

Mechanical Engineer with experience in the design and development of industrial mechanical systems, including fluid handling and dosing equipment. Holds an MSc in Automotive Engineering and a BEng in Mechanical Engineering. Skilled in 3D CAD modelling, assembly design, engineering drawings and technical specification development using Autodesk Inventor and SolidWorks. Experienced in supporting projects across the full engineering lifecycle, from concept design and manufacturing through to installation and commissioning. Adept at analysing mechanical issues, collaborating with multidisciplinary teams and implementing engineering improvements to ensure reliable and compliant system operation.

Technical Skills

- **CAD Tools:** Autodesk Inventor (Advanced), SolidWorks, Siemens NX (Familiar)
- **Engineering & Design:** Mechanical system design, 3D CAD assemblies, manufacturing drawings, GD&T, DFM/DFA principles
- **Engineering Analysis:** Fluid systems, pressure and flow calculations
- **PLM/PDM:** BOM creation and management, version control, PLM workflows
- **Materials & Manufacturing:** Sheet metal, stainless steel, plastics, composites (carbon fibre, fiberglass)
- **Collaboration:** Cross-functional teamwork, design reviews, technical problem solving

Education

University of Leeds – MSc in Automotive Engineering

Leeds, United Kingdom

- Merit degree
- **Key Modules:** Automotive Chassis Engineering, Vehicle Dynamics and Design, Electric and Hybrid Drivetrain Engineering and Connected and Autonomous Vehicles Systems

Coventry University – BEng (Hons) in Mechanical Engineering

Coventry, United Kingdom

- Upper Second-Class degree (2:1)
- **Main Modules:** Solid Mechanics and Dynamics, Thermofluid Mechanics, Design and Sustainability

Work Experience

Chemdose Ltd. – Mechanical Design Engineer

Aug 2023 – Present

- Design and develop mechanical assemblies and fluid handling systems for industrial chemical dosing applications using Autodesk Inventor.
- Produce general arrangement layouts, manufacturing drawings and assembly documentation incorporating GD&T principles.
- Develop technical specifications and select pumps, valves, hoses and other components based on pressure ratings, chemical compatibility and operational requirements.
- Perform engineering calculations relating to pressure, flow and component sizing to ensure stable system operation and accurate chemical dosing performance.
- Provide engineering support during fabrication and installation, preparing assembly drawings and installation guidance for workshop technicians and site teams.
- Support on-site installation and commissioning of dosing systems, assisting with system integration and resolving mechanical installation issues.
- Conduct inspections and pressure testing of pipework and mechanical systems to verify compliance with design specifications and operational requirements.
- Investigate operational issues such as pulsation, vibration and pressure instability in dosing systems, identifying root causes and implementing engineering design improvements to restore stable system operation.
- Implement design modifications to improve system reliability and maintainability, including pipework layout changes, additional mechanical supports and appropriate hose sizing to reduce vibration, improve pump priming performance and optimise powder transfer efficiency.

Magnus Aircraft Ltd. – Mechanical Engineer Trainee***Jul 2021 – Sep 2021***

- Modelled aircraft components and assemblies in 3D CAD and produced detailed manufacturing and assembly drawings.
- Assisted in structural layout design using composite materials to optimise strength-to-weight performance.
- Supported prototype assembly and mechanical testing activities to verify component performance and structural integrity.

Wade Bau Ltd. – Project Management Intern***Apr 2020 – Sep 2020***

- Monitored and controlled project deliverables and construction progress
- Oversaw material procurement and quality assurance in construction projects
- Supported planning and coordination between site teams and clients
- Assisted with preparation and negotiation of project tenders
- Prepared and presented project status reports to stakeholders

Academic Project**Autonomous Campus EV (University of Leeds, 2023)**

- Developed 3D CAD models in SolidWorks for chassis layout.
- Performed feasibility calculations for energy demands and drivetrain sizing.
- Collaborated in a multidisciplinary team to deliver a complete concept design.

Certification and Professional Development

- CCNSG Safety Passport – ECITB
- National Water Hygiene Card – EUSR

Languages

- English - Fluent
- Hungarian - Native