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# Example of Mechanical Process Engineer Job Description

Our innovative and growing company is hiring for a mechanical process engineer. If you are looking for an exciting place to work, please take a look at the list of qualifications below.

## Responsibilities for mechanical process engineer

* Broad range of experience in industrial mechanical hardware (winding and chopping equipment, material handling, piping and fluid control, equipment guarding and safety equipment related to process equipment requirements)
* Provide consultation in specialized areas related to efficient design management for treatment plant, pumping station, and bio-system facility planning and design
* Analyze customer contract requirements to be considered in the design and collect all required inputs from internal and external stakeholders
* Prepare the functional specifications for the plant equipment and systems sizing
* Ensure that the design is per applicable rules, regulations codes and standards and per good engineering practices especially about environmental aspects and health and safety of site personal, operators, maintenance personnel and third parties
* Prepare process engineering documentation such as PFD/PID/P&IDs, system and operation description, signal exchange list/ set point list, line and valve lists, control narratives (block diagram, description), mechanical interfaces list, consumer and source lists (electrical, instrument air, waste water etc)
* Ensure a coordinated approach in all areas with the other engineering disciplines and support the project engineering manager and the lead engineer
* Participate to HAZOP-studies, to design reviews and to the design freeze meetings and ensure that corrective actions are closed on time
* Verify the system design based on equipment characteristic and piping arrangement
* Participate in software acceptance test of the plant control system

## Qualifications for mechanical process engineer

* MircoStation, 3D CAD package, EPDM, PLM and SAP
* Establish plans and manage execution per project timing
* Personal awareness of own ability
* Experience with pumping systems, blower systems, multi-media filters, inclined plate clarifiers, pH neutralization systems, chemical feed systems, and other treatment systems commonly used for water and wastewater treatment is preferred, but not required
* Scientific writing skills and ability to format reports in Microsoft Word with figures, tables, for professional presentations to a client are a must
* Trane Trace 700 for load calculations and energy modeling preferred, but considerable experience in other platforms such as Carrier HAP, EnergyPlus, or EQuest is also acceptable