





Mission

“Sustainable Power for the Future”

Maskinel specializes in architecture of high-power systems in the megawatt range, focusing on wind, solar, thermal, wave, and hydrogen energy sectors.

Maskinel’s commitment to efficiency is driven by advanced control systems and carefully chosen hardware, ensuring that power is delivered with maximum effectiveness and every “drop” of generated energy is utilized.



Vision

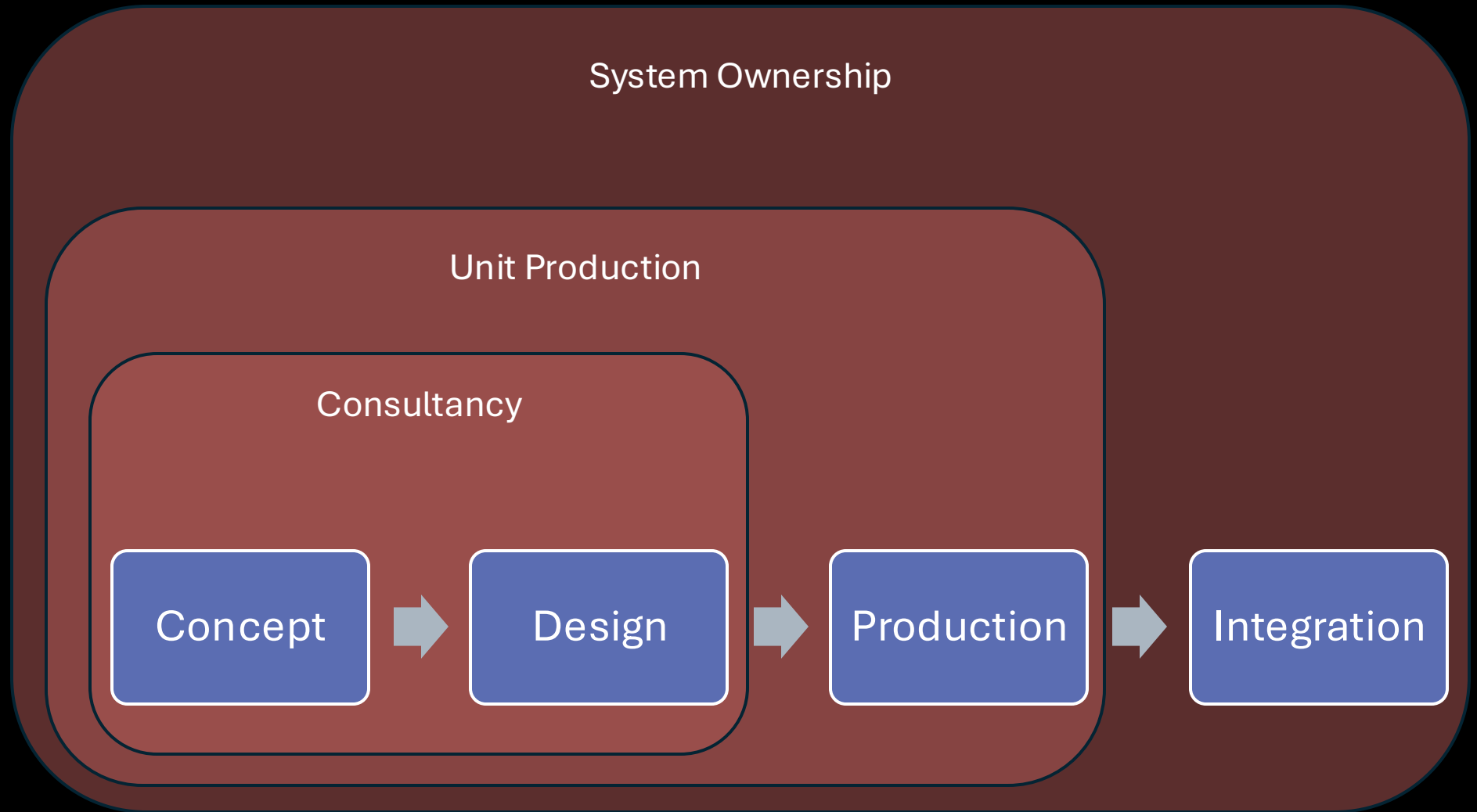
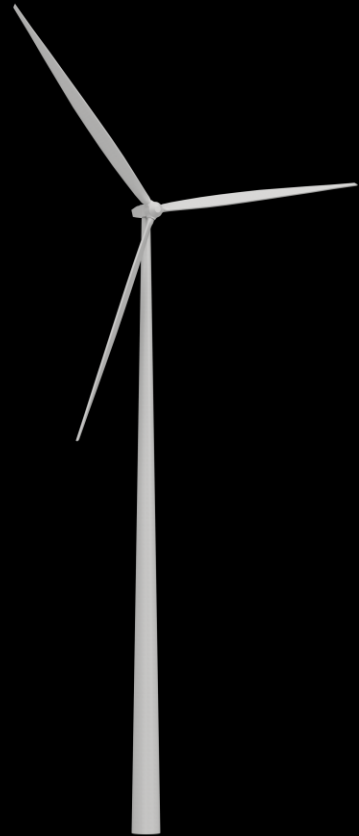


Maskinel aims to revolutionize the power sector with the development of modular Discrete Intelligent Control Equipment/Systems (DICE), designed to adapt to any power and control demand.

Each DICE unit embodies collective intelligence, working independently while seamlessly combining with others to create powerful, adaptable energy systems.

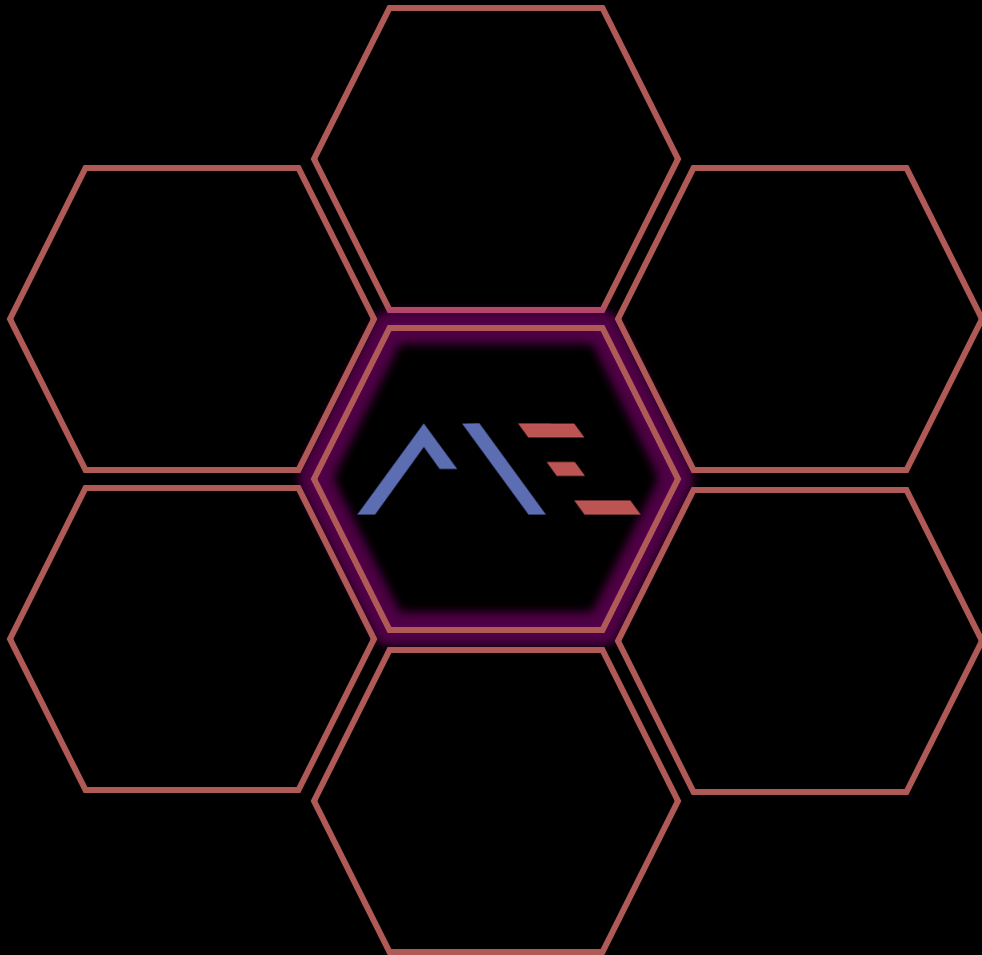


Partnership paths with Maskinel

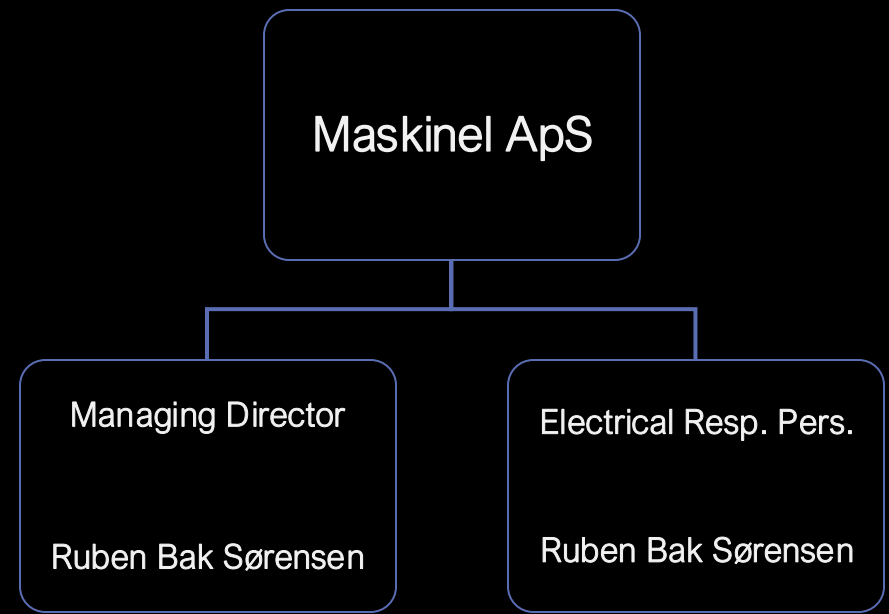




Competences

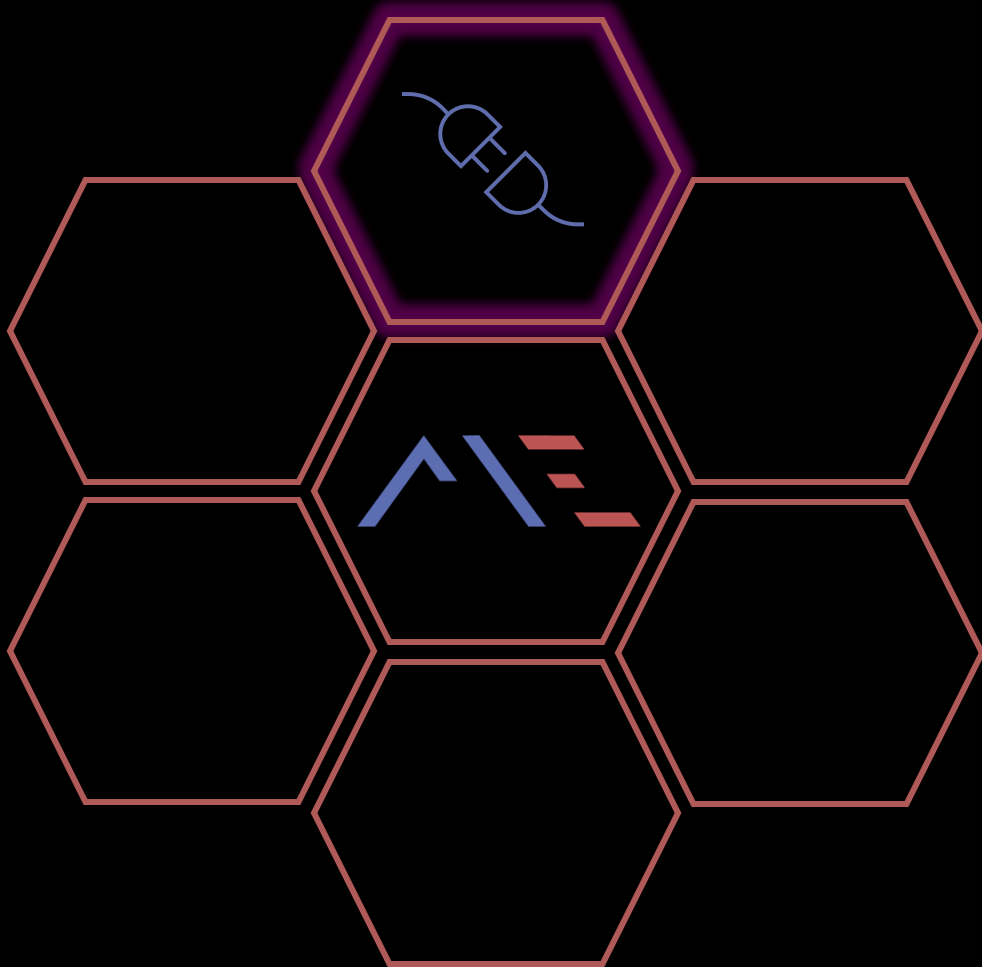


Maskinel ApS is founded in 2021 being a consultancy company. It is moving towards a technology provider and is 100% owned by Maskinel Holding ApS, with both companies being fully owned by Ruben Bak Sørensen. Two FTE and can scale up quickly (20+ FTE) through extensive network in industry and academia.





Competences

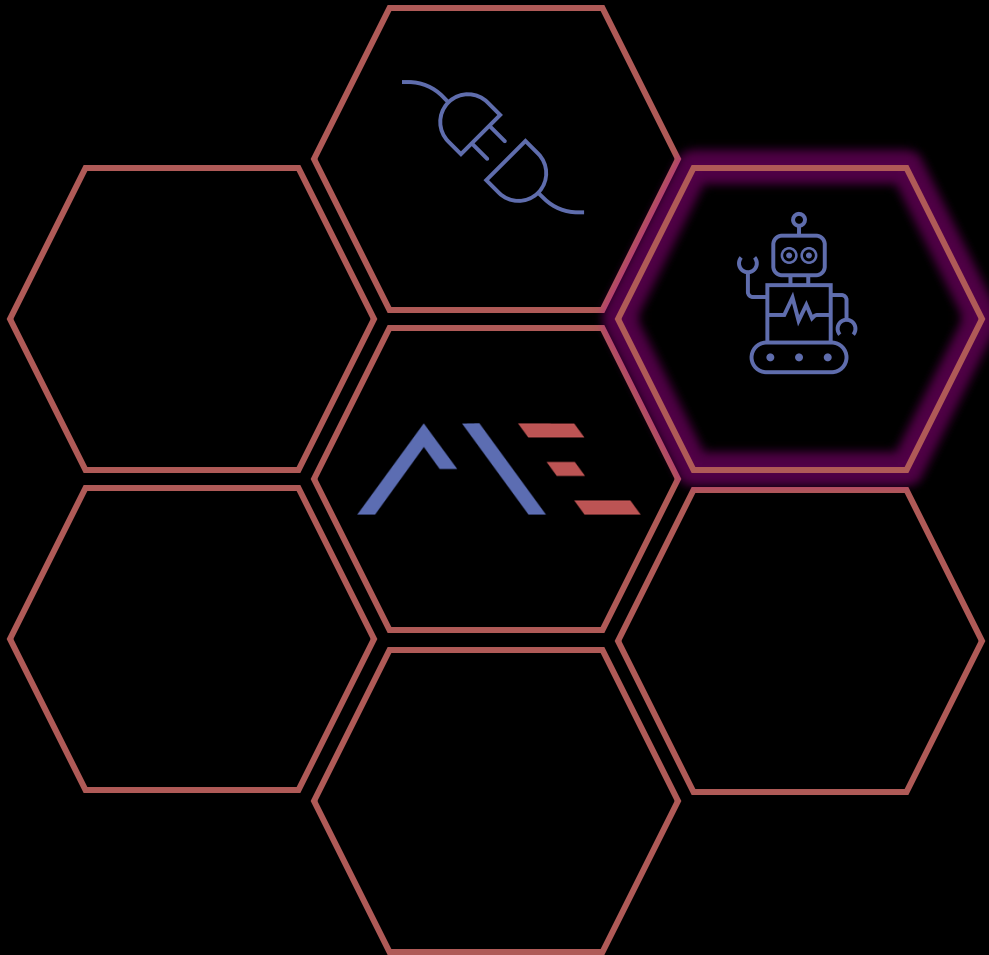


Authorization to connect LV equipment EFUL-89728 and a UL508a MTR Certificate. Complying with IEC and/or UL.

- Grid compliance
- Fault Ride Throughs
- Filters
- High current, high voltage protection
- Simulation & load-flow studies



Competences

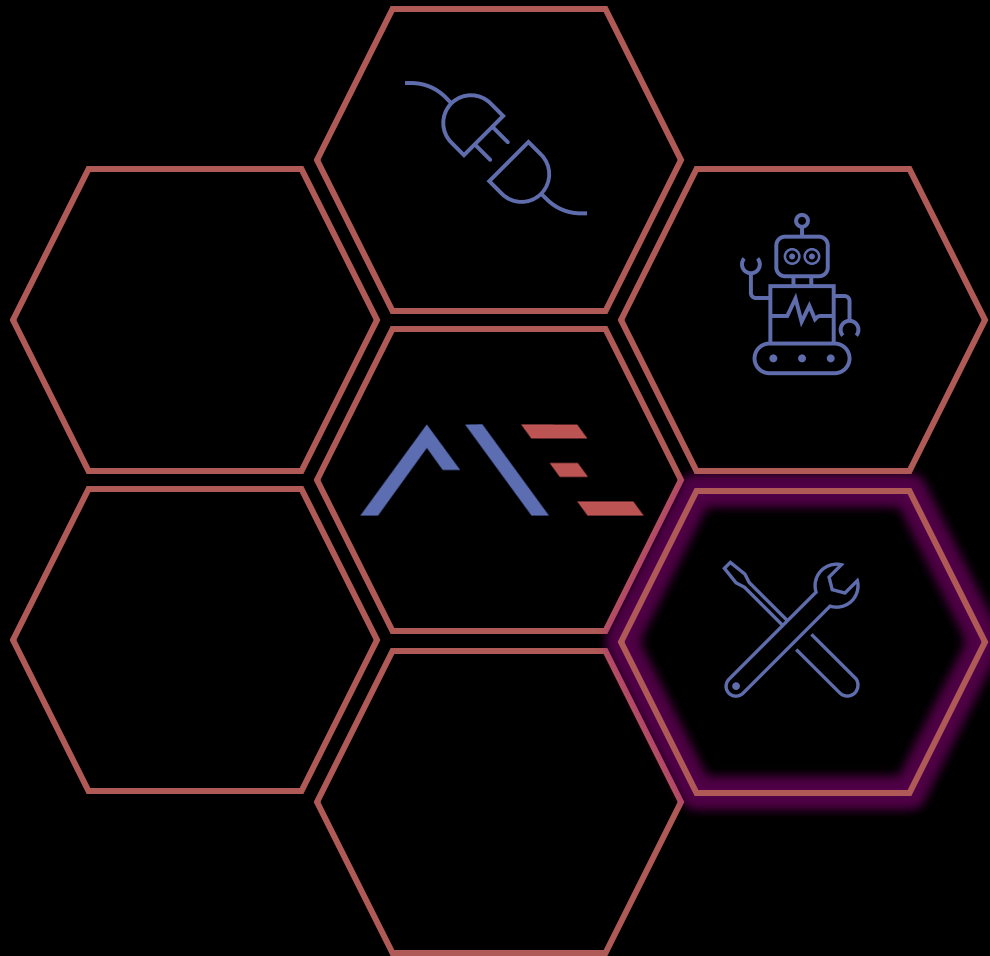


Automation and control systems in time and frequency domain. Controllers in PLC, soft PLC or even PC-based solutions.

- Actuator controls
- Generators/motors
- Sensors
- Networks
- Scada and Enterprise



Competences

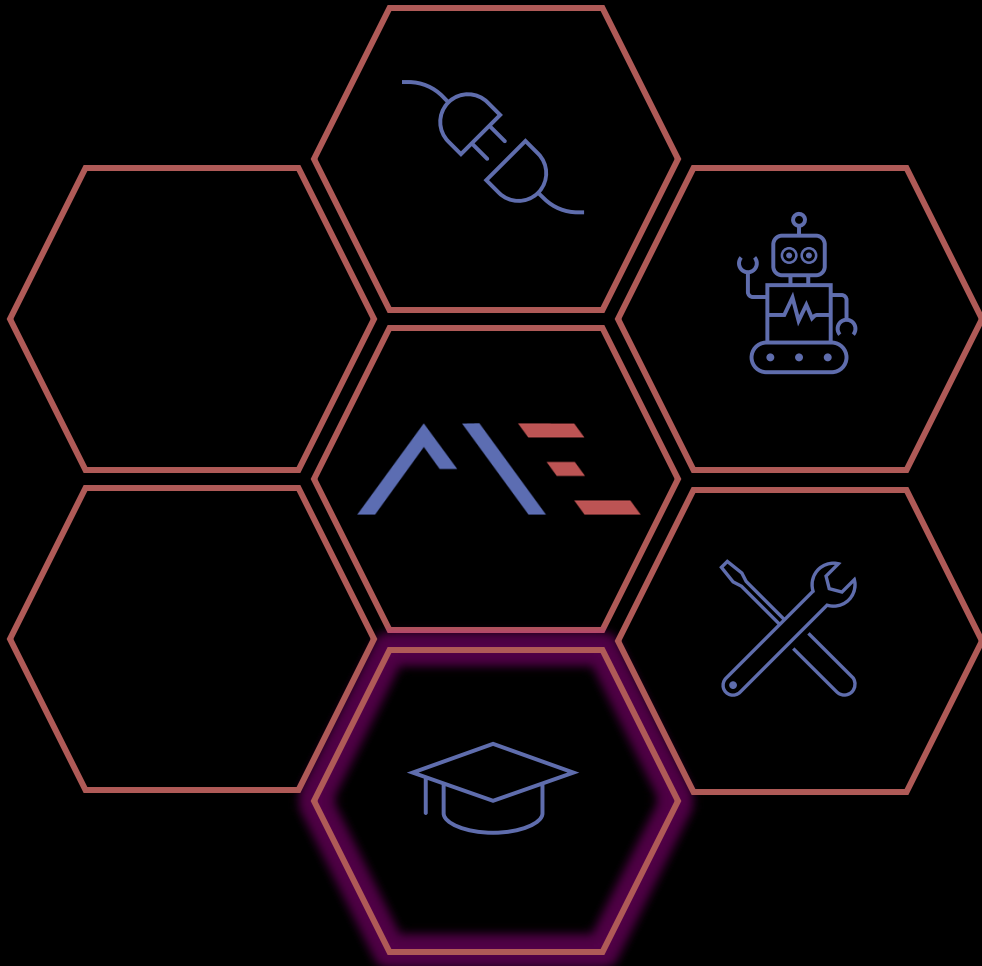


Craftmanship to install, service, maintenance and diagnostics of electrical equipment

- Solar panels
- Cabinet installation
- Cable routing
- Cooling
- etc



Competences

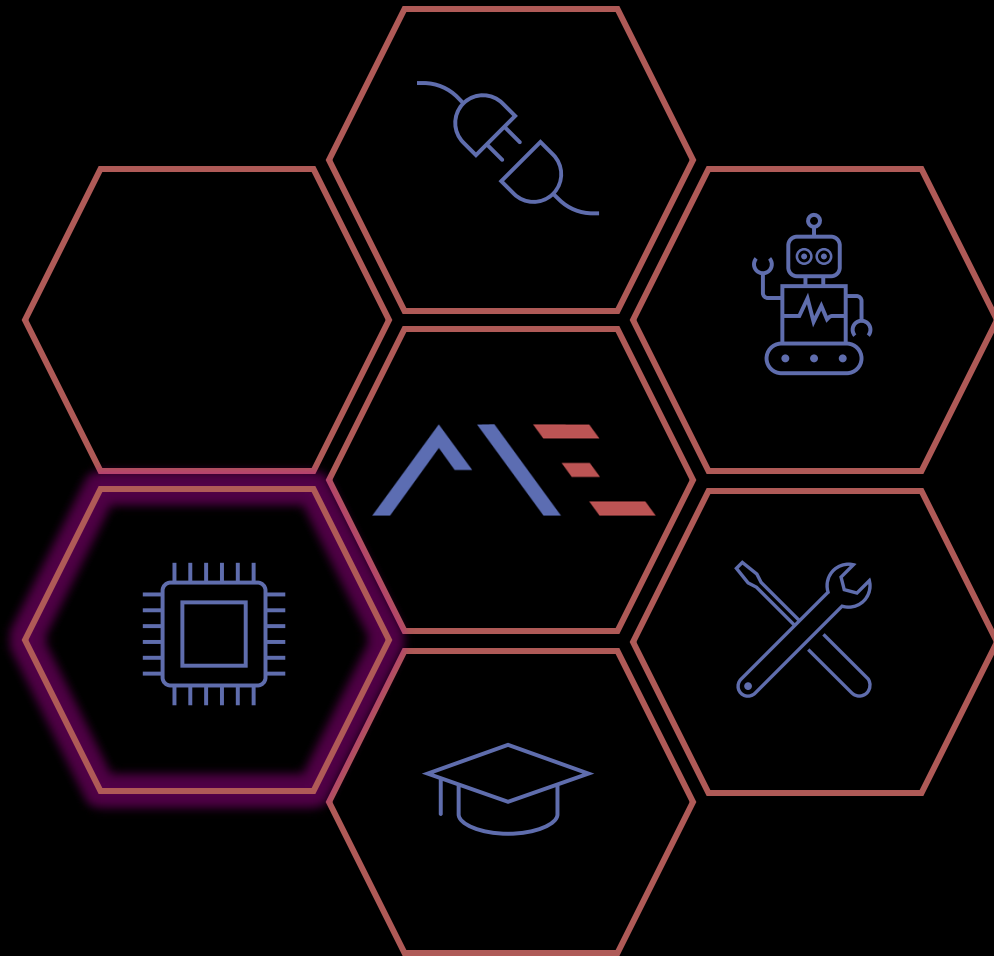


Connected to University of Southern Denmark with a close collaboration to research and lecturing

- Full access to knowledge databases like IEEE, ScienceDirect etc
- PhDs, Post-doc and university projects
- AU, DTU and SDU



Competences

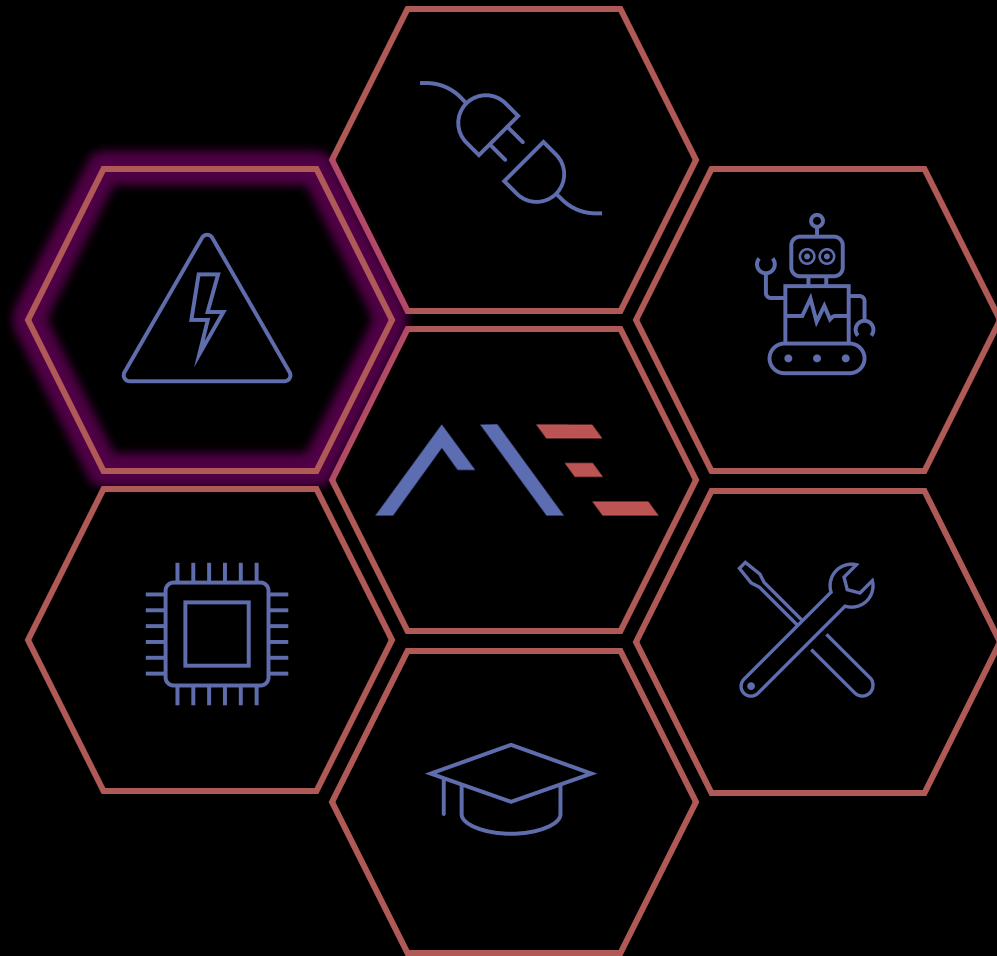


Design, simulate, layout and programming of high-speed power circuits and sensing with high bandwidth.

- PCB
- DC-links
- Transistors (IGBT, SiC, GaN)
- Drivers



Competences



Working in hazardous areas and live-work on systems.

Test of systems with a high complexity and extensive reporting and evaluation of systems



Collective Intelligence

Plant Optimization



Collective intelligence in plant operations uses data from sensors to optimize performance, increase power output, and enable predictive maintenance increasing OEE.

A proactive approach reduces maintenance costs, and extends equipment life, making plant operations more efficient and resilient.



Power Systems

Conversion-X



Power-to-X, X-to-Power, AC/DC, DC/DC, AC/AC – it does not matter! Maskinel calls it all **Conversion-X**

Maskinel prefers to develop modular power equipment that are flexible in power rating and controllability, focusing on an intuitive and simple cooling principle, mechanical installation at minimum and full range of voltage control. This enables a wide usage of one single modular block (like a LEGO system), which can be produced in high quantities.

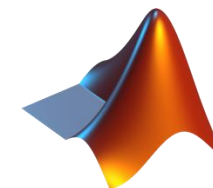
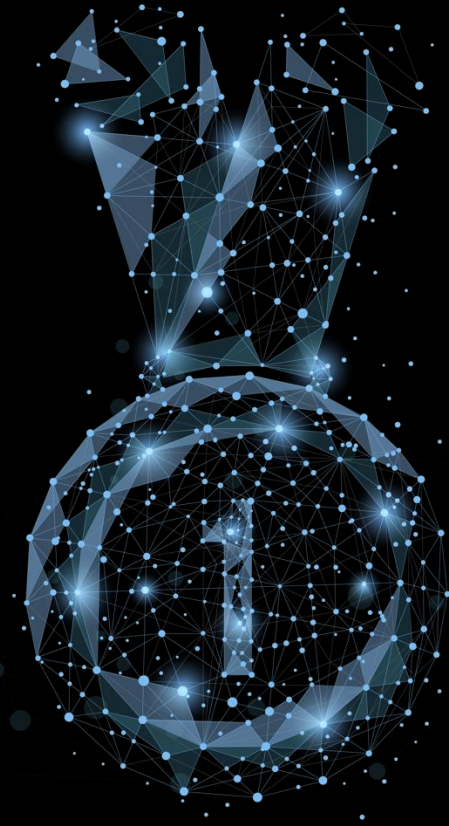


Competitive Mindset

Be best in class and strive for perfection

Maskinel ensures a correct design by analytical calculations, simulation in software and verification by testing

- Best electrical drive-trains
- High quality documentation with transparent design approach
- Right tool for the job (HW or SW)



Contact



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