



# ELECTRICAL ENGINEERING

Creaform offers a full range of electrical engineering services tailored to our partners' needs. Whether you are looking to create or optimize equipment, design a new electrical system, automate your industrial processes or meet project management needs, you can always trust our experts with your product development and manufacturing projects.

## OUR CAPACITY

Our team of experienced engineers and designers will assist you through every step of your electrical engineering projects. Thanks to our state-of-the-art infrastructures and tools, we can deliver our professional services from our own offices or yours.

### Electrical system design and integration:

Backed by our broad expertise, we have the capacity to create new electrical systems and optimize existing ones. When you leave your projects in the hands of our reliable team, you also benefit from an unparalleled service tailored to your needs.

- Design and electrical drafting in line with the client's requirements
- Electrical plan updates
- Electrical component selection
- Integration of new electrical systems into vehicles
- Electrical test procedure development for intermediate and end products
- Power consumption reduction in electrical installations
- Design of electrical component manufacturing and installation plans, and listing of the required material
- Development and design of complete electrical harness systems ready for mass production



## Industrial process automation and instrumentation:

Creaform provides a full range of services to help you develop projects in control system design, automation and robotics.

- Interpretation and design of automated systems from specifications
- Programmable logic controller (PLC) programming and standardization
- Piping and instrument diagram (P&ID) design
- Process optimization and reduction of production disruptions
- Improvement of equipment safety, risk analysis and implementation of safety measures
- Data collection and archiving
- Design of clear and simple user interfaces
- OEM software optimization with Visual Basic (VB.NET) to meet the client's unique needs
- Industrial robot integration and programming
- Design of communication protocols between all types of equipment
- Remote control via Internet or phone
- Integration of automated validation systems with Creaform's scanners



## Electronic system design:

Our experts can take on the full extent of your electronic product development and engineering projects.

- Printed circuit design with software such as Altium Designer 14 and OrCAD
- Programming: Bluetooth, CPLD and PIC
- Hardware architecture definition and component selection
- Implementation of simulation studies and electronic circuit simulations



## Project management and turnkey projects:

We also provide project management services in terms of planning, organization and execution for electrical engineering projects.

- Assembly line productivity improvement
- Reliable schedule performance and project monitoring
- Supervision of the various electrical route sub-assemblies
- Design work coordination and preparation of drafts, plans and specifications
- Recommendation of suppliers and supply monitoring
- Use of adequate management tools and maintenance of the relevant documentation
- Complete solution management: design, installation, equipment set-up and user training