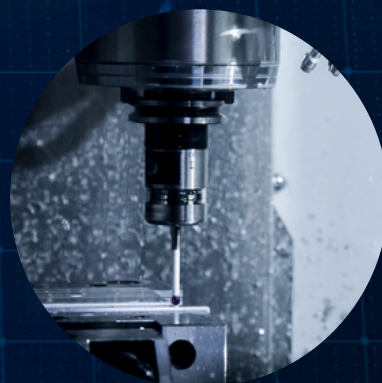
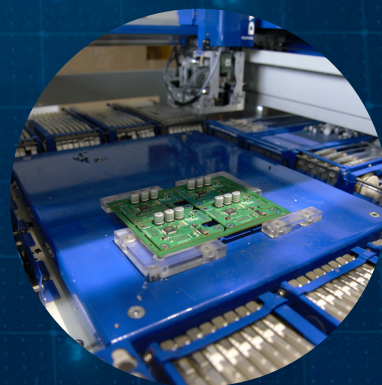




DESIGN & MANUFACTURING

Electronics - Mechanics - Robotics



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www.dkinnovation.fr

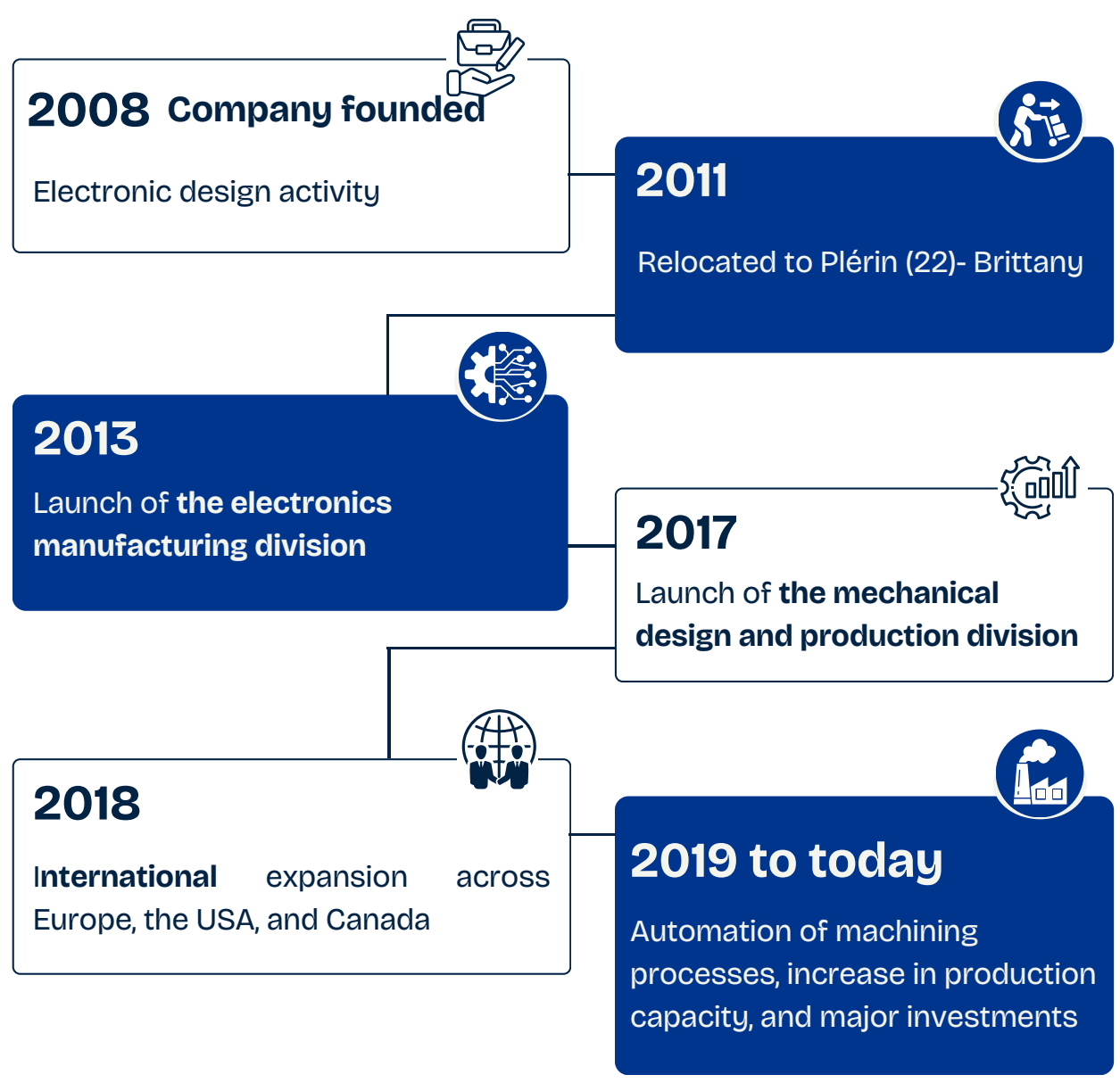


Contact@dkinnovation.fr

ABOUT DK INNOVATION

DK Innovation supports multi-sector projects in electronics, mechanics, and robotics. We operate mainly in **France, Europe, and North America (USA/Canada)**.

Our engineers and technicians are specialized in electronic, mechanical, and robotic design and production, as well as industrial computing and embedded energy. Our mission is to bring you our expertise through tailor-made services, ranging from one-off assignments to the development of comprehensive, reliable, and high-performance industrial solutions.



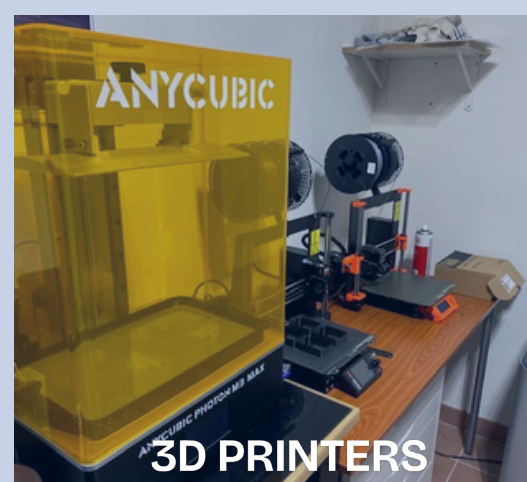
OUR MULTIDISCIPLINARY KNOW-HOW

Comprehensive expertise, from concept to manufacturing

Over the years, **DK Innovation** has developed new skills and invested in **high-performance design and manufacturing resources** to offer its clients a comprehensive, responsive, and high-quality service — all handled directly from its workshops in Brittany.

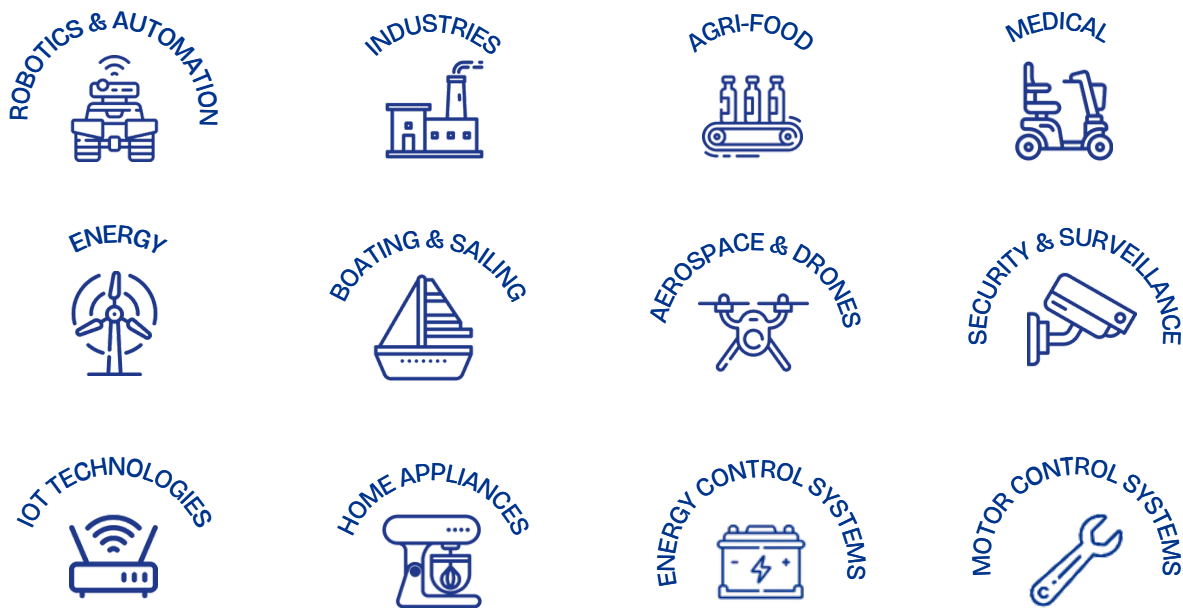
We provide **end-to-end support**, including:

- ◆ **Engineering and design:** electronics, mechanics, and software
- ◆ **Prototyping and industrialization**
- ◆ **Electronic and mechanical production**
- ◆ **3D printing and rapid prototyping**
- ◆ **Testing:** performance and lifespan
- ◆ **Maintenance & in-service support (ISS)**



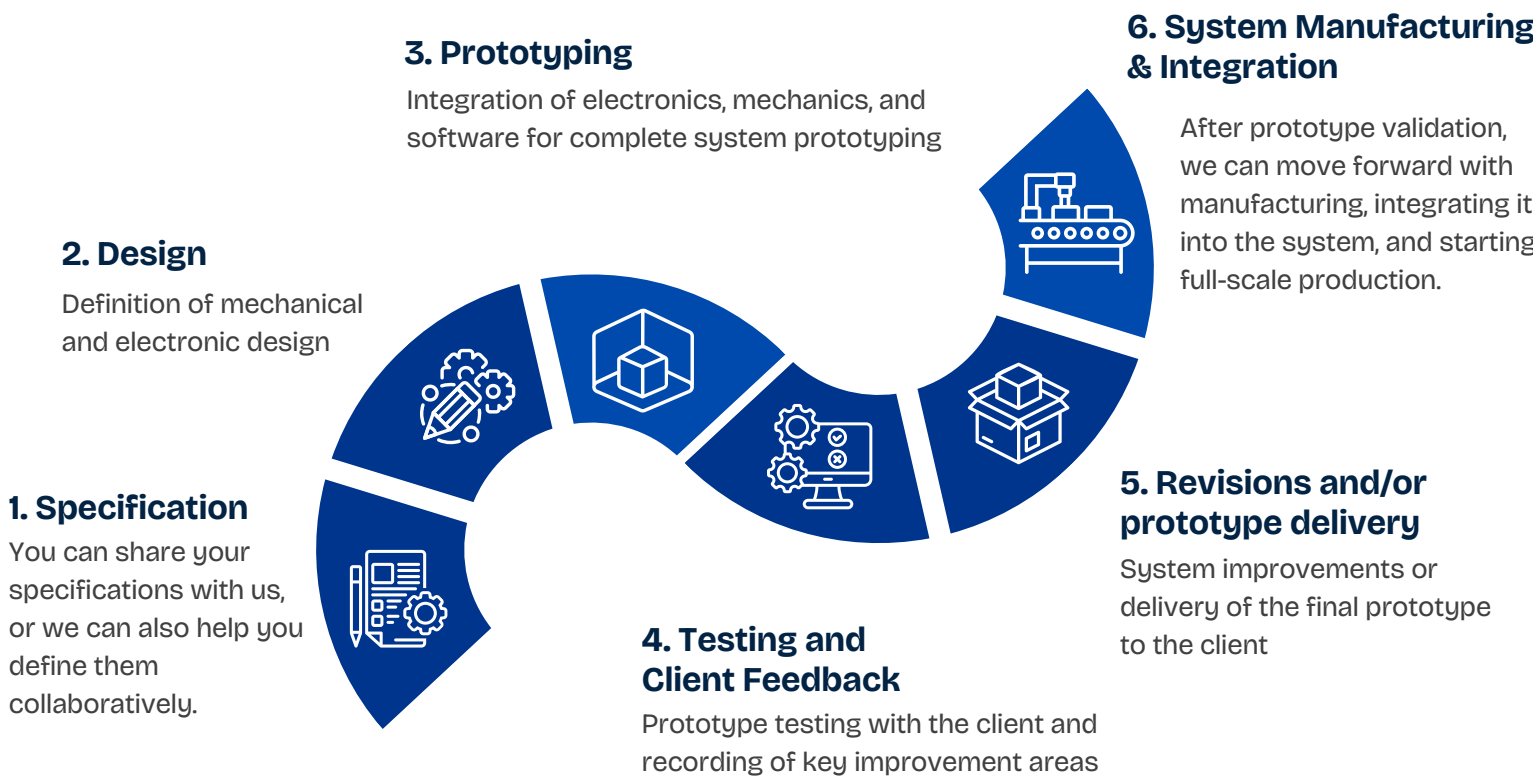
SECTORS OF ACTIVITY

DK Innovation has been supporting multisector projects for years.



WORK PROCESS

DK Innovation supports you through every phase of your project — **from the initial idea to the production of a finished, market-ready product** — and can step in at any stage, according to your needs.



ELECTRONIC DESIGN

Our expertise in electronic design allows us to drive R&D efforts aimed at improving or developing the electronics within your innovative products.

MECHANICAL DESIGN

Our engineers assist you with the mechanical design of your products. We handle the design and machining of mechanical assemblies to seamlessly integrate your electronic boards and systems, resulting in a fully finished product.

SOFTWARE DESIGN

Our engineering team designs and codes the algorithms powering your electronic systems.

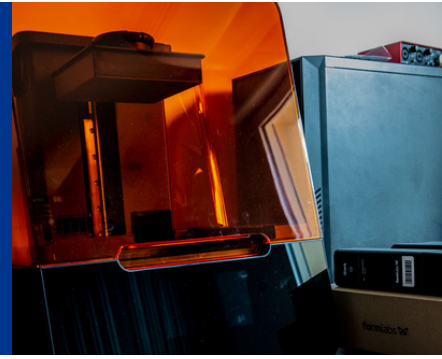


DK Innovation supports your engineering and R&D projects from start to finish. Our in-house teams design and develop your electronic systems, mechanical assemblies, and embedded software — all under one roof. This integrated approach ensures efficient collaboration, fast turnaround times, and the highest level of confidentiality.

MANUFACTURING EXPERTISE

3D PROTOTYPING

Equipped with an in-house 3D printing workshop, DK Innovation offers the printing of 3D CAD-based models (using filament and resin) with high-performance materials that are both mechanically resistant and durable over time.



INDUSTRIALIZATION

The industrialization phase transforms the electronic prototype into the final product. To reduce costs and minimize iterations, DK Innovation prepares for industrialization concurrently with the design phase.

ELECTRONIC PRODUCTION

DK Innovation is equipped with a complete SMT production line. We manufacture your electronic boards in-house. Our high-performance, automated equipment allows for efficient series production with optimal quality control.



MECHANICAL PRODUCTION

DK Innovation has its own machining workshop on-site (turning and milling), enabling the design and series production of mechanical parts and assemblies.

“Our full in-house expertise allows us to move from concept to production in record time, thanks to our integrated machinery and exceptional responsiveness.”

PRODUCTION EQUIPMENT



CMS LINE – ELECTRONIC PRODUCTION



MACHINING CENTERS & MECHANICAL PRODUCTION



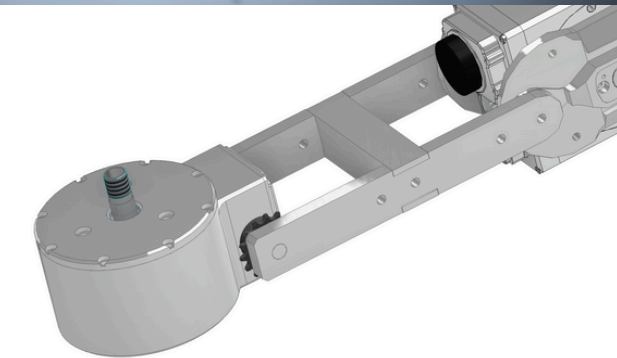
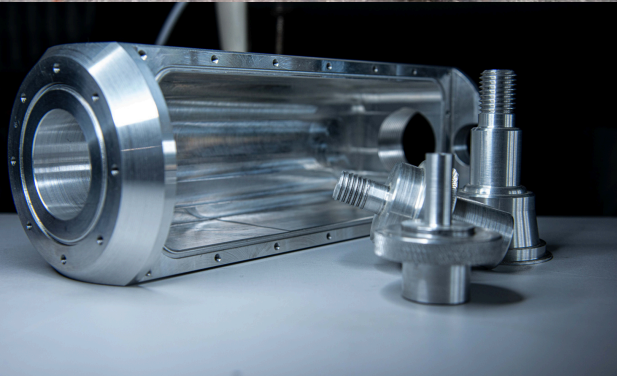
3D PRINTING WORKSHOP

Infrastructure Robotics

Design and mass production project of water pipe robots and their ecosystem for a large group, American. Deployment of nearly 300 robots on the ground every day in North America and Europe.

Missions completed :

- Electronic design
- Mechanical design
- Embedded software development
- Prototyping
- Industrialization
- Mass production (since 2018)
- Ongoing upgrades and technical follow-up



Robotic Tooling Development

Project to design robotic work tools for use by a water pipeline inspection robot, including electric pipe milling. Patented devices.

Missions completed :

- Electronic design
- Mechanical design
- Embedded software development
- Prototyping
- Pre-industrialization & pilot run
- Small-batch production (pre-series)
- Mass production
- Ongoing updates & system evolution follow-up



Electric assistance for trolleys

Development and mass production of motorized wheels, with push and brake assistance, intended for industrial trolleys providing many advantages such as the elimination of pulling forces, adaptability to existing trolleys, retractable system and a separate tractor.

Missions completed :

- Electronic design
- Mechanical design
- Software design
- Prototyping
- Industrialization
- Mass production
- Monitoring of developments

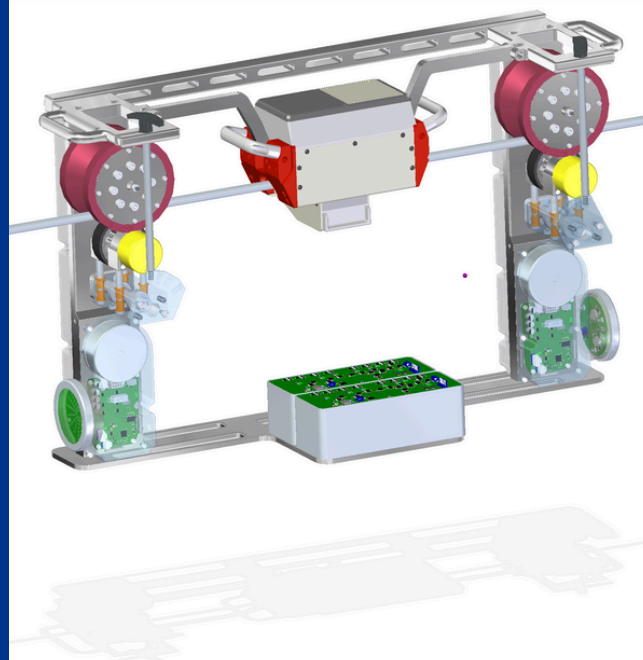
Power line inspection robot

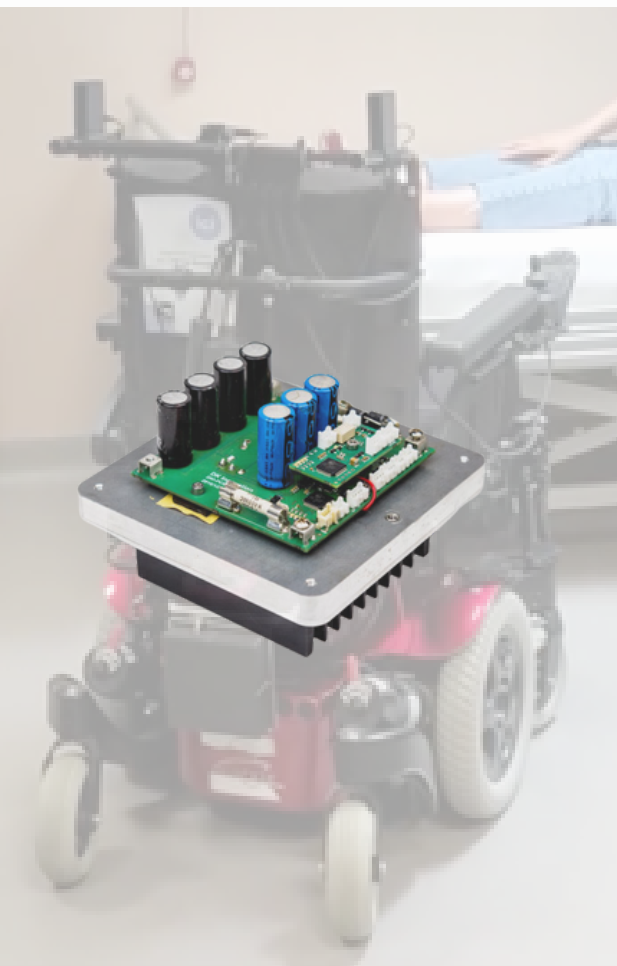
Development and manufacture of a tractor robot for the inspection of high-voltage power lines and ski lifts.

Manufacture of the robot in several copies and versions with technical developments, intended for a large French industrial group.

Missions completed :

- Electronic design
- Mechanical design
- Software design
- Prototyping
- Manufacture of several versions of the robot.





Induction charger

Design of induction charging systems for several projects, particularly in the paramedical sector for electric wheelchair recharging.

Development and manufacture of ground and embedded parts in the form of a kit adaptable and integrable to the device.

This type of solution is designed to be easily adaptable and customizable to other applications.

Missions completed :

- Electronic design
- Mechanical design
- Software design
- Prototyping
- Certification

Battery park and BMS system

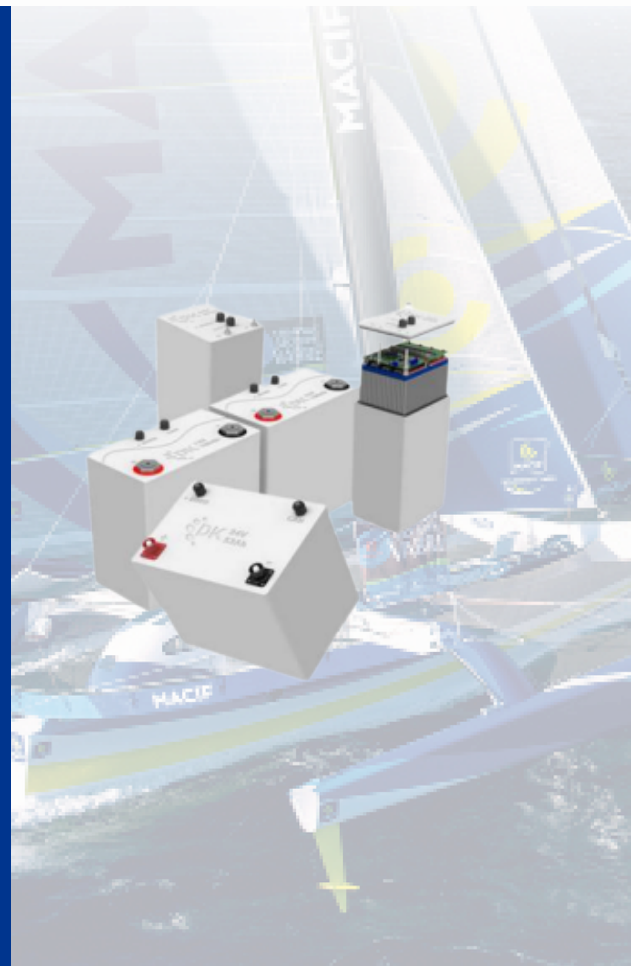
Design and manufacture of custom battery parks/power bank and their BMS.

Our battery parks have equipped several offshore racing boats in a constrained environment, subject to severe conditions, they have been extensively tested by going around the world several times.

We also design stationary systems to meet large industrial needs.

Missions completed :

- Electronic design
- Mechanical design
- Software design
- Prototyping
- Manufacturing





Carbon monoxide detector

Design and manufacture of a low consumption carbon monoxide detector.

This device is intended for consumer applications.

Product designed for a French industrial specialist in the field of fire safety, environmental monitoring.

We have been able to design other detectors for various applications.

Missions completed :

- Electronic design
- Mechanical design
- Software design
- Clearance
- Preparation for mass production

Electronic control system

Design and manufacture of an electronic control system for Flyboards.

We accompanied the designer of the Flyboard in the design and manufacture of the first versions of the electronic equipment of the Flyboard.

These Flyboards have been produced in large series and deployed worldwide.

Missions completed :

- Electronic design
- Mechanical design
- Software design
- Industrialization
- Mass production

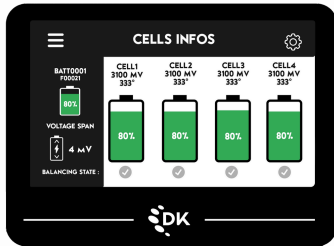


OUR PRODUCTS

DK Innovation has also designed specific products on a modular basis, allowing adaptation to the requirements of each customer. Each customization request can be studied accurately.

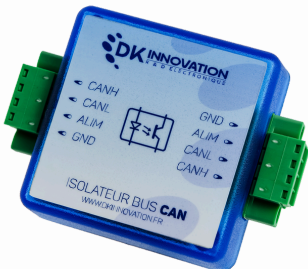
CAN VIEWER

It is part of the energy management ecosystem DK Innovation. It allows to display information related to the batteries, de-lester, alternator regulator or other systems present on the CAN network. This device allows for monitoring of battery voltages and the cells that compose them.



CAN BUS ISOLATOR

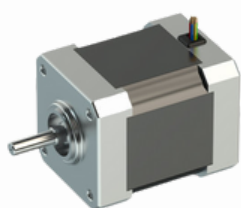
It allows to connect between them two CAN buses whose electrical potentials or communication speeds are different. In the case where two devices do not communicate at the same speed, it can be placed between these two devices to make them communicate.



SECURITY MODULE

The security module is an essential organ of BMS DK Innovation. It allows to power the BMS of one or more batteries from the connection "+BORD" and CAN connections. This module brings together all the information of the different batteries, sent to the bus to manage the stages of charging and discharging thus avoiding any deterioration of the batteries in case of under-charge and overload.





DRIVER BLDC

Our standard (or custom) BLDC/DC controller allows the control of motors from a few watts to several kW. It was tested on the MACIF Trimaran which used it on its automatic pilot jack and small autonomous surveillance and safety vehicles. Brushless technology has a lifetime advantage over brush motors.

SOFT START MODULE



The Soft Start Module is an innovative solution designed to ensure a smooth and controlled start of electric motors. By limiting current peaks and mechanical stresses, this module optimizes the service life of motors while reducing the risk of overload. Ideal for demanding industrial applications, it allows a smooth, efficient and reliable start-up, while guaranteeing maximum performance.



WIFI MULTIPLEXER

It allows you to connect your NMEA instruments between them and to your computer in-car WiFi or USB: iPhone, iPad, smartphone, computer, tablet. Four NMEA/RS232 opto-isolated inputs allow you to acquire the information of your instruments, four outputs allow you to return the received information to other instruments.



MINILOGGER NMEA

It saves all NMEA data on an SD card. Two isolated NMEA inputs are automatically configured to acquire information from 2 different sources. An event entry allows to associate changes of sails or boat configuration with the recorded data.



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