mechanical engineering design and analysis tasks which requires the knowledge of engineering theory and principles to determine design solutions to electrical and electromechanical equipment and systems.

The position will play a fundamental role in Burrana's growth strategy to take a more dominant stance as the leader of in-cabin technology solutions to our aviation clients.

### **DUTIES AND RESPONSIBILITIES**

- Assist in the design solutions electrical and electromechanical equipment and systems (e.g. line-replaceable units, electronics enclosures, cable harnesses, brackets, test fixtures);
- Have demonstrable knowledge of material properties, fabrication processes (e.g. plastic injection moulding, sheet metal, machining, stamping, casting, 3D printing, laser cutting) and thermal/structural analysis techniques and computer aided design (CAD) tools;
- Apply an independent judgement to make decisions on daily responsibilities or participate in wider team-based projects;
- Product requirements gathering, design, test (e.g. thermal, vibration and shock, impact, abuse),
  analysis, integration and documentation
- Liaison with operations team for material review, component selection, manufacturing and assembly
- Liaise with certification team and relevant external authorities (DERs) to facilitate review/approval of documentation (e.g. qualification testing, flammability)
- Sales and marketing support
- Aircraft installation support as required

## **QUALIFICATION REQUIREMENTS**

## a) Education and/or Experience

- Bachelors/Masters degree in Mechanical Engineering
- Experience in 3D CAD tools (Solidworks preferred)
- Experience in 2D CAD tools (Draftsight preferred)
- Experience in issue tracking/collaboration tools (Jira/Confluence preferred)
- Experience in project management tools (MS Project preferred)
- Experience in MS Office (Excel, Word, Power Point)
- Experience in enterprise resource planning (ERP) systems (Epicor preferred)
- Works with all other Engineering functions:
  - o Systems
  - Electrical
  - Software
  - Certification and installation
  - Product life cycle and planning
  - Works with Operations and Procurement
  - o ERP data upload

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- o Manufacturing jig and fixture design
- o Procurement support
- o Supplier management
- o Works with Quality
- o First article inspection
- Works with Sales/Marketing
- o Tradeshow product/booth design, setup and demonstration
- o Bid support