Mazzei Injector Company is currently seeking a CFD and Product Design Engineer based in Bakersfield, CA (remote work option may be considered for exceptional candidates). This position will report to our Director of Research and Development and be responsible for CFD modeling, pump and piping design calculations and process analysis for water and wastewater treatment projects as well as internal research and development. This position will collaborate with our engineering staff to successfully design solutions to our customers’ water and wastewater problems. In addition to job training in advanced uses of CFD and the design and engineering of Mazzei products and processes, Mazzei offers its employees a generous benefits package and competitive base salary.

Recurring Responsibilities:

- Perform CFD modelling and analysis of multiphase flows
- Produce CFD reports for internal development projects and customer sales projects
- Sales support related to CFD, including internally developed papers and articles and trade show presentations
- Process calculations for water/wastewater treatment including piping system design calculations
- Apply Design for Manufacturability (DFM) best practices using CAD/CAE/CAM tools including SolidWorks and AutoCAD and applying manufacturing process limits and tolerances
- Assist in laboratory testing of existing and new products
- Oversee/assist with process trials, advising on product or process modification
- Review/update product performance tables
- Support research and development projects

Internal Project Related Responsibilities:

- Work with engineering and/or sales to develop new products or to modify/improve existing products
- Cost effectively design, build and test prototypes
- Assist in transitioning prototype products to full-scale production
- Supervise outside or secondary equipment testing and validation
- Advise and consult with sales department with respect to sales prospects and ongoing projects, including design changes to Mazzei products.
Desired Skills & Experience:

- Minimum Bachelor’s Degree in Engineering with 3 years of industry experience, preferably in water/process industry and or Master's in Engineering with minimum 1 year of industry experience. Chemical or Environmental Engineering background preferred. Exceptional candidates with higher degrees will be considered.
- Chemical or Mechanical Engineering background preferred but Civil/Environmental Engineers with relevant experience will be considered.
- Strong fundamental fluid mechanics knowledge.
- Applied knowledge of CAD concepts: Solid & Parametric Modeling with SolidWorks and AutoCAD or equivalent, Geometric Dimensioning & Tolerancing (GD&T), Design for Manufacturability (DFM).
- Experience with ANSYS Fluent or equivalent CFD software.
- Strong conceptual mechanical design of water treatment and process equipment and familiarity with hydraulic designs and calculations.
- Authorization to work in the U.S. is a precondition of employment.

Company Profile:

Founded in 1978, Mazzei Injector Company, LLC is dedicated to conducting business with honesty, integrity and responsiveness in the development and application of innovative science-based technologies to make more efficient use of the world’s water resources. Mazzei designs and manufactures a broad line of patented high-efficiency venturi injectors, nozzles, degassing separators, flash mixers, and GDT™ ozone system combinations for use in the expanding fields of water and wastewater.

Job Type: Full-time