

Next-gen aerial fire suppression systems



Helitak is a firefighting specialist, designing and manufacturing rotary aerial firefighting equipment. With well over a decade of research and development, Helitak has developed an efficient, compact, reliable and cost-effective fire tank, constructed with advanced composite materials from Gurit.

Helitak's CEO and Chief Engineer, Jason Schellaars, is a helicopter firefighting pilot. As a commercial pilot and engineer by trade, Jason identified the need for a user-friendly, easy-to-install, all-in-one plug and play fire suppression unit for use in the helicopter industry. He is supported by an expert team and together they ensure consistently high standards of innovation, design and manufacture.

Helitak has been operating since 2006 and the first commercial Helitak Fire Tank was exported to the United States in 2007. The Helitak Fire Tank was also featured on the Australian Broadcasting Corporation's "New Inventors" TV show in 2009. The tank design was the clear winner and collected the people's choice award.

Custom-built fire tanks

The underbelly fire tanks are custom-built for each make and type of helicopter, with a carrying capacity ranging from 1000 to 10000 liters (250 to 2645 US Gal). The top section of the tank is constructed from carbon fiber with a Gurit Corecell™ M foam core, infused with Gurit epoxy resin Prime™ 27, and the design is such that no modifications are required to the aircraft. The extendable bag is manufactured from a specially sourced, heavy-grade, hard-wearing and tear-resistant vinyl material – rated to 15 tons. The tanks have built-in compartments housing the electrical systems, microprocessor control unit, hydraulic components as well as the foam dispensing tank and pumps. Fail-safe door operation allows the doors to open following a loss of power. Drop sequencing can be variably controlled by the pilot from the easy-to-use cockpit controller.



Black Hawks attacking wildfires

The Australian-made Helitak FT4500 Black Hawk aerial firefighting tank is a 450-litre-capacity aerial suppression system installed to the underbelly of the Sikorsky Black Hawk helicopter. A predominantly carbon composite shell provides the structural integrity of Helitak's newest tank to hit the global market.

Helitak completes load testing to 4.4 g of the Design Limit Load, around 20,000 kgs, on the tank shell to pass the strict international aviation certification regulations.

Helitak has a range of tanks to suit the most popular helicopters commonly used in fire suppression and have expanded their product line to include a range of high-volume hover pumps and a micro-processor controller unit and mapping systems.

"Helitak chose Gurit to partner in our very important supply chain to provide a range of consistent-quality composite materials. So we can confidently stand by our product range and boast being the best 'next-generation' fire tank on the global market to help combat the growing bushfire and wildfire problems our planet is experiencing."

Paul Blundell

Operations Manager Helitak Firefighting Equipment PTY LTD

