FREWER & CO. ENGINEERS LTD



Job Description - Lead Fluids Engineer

• General Role Description:

 Support to governance of fluids and heat transfer analytical work completed within the organisation, holding responsibility for released data, in line with customer requirements and recognised standards, reporting to the Technical Authority Fluids.

• Fluids and Heat Transfer Analysis:

- o Supporting and growing engineering expertise within the organisation.
- Expertise in technical field Fluids / Thermal Computational Fluid Dynamics (CFD) analysis.
- o CFD Modelling techniques RANS, Unsteady RANS, DES, LES, multi-phase and multi-physics.
- o Working knowledge of Fluid-Structure Interaction (FSI) methods jointly with structural modelling
- Critical evaluation and 'sanity checking' of analysis data through validation, multiple-source cross-checking and alternative methods of calculation.

• Support to Frewer Design Projects:

- Support to development of 3D CAD designs, working from initial concept to detailed design.
- Generation of fluids models (hand calculations & CFD) commensurate with level of design maturity.
- Reviewing of designs making recommendations on how to proceed with regard to drag reduction, air/water flow presentation into test rigs, meeting clean flow requirements etc.
- o Altering designs as necessary to achieve safety, performance or efficiency standards as required.
- Leading and presenting internal & external Design Reviews as required.

• Project Management:

- o Balancing technical projects as business priorities shift (typically a minimum of two projects per person to manage peaks and troughs in workload and availability of data).
- Supporting resourcing and work-sharing to manage work-load across the business.
- o Communicating technical and commercial progress to Senior Management.

• Business Development:

- o Active role in Business Development (BD) activities.
- Lead author of proposals including technical content, project planning and cost estimates.
- o Key customer account holder main point-of-contact.
- o Shared responsibility for winning new business existing & new customers.
- Attendance and visits to customer sites, trade shows and conferences, representing the company.

• Technical Reporting:

- o Lead author of technical reports and documentation.
- o Checking & approval of technical reports and documentation authored by others.

• Communication:

- o Creation of technical presentations and content to aid customer engagement and discussion.
- o Clear written and spoken communication direct liaison with customers and suppliers.
- o Presentations to internal staff and external customers, in-person and virtually.

• Leadership:

- o Mentoring / coaching of Graduates, Engineers & other Lead Engineers, in all regards of professional work, with particular focus on fluids and heat transfer analytical work.
- o Packaging and delegation of work tasks to junior members of team.

• Continuous Personal Development:

Chartered CEng Status assumed for Lead Engineer position - actively working towards an advanced professionally accreditation (i.e. Chartered Manager or Fellow status).