

Oskar Wróbel

DESIGN ENGINEER

Tel: 539 620 635

Email: o.wrobel@outlook.com

SKILLS

Project management

Team management

Heat pumps

Photovoltaics

Hydrogen fuel cells

Gas boilers

CE Certification

Sharepoint

Office365

Driving licence cat. B

LANGUAGES

English – C1

EDUCATION

MSc – Renewable Energy Sources

BSE – Heat and Process Engineering

HOBBIES

Programming

Cybersecurity

Aviation and flight simulators

Summary

Experienced engineer specializing in classic and renewable energy sources. More than 10 years of experience in design projects for gas boilers and heat pumps. Solo project management from preliminary design to implementation in production. Project team leader in the field of heat pumps

Experience

2021–now *Project leader Heat Pumps* | Termet S.A.

2022-now original heat pump design at Termet S.A.

- report about state and trends of heat pump market (2022)
- Conceptual and preliminary design of heat pump type series
- development of requirements based on the PED, LVD, EMC and Ecodesign directives
- modification and optimization of heat pump control algorithms
- supervision of the work of the engineering team
- close cooperation with suppliers of key components
- design and implementation of refrigeration chamber and heat pump testing workbench (including tooling and custom software)
- conceptual design of heat pump manufacturing process (process stages, workbench instructions, measuring equipment)
- design and supervision of heat pump laboratory tests
- assistance in certification tests of heat pumps

2023 hydraulic module for heat pumps (T-BOX, T-BLOCK)

- supervision of the work of the engineering team
- analysis of similar products available on the market
- selection of components and cooperation with suppliers
- laboratory tests
- CE certification according to EMC, LVD directives

2021-2022 Technical documentation of Termet Heat Gold and Termet Heat Platinum heat pumps

- formal and laboratory verification of operating parameters declared by OEM manufacturer (EMV, LVD, Ecodesign directives)
- design of instruction manual and technical documentation (as required by Ecodesign directive)
- close cooperation with OEM manufacturer in implementation of cascade operation (requirements and testing)
- verification of the proper operation of integrated system: heat pump ↔ HP Multi external controller
- implementation of the key functionalities giving market advantage (cooperation with gas boiler, cascades, hybrid operation)

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Experience (cont.)

2009–now *Design Engineer* | Termet S.A.

2012-2022 Condensing gas boiler Integra series

- Innovative design of a wall-mounted boiler with a built-in tank, the first construction of this type on the Polish market
- Four generations of boilers with increasing market share
- Design documentation in accordance with ISO 14001 (FMEA, risk analysis, product validation)
- 3D documents for marketing department (full/simplified 3D models, professional 3D renderings)

2013-2022 Condensing gas boiler Solid series

- Floor-standing boiler with built-in 100 l tank
- Three generations of boilers implementing the state of the art heating technology solutions
- Design documentation in accordance with ISO 14001 (FMEA, risk analysis, product validation)
- 3D documents for marketing department (full/simplified 3D models, professional 3D renderings)

2020-2021 System Termet Comfort

- Testing of the hardware and software application layers of the Termet Comfort System
- QA tests (bug reporting, functionality analysis and developing system corrections)
- proposals for additional functionalities that expand the capabilities of the Termet Comfort module

Education

2012 Wrocław University of Science and Technology

Renewable Energy Sources – Master of Science in Engineering
Courses

- Heat pumps
- Solar Energy Conversion Systems
- Fuel Cells and Hydrogen Production

2009 Wrocław University of Science and Technology

Heat and Process Engineering – Bachelor of Science in Engineering
Courses

- Refrigeration and Heat Pumps
- Combustion and fuels
- Thermal flow engines