



## INDUSTRIAL R&D GROUPS

**For privileged access to new, advanced manufacturing technologies!**

Advanced manufacturing is the use of innovative technology to improve new and existing products and processes. NRC's industrial R&D groups are collaboration projects that bring together member companies to share the costs and risks associated with R&D on advanced technology, while providing access to NRC experts and facilities. Advanced Manufacturing industrial R&D groups generate approximately \$5M of activity annually.

Our groups' objective is to find solutions to the industry's common problems through pre-competitive research projects. Their findings will help increase your manufacturing capacity.

### **ALTec Aluminium manufacturing and assembly technologies**

Improves member companies' capabilities in manufacturing, assembling and evaluating the durability of advanced aluminium or multi-material components with tailored properties.

### **STAMP Stamping Technology for Automotive Manufacturing Processing of Composites**

Develops, demonstrates and deploys the thermoplastic composite process for high-speed, cost-effective manufacturing of lightweight automotive parts.

### **CSAM Cold Spray Additive Manufacturing**

Brings together the technology supply chain, end-users and OEMs in an effort to develop and adapt cold spray for additive manufacturing and demonstrate feasibility for targeted applications.

### **SNAP Advanced Thermoset Composites**

Investigates two processing families, RTM-Compression Moulding (SNAP RTM) and Prepreg-Compression Moulding (SNAP PREG) to rapidly manufacture integrated structural composite parts: cycle time target < 2 min.

### **SIGBLOW Special Interest Group in Blow Moulding**

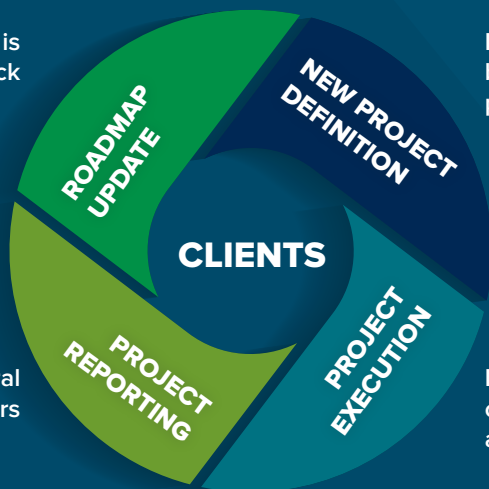
Is made up of global leaders in the automotive, packaged goods and resin industries. Its objective is to increase the efficiency of the blow-moulding design process.

### **Surftec Surface Technologies**

Consists of projects with R&D technical themes related to thermal spray coatings. The primary industries targeted by Surftec include aerospace, industrial gas turbines, automotive and oil and gas.

Technology development roadmap is updated based on client feedback

Industrial project SoW are prepared based on roadmap objectives and participant requests



Reporting is made through general face to face meetings and webinars

NRC prioritizes projects based on client requests, available resources and roadmap strategy

## Project definition process

## Supporting innovation in manufacturing

Manufacturing is at the heart of the Canadian economy. The NRC is well positioned to support advanced manufacturing innovation through its diverse expertise, ability to establish collaboration with industry and academia, and long-term holistic approach.

### How can an industrial R&D group help you?

- › By developing a better understanding of these new advanced manufacturing technologies.
- › By identifying the strengths and weaknesses of these emerging technologies in a context of mass production.
- › By comparing various technologies through the development of concrete applications.

### Why join an industrial R&D group?

- › Members benefit from a vehicle to de-risk R&D investment through cost-sharing among members, with significant additional leverage from NRC investment and sponsorship.
- › Members gain an excellent opportunity to network with peers from across the entire supply chain, as well as with competitors, but in a non-competitive environment.
- › Members gain access to current and valuable advanced manufacturing analysis.

- › Members obtain access to selected NRC background intellectual property and arising intellectual property as a result of the R&D projects carried out by the research group.
- › Members get to prove their products against similar or benchmark products in an unbiased environment using the latest technologies.
- › Members get increased insight into the NRC capabilities in this field with the ability to launch “spin-off” projects one-on-one to explore the particular needs of any given member for developing an idea into a marketable product.

### How do industrial R&D groups work?

- › Members pay only a fraction of the R&D with co-funding from the NRC and other sponsoring organizations. The R&D projects are executed by the NRC.
- › Members set the goals of the group’s technology development projects. The NRC experts, in collaboration with industry partners, develop technologies in accordance with these set priorities.

- › The results are presented in biannual meetings and the R&D objectives are proposed and discussed regularly with the members.
- › Intellectual property developed within the R&D group is protected and managed by the NRC, allowing both flexibility for sharing third-party, unbiased results and process protection to maintain the competitive advantage of members.

**Become a member! Contact us to learn how your company can benefit from our industrial R&D projects.**

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