

VLADIMIR ŠPANIĆ

Mechanical Engineer, mag.ing.mech.

Topolovečki priključak 2, 10040 Zagreb, Croatia

+385 91 4040 809

✉ vladimir.spanic01@gmail.com

🌐 www.vladimir-spanic.com



PROFESSIONAL STATEMENT

I am a 32 years old mechanical engineer with a strong analytical approach, proven communication and management skills. Experienced in complex construction design, project leading, test plan development, cost evaluation, automotive electric and hybrid powertrain and gearbox design, strength calculations and structural analysis. Highly passionate about automotive engineering and engineering design since childhood. Challenged by engineering problems and thrilled about solving problems. Love to create and maintain a positive work environment and always in pursuit for improvements and new challenges.

WORK EXPERIENCE

- Dec - 2022 on going** **Engineer Mechanical Design/ Hudek strojogradnja d.o.o.**
- Development, design and layout organization of the automated production lines in the wood process industry
- Creating the multidisciplinary technical solutions that include pneumatics, sensors, electric drivetrains, conveyers, transporters and the complex sorting machines
- Aug - 2022** **Consultant E-Powertrain/ for a company based in United Kingdom**
March - 2023
- Development of the E-powertrain with a planetary transmission for a client based in UK
- Feasibility studies and concept evaluation
- Detail component calculation with a use of KISSsoft, FEA design verification, CAD detail design
- Project management and communication with suppliers
- May - 2021** **Project manager/ KFK d.o.o.**
Jun - 2022
- Project management of the production of the complex facade elements and metal constructions for projects based in London
- Management of the suppliers to follow project programs
- Coordination with engineering, production, assembly, purchase and packing temas
- Monitoring and organization of production, delivery of metal structures to the construction site
- Nov - 2020** **Engineer Mechanical Design for Product development & Production/ Tehnoplast profili d.o.o.**
May - 2021
- Development and design of the tools for the deformation shaping and sheet metal design of aluminium and steel sheets - design and drawing creation
- Technical solution development of the metal prefabricated buildings - ventilated facades and structural wall elements, collaboration with 3LHD design office based in Zagreb
- Jan - 2020** **Engineer Mechanical Design for Chassis & Powertrain development/ Toyota GAZOO Racing Europe GmbH**
Apr - 2020
- Development, design and price estimation of a Gearbox oil pump for a small series production
- use of ERP and PLM systems
- design optimisation with F1 experts as a support for superior performance, cost reduction by 300%
- Oct - 2016** **Powertrain engineer - project team lead/ Rimac Automobili d.o.o.**
Sep - 2019
- Development, construction and calculations of electric powertrains and transmissions, manager of the two-speed transmission development project
- Development of the drivetrain for the RIMAC NEVERA hypersport electric car
- Cooperation and work with concept engineers, transmission development experts and mechanical and electrical engineers, supplier contact
- Preparation for serial production, BOM creation, PFA and PDFMA analysis
- Development of transmissions and powertrains for serial production
- Creation of feasibility studies and concept design of electric drives for a world famous car manufacturers
- Development of the test procedures - vehicle on the road and track

EDUCATION

- 31/Mar-2017** **Master's degree, Mechanical Engineering/University of Zagreb**
Design of a variable gearbox
- 24/Sep-2014** **Bachelor's degree, Mechanical Engineering/University of Zagreb**
Design solution of machine for welding tanks

SKILLS

Professional	Personal
Catia V5, 3DExperience	English
MatLab	German
Abaqus FEA	Creative
MASTA; KISSsoft	Innovative
Pro Engineer	Team Work
Soildworks	Project Lead
MS Office, MS Project	
Inventor	
Auto CAD	Hobbies Freshwater & Saltwater Aquaristics
C++, Python, Kotlin	Body Workout
Driving license Category B	

PROJECTS

Engineer Mechanical Design/ Hudek strojogradnja d.o.o., Croatia

Development, design, layout and drawing creation of the automation lines for the wood processing industry. Detail design of sorting machines, conveyers, transporters and auxiliary equipment. Project management, supplier contact and cost estimation. Construction design and creation of drawing documentation with a use of Solidworks.

Consultant/for client from Great Britain

Development of the electric drive with planetary transmission for electric sports vehicle and cargo transport vehicle. Communication with suppliers and project management. Construction design and calculation of the drive elements, creation of project documentation with use of KISSsoft, MASTA, Solidworks and Catia V5.

Project manager/KFK d.o.o., Croatia

Leading the production of facade elements and metal structures for projects in London. Monitoring and organization of production, supplier management and delivery of the structures to the construction site. Communication with business partners, design engineering and project directors in Germany.

Engineer Mechanical Design for Product development & Production/ Tehnoplast profili d.o.o.

Tooling design for plastic metal forming of a steel sheet, design of a aluminium and steel sheets covers, development of the technical solutions for ventilated facades and metal prefabricated buildings and constructions with use of Solidworks.

Engineer Mechanical Design for Chassis & Powertrain development/Toyota Motorsport GmbH, Germany

Oil pump for hypercar gearbox oil system - housing development of a triple oil pump in one housing, price estimation for small series production with use of Catia V5.

Powertrain engineer/Rimac Automobili for famous OEM based in Affalterbach, Germany, German Tier 1 consultant as support

Electric Powertrain concepts; dual stage gearbox with planetary output; two speed gearbox with two planetary systems; two speed gearbox with planetary system and final drive, complete BOM creation and price estimation with use of 3DExperience/Catia V5 and KISSsoft

Powertrain engineer/Rimac Automobili for OEM based in Italy, German Tier 1 consultant as support

Project team lead for high power two speed transmission - prototype development and production, high power front and rear gearbox for hypercars, calculation and analysis of internal components with use of Catia V5/3DExperience, MASTA, KISSsoft

Powertrain engineer/Rimac Automobili famous OEM based in Igolstadt, Germany

Electric powertrain feasibility study – high torque planetary transmission with use of 3DExperience/Catia V5 and MASTA

Powertrain engineer/Rimac Automobili for famous OEM based in Boulogne-Billancourt, France

Electric powertrain feasibility study (two electric motors, two inverters and two high speed planetary gearboxes) with use of 3DExperience/Catia V5 and MASTA

Powertrain engineer/Rimac Automobili for famous OEM based in Seoul, South Korea

Feasibility study of electric powertrain with two electric motors and two single speed planetary gearbox with use of 3DExperience/Catia V5 and MASTA

Junior Powertrain engineer/Rimac Automobili for hypercar OEM

Rear gearbox, internals and housing analysis, carbon clutch slipping analysis; steering system redesign with bevel gears, system improvement and production with use of 3DExperience/Catia V5, MASTA and KISSsoft

Junior Powertrain engineer/Rimac Automobili for famous OEM based in Stuttgart, Germany

Electric powertrain feasibility study – front axle (two electric motors, two inverters and two single stage planetary gearboxes); rear axle (two motors, two inverters and single speed two stage gearboxes in one housing with use of 3DExperience/Catia V5, MASTA and KISSsoft

Student intern/Rimac Automobili

Two speed synchromesh gearbox for electric hypercar – design, development and prototype production with use of MatLab, KISSsoft and Solidworks