We Engineer Solutions

Changing the Future
About SEI Industries Ltd.

A Brief History

SEI Industries Ltd. is an industrial fabric products manufacturer located in Vancouver, British Columbia, Canada. The company was first established in 1978 with the invention of the Bambi Bucket which is used by helicopters to drop water on forest fires.

Today, SEI is a global supplier of unique fabric products serving the military and many other industries such as oil and gas, mining, remote construction, wildland fire management, aviation, environmental spill prevention and disaster response.

SEI products are now used in 110 countries around the world. Its two primary product divisions, aerial and remote site, are world leaders in their respective markets.

Engineered Success

SEI has cultivated a unique, innovative capability not readily found elsewhere in the world. It excels at designing, engineering and manufacturing products from industrial fabric materials that solve specific problems for customers.

SEI’s flexible fabric-based products provide advantages that are not available with products made from traditional rigid materials. With its emphasis on customer-driven features such as collapsibility, transportability and quick set-up, SEI industries has moved to the forefront of product design for a variety of applications related to liquid containment and handling.

SEI’s large facility houses an impressive collection of industrial equipment including electronic radio frequency welding equipment for industrial coated fabrics; metal welding, sewing and machining equipment; an in-house fabrics testing laboratory; an 11,000 gallon (50,000 liter) test tank with crane; and numerous in-house computer systems.

Today, SEI Industries operates a number of divisions that reflect its widespread product diversity, based on a common theme of providing industrial fabric solutions.
A World Market Leader

Firefighting Division

The aerial division with born in 1982 when SEI introduced the first model of the Bambi Bucket. In those days, firefighting buckets were not new but SEI was the first company to perfect a fully-collapsible bucket that incorporated a revolutionary pilot-controlled, instant-opening, all-fabric salvo valve. This valve allows helicopters to deliver of an extremely concentrated column of water from the air to the fire.

The development of this innovative aerial firefighting technology was the result of valuable feedback from helicopter operators as well as Canadian and American forest and land management agencies that use helicopter firefighting equipment to protect remote and urban interface areas from fire.

Today, SEI still services more than 90 percent of the world market and the Bambi Bucket brand has become synonymous with aerial firefighting.

Since those early days, a variety of options have been developed to meet the requirements of different types of helicopters. The ever-expanding line of Bambi Buckets now offers more than 20 different sizes ranging from its smallest — a Robinson R44 bucket — to the huge 2,600 US gallon version.

SEI has also added several options to the Bambi Bucket including the multiple dump, variable-flow Avalanche and Torrentula valves, the shallow water filling PowerFill technologies, foam injection systems as well as data logging and load-shedding capabilities.

Today, despite the onslaught of competition, SEI remains the industry leader by enhancing the existing Bambi Bucket product line with a dedicated research and development team.

Since 1982, SEI has continued to grow, using its valuable experience to respond to helicopter operators and wildfire management agencies worldwide that are looking for a safe, efficient and cost-effective tool that can withstand the on-going, daily rigors of arduous firefighting.

Advanced Manufacturing

SEI works with a select group of suppliers that manufacture the proprietary fabrics for each product division.

To ensure the highest product quality possible, SEI has developed an advanced manufacturing method that uses 100% radio frequency welding — the most reliable method of fabric welding available.

SEI Industries is also an ISO 9001:2008 certified company that constantly undergoes testing and enhanced development of its products to ensure the highest levels of quality.
Remote Site Division

SEI Industries Ltd. is a world leader in the manufacturing of collapsible fuel tanks. Initially, collapsible fuel tanks were mainly used by the military for temporary storage in remote locations. Now, after 24 years of service, SEI’s fuel tanks have been deployed in operations around the world — for mining companies, oil and gas exploration, remote-site construction projects, helicopter bases and disaster relief operations.

SEI Industries achieved its world-leader reputation by engineering and developing not just one but three state-of-the-art collapsible fuel tanks for use in the planet’s harshest environments. In arctic, desert or jungle climates, SEI’s King series of tanks provides environment-specific fuel storage — safely and cost effectively.

Based on its extensive field experience, SEI Industries pioneered the idea that each environment required a unique solution. SEI’s experience has proven that selecting the right tank for the right environment is critical for safe fuel storage. SEI’s trio of collapsible fuel tanks — the Arctic King, Desert King and Jungle King — have all been designed to meet the specific challenges of their respective environments.

To ensure the highest product quality possible, SEI Industries has further developed an advanced manufacturing method that uses computer-controlled 100% radio frequency welding — the most reliable method of fabric welding available. SEI has also engineered a unique cross-seaming procedure that provides a minimum 5:1 safety factor. By developing fabrics for specific environments and employing the latest engineering technologies, SEI has been able to extend the service life of its tanks to double that of traditional US military standards.

SEI Industries is the only company in the world that engineers, manufactures, installs and provides customer operational support for complete turnkey fuel storage systems designed around collapsible fuel storage tanks. This innovative method of fuel storage is ideal for remote locations where infrastructure is non-existent and transportation costs are high. Using its trio of tanks, SEI’s turn-key fuel systems allow for the complete management of fuel anywhere, anytime and in any climate.
Changing the Future

New For 2010 — Bulk Aviation Transport Tank (BATT)

SEI’s new bulk fuel aviation transport tanks are the world’s first double-walled, aviation-specific, baffled transportation tanks. Each tank is designed specifically for the aircraft using it to ensure a precise fit and to maximize the load-carrying capacity of the aircraft. Bulk fuel aviation transport tanks are made from two primary components: a heavy duty, abrasion-resistant outer tank (with a built-in strapping system) that also serves as secondary-containment and a fuel-specific, baffled inner tank.

Traditionally, fuel drums have been used to supply fuel to remote locations using small aircraft. Few remote sites have year-round delivery from tanker trucks or barges so fixed-wing aircraft or helicopters are typically used to transport fuel supplies. Now, with the development of the BATT, remote site operators have a safe, effective new option.

Benefits

Economic
Remote site operators can now purchase bulk fuel easily and can eliminate the cost of returning empty drums. Air operators can maximize load-carrying capacity on flights. Flights with no cargo or passengers can be minimized because bulk fuel aviation transport tanks can be folded up and stored, when not in use.

Safety
Bulk fuel aviation transport tanks are designed to fit each specific aircraft which ensures that the payload doesn’t shift (unlike drums which are not designed to fit or be secured inside aircraft). The double-walled design with built-in restraining straps and baffles minimizes liquid dynamics. The tanks are designed with a 5:1 safety factor.

Environmental
Bulk fuel aviation transport tanks allow remote site operators to eliminate empty drums which are often abandoned because of the high cost associated with removing them. Fuel spills associated with handling multiple drums are also eliminated.

Patent Pending
SEI has finalized its patent application and is completing its International Civil Aviation Organization approval process which will enable the product to be sold worldwide.

First Order
SEI’s first large BATT order was just completed for the Colombian Military to support remote bases used to combat narcotics trafficking.

The BATT is a revolutionary step in how remote sites transport fuel and it allows SEI to complement its product offering for turn key fuel systems by enabling bulk fuel transport by aircraft.

SEI’s new BATT product installed in an aircraft.
Changing the Future (continued)

New For 2010 — Dragon Product Line

In 2003, recognizing that industry wanted a modernized solution, SEI set out to develop a new aerial ignition system. The objective was to introduce aerial and ground-based ignition dispensers that simplified the task of land management, while reducing costs and setting higher standards of operational efficiency and operator safety.

Dragon Eggs, the newly-designed delayed chemical ignition devices, represented a scientific advancement compared to the outdated plastic spheres of the past by improving reliability and burning dynamics.

At the same time, SEI also engineered the Red Dragon — a vastly improved aerial plastic sphere dispenser — and the Green Dragon, the first automated ground-based plastic sphere dispensing system.

The teaming of the Red and Green Dragon dispensers with Dragon Eggs has resulted in next-generation fire ignition systems that offer more safety features and better operability than any other system available today. Other unique advantages include:

- Variable launch rates that can be instantly selected by turning a dial on a hand-held remote tether.
- Microprocessor controlled motor/feed gates that eliminate sphere jamming.
- Fixed-displacement pumps that deliver the same amount of chemical, no matter what speed is selected.
- Safety system with back-up battery to ensure on-board fire protection at all times.

Today, the Red Dragon and Green Dragon — with their enhanced safety features, ease of use and superior performance — are changing land management practices and expanding SEI sales by allowing both traditional and emerging markets to realize the benefits of reduced fire hazards and fuel accumulation.
Looking Forward

Committed to Excellence

As a manufacturer, SEI focuses on creating innovative product solutions for its customers. This focus has fostered a dynamic, flexible spirit that enables SEI to continually reinvent itself.

Not being content to wait for change to happen, SEI’s two product divisions, remote site and firefighting, are currently redeveloping the way their industries work by engineering new products. These new products will ensure that SEI and its staff remain a world class manufacturer in British Colombia for years to come.

Today, with 30 years of manufacturing experience, SEI is proud of its accomplishments and of its diverse product lines. But mostly, SEI is proud of its customers and the roles it plays serving militaries, government agencies, and companies around the world.

SEI customers take its products to the edge and beyond. It is their endeavors that prompt us to constantly innovate further — always striving to envision and engineer the ultimate product for the most demanding purpose.

Columbia law enforcement uses SEI’s new BATT product in its efforts to reduce narcotics trafficking.