



*Industrial Applications  
...Concept to Completion*

# DESIGN AND BUILD SERVICES

## INTEGRATED MACHINE SYSTEM DESIGN AND BUILD SERVICES

Optimation's background in a wide array of industries and technologies provides us the insight from which to derive creative solutions to your unique challenges. Optimation's expertise in automated systems ranges from providing simple single axis mechanisms to complex and full turnkey inspection, assembly, and testing systems. We have novel solutions that span the entire scope of your project from concept to equipment commissioning at your site, providing you technically sound and cost-effective asset installations. Our team is fluent in many softwares: SolidWorks, AutoCAD, Unigraphics as well as many PLC's and PC platforms providing us the tools to succeed.

### Examples of successfully executed solutions:

- Envisioned, designed and implemented four skid-mounted **testing stands** for simultaneous **stress testing** of multiple automotive radiators and heater cores.
- Constructed and built custom machinery to handle and slit thin ceramic material like a **flexible web**.
- Conceived, designed and built a production system of 3 separate **web lines** to manufacture **touch sensors** for handheld devices and smart phones. System consisted of an exposure unit, a film processing unit, and a test unit.
- Developed, engineered, designed, and fabricated high precision tooling to **fixture product samples for interferometer testing**.
- Implemented a design we created of a **fuel oil pump test stand** and overall process, which comprised an oil delivery, holding tank, valves, flow meters, piping and spill containment.
- Designed, built and **automated a part washer** that queued, loaded, unloaded and sorted parts as one automated process.
- Invented and implemented a system for **batch material handling, blending and transfer of powdered materials**. The system comprised twelve major pieces of equipment and numerous ancillary components.
- Produced a **15-station rotary dial**, to feed, position, assemble and online test automotive components.
- Engineered, designed and integrated a **complex system of automatic assembly machines** to continuously manufacture and test a client's proprietary energy product.