



Job posting: we are looking for a (Senior) Process & Commissioning Engineer (based in Guildford, UK, with extensive international travel)

(SENIOR) PROCESS & COMMISSIONING ENGINEER

The Opportunity

With increased commercial demand for the company's technologies, Modern Water has identified an opportunity to recruit a Process & Commissioning Engineer to work within the expanding Membrane Processes Division. Modern Water has entered into a number of agreements to deploy its technologies in different sectors and regions. The working model is for Modern Water to provide the process design definition and deliverables to EPC partners acting as technology licensees. Modern Water provides process expertise to the EPC partners' commissioning team during commissioning and initial plant operation.

The successful candidate will be based at Modern Water's Guildford office with overseas travel during the commissioning phases of projects. It is expected that the role will split approximately 75% UK based engineering and 25% overseas commissioning.

This opportunity represents the chance to join a business that:-

- Is the established and proven leader in Forward Osmosis and other Osmotically Driven Membrane Process technologies
- Enables the successful candidate to work within an intellectual 'powerhouse' committed to making a real contribution to one of the world's most urgent challenges – water availability
- Takes a multi-strand approach to R&D and product development – there are opportunities for broadening the utilisation of the company's patented technologies
- Offers a clear opportunity to the post-holder to become one of the world's leading authorities in this field – influencing the global importance of this technology

Key Responsibilities

- Provide expert process input to the commissioning and initial operation of membrane based water and wastewater process plants utilising Modern Water's osmotically driven membrane process technology
- Monitor, analyse and report on process plant performance
- Interface with equipment and proprietary chemical suppliers to optimise process plant performance
- Carry out laboratory/bench and pilot scale testing to evaluate and optimise processes.
- Carry out design calculations for membrane based treatment processes including the sizing of vessels, pipework, pumps and valves
- Develop P&IDs in collaboration with Modern Water's Licensees and partners
- Produce project deliverables including Equipment Lists, Instrument Lists, Line Lists, Valve Lists and I/O Schedules to specify technical requirements
- Prepare Control Philosophy documents and Alarm and Interlock Schedules. Review vendor/partner Functional Design Specifications and other ICA documentation to ensure that the control philosophy has been correctly interpreted and developed into appropriate specifications/drawings/code.
- Produce Plant Operating Procedures and O&M manuals and documentation.



- Produce layout and general arrangement sketches and drawings to support the detailed design conducted by EPC partners.
- Review detailed design information and equipment vendor data provided by EPC partners.
- Liaise with equipment vendors to establish appropriate commercially available equipment to meet process duties.
- Develop plant cost estimates based on material take offs.
- Support the sales and business development functions by providing technical input for proposals and attending client meetings.
- Supervise and check the work of other technical personnel including other engineers and technicians
- Participate in design reviews and HAZOP studies as required
- Help to develop the company's in-house software

Candidate Profile

The role will report to either the Principal Process Engineer or directly to the Engineering Manager depending on the successful applicant's experience. A high level of motivation, good interpersonal skills and a flexible 'can do' attitude are essential. The following broadly describes the profile of candidate being sought, however candidates with the right approach will be considered even if they do not have the level of experience indicated:-

- A degree or HND in a relevant discipline, such as chemical, process or mechanical engineering. Candidates are likely to be Chartered Engineers or working towards gaining chartered status.
- Likely to have circa five or more years of experience in a process engineering environment, preferably including demonstrable experience of the design of water or wastewater treatment process plant ideally including membrane systems - technologies may include reverse osmosis and/or microfiltration, ultrafiltration and nanofiltration.
- Practical experience of the commissioning, operation and/or troubleshooting of membrane based process plants would be advantageous including a working knowledge of instrumentation, control and automation equipment and systems.
- A good working knowledge of process control and the ability to develop plant process control philosophies.
- A hands-on, practical approach, organised, confident and articulate – with both colleagues and clients.
- The ability to work unsupervised on own initiative and / or to collaborate effectively as part of a multi-disciplined team.
- Experience of and comfort with the travel requirements in international / overseas projects.
- Good IT skills

The title of Engineer or Senior Engineer will be dependent upon the qualification and experience level of the successful applicant.

Remuneration

A highly competitive package will be offered to the successful candidate with benefits including pension, private healthcare and life assurance.

If you think you fit the role, please send a covering letter and current CV to recruitment@modernwater.co.uk.