

To: Engineering Managers and Project Engineers
From: CFD Canada team
Subject: Fluid, Thermal and Stress Analysis
Consulting Services, Seminars and Software Licensing

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What is CFD? Computational Fluid Mechanics (or CFD) is now often used as an acronym for many different types of computational analysis of engineering systems and devices. All of them have one thing in common - they have to solve some sort of a transport equation or a system of transport equations. Fluid flow around ship or motorboat, gas flow around your car or in the hair dryer, smoke from the bon-fire or from the exhaust pipe, nuclear reactor coolant system or ventilator for cooling of intel chip, forest fire propagation or combustion in the industrial burner, hydrostatic bearing in a drilling platform or flows in manifolds, orifices and seals, inductive and radiant heating or pump cavitation, ionic transport in the fuel cells or catalytic combustion, fuel injectors or inhalers and catheters for drug delivery, IC engine and under-hood cooling or micro-electro-mechanical devices (MEMS), car sliding in a rainy day or airplane wing vibrations - all these phenomena and systems can be studied and optimized by methods and commercial software developed in a framework of CFD. CFD is science, art, technology and software programming melted together to benefit engineering practices. It can help engineers to understand better physical behavior and responses of their system and to improve system performance. During last ten years, and especially since 1995, CFD had been utilized by thousands of engineering organizations all over the world.

What is CFD Canada? CFD Canada is a consulting outfit that provides "cfd-related" services to the industry in partnership with CERCA (Montreal) and CFD Research Corporation (Huntsville, AL). CERCA is a center of technical excellence that unites professors from leading Montreal Universities and CFDRC is a major international supplier of CFD software. At present this software allows to perform fluid flow, heat transfer, stress and chemical transport and reactions analysis in gaseous and liquid systems. CFD Canada is **immediately** available to serve your consulting needs utilizing it's own staff and consultants from CERCA and CFDRC. CFD Canada is also an exclusive distributor of CFDRC software (CFD-ACE+) in Canada and provides software licensing and support to Canadian companies, research organizations and universities.

How can CFD Canada be of assistance to your Organization? We provide:

- total support consulting services which include product improvement recommendations;
- training for your staff on use of advanced CFD software tools. We offer specialized 2-3 day training seminar "Solving Industrial Engineering Problems using Advanced Engineering Software for Fluid Flow, Heat, Chemical and Stress Analysis";
- management consulting services on implementation of CFD into engineering practices of your organization;
- software licensing and necessary support for commercial CFD software.

Please contact us for free evaluation of your engineering problems, consulting and software demonstrations and training.

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