

Innovation & Prototyping

Our innovation and prototyping service focuses on the creative aspects of engineering, and serves as a means for our clients to explore and develop novel ideas and product prototypes based on applications driven research. While innovation and prototyping is only a small part of the product development process, we understand that it is in this creative phase that our clients often need help and new ideas from outside of their environment. Our activity in a wide variety of fields provides an excellent means for cross-fertilization of ideas and technology transfer that can result in significant product advances.

Engaged in this role, we would typically focus on

- Extracting and understanding the client's needs, both stated and latent, through a structured identification and prioritization process resulting in a complete definition of requirements.
- Developing a consistent and achievable technical specification complete with verification metrics.
- Surveying and evaluating, on an ongoing basis, technologies from different fields that may be applicable to solve the problem at hand.
- Developing concepts through a structured application of proven methods for encouraging creative thinking and idea generation.
- Applying structured evaluation methods for selecting concepts for prototyping that satisfy the technical specification.
- Conducting preliminary patent searches and devising a preliminary intellectual property approach and technology strategy.

- Producing preliminary designs and analysis to prove feasibility of the selected concept and reduce development cost.
- Refining the conceptual design to produce a detailed prototype design.
- Manufacturing a prototype.
- Conducting evaluation testing of the prototype to verify design analysis and determine compliance with the technical specifications.
- Producing a final report on the development work conducted, including design analysis and recommendations for continued development of the concept.

Although this service is offered as standalone, it can also form part of a complete turnkey approach where required, which would extend to the detailed engineering and functional prototype development of the concept, ultimately to end with a production prototype supported by a technology and intellectual property strategy and production process plan.

Please contact us if you are interested in learning more about SEC.

Serra Engineering Consultants

Jägerstrasse 2
8406 Winterthur
Switzerland

Tel: +41 52 202 4104

Fax: +41 52 202 4104

Email: info@serra-engineering.com

Web: www.serra-engineering.com