

## Case study

# Composite propeller blades manufacturer for aerospace

**How Vapormatt's commitment to technical innovation improved a leading aerospace manufacturer's operations through the power of automation.**

This engineering-based company (NDA in place\*) is a major player in the OEM aerospace market. More specifically, they pride themselves on their longstanding position and speciality in manufacturing high quality and complex composite propellers and propeller components.

This company's previous finishing process involved a Vapormatt machine that had been in operation since the 1980s. They were using it to clean composite propeller blades for bonding preparation and as part of their inspection process. The process was effective, but as their operations evolved, they decided that having multiple personnel manually wet blasting up to 2.4m (8ft) long blades, on their sides, and in a machine that took up too much floor space was no longer going to be practical or meet their increased demand.

They came back to us with these challenges and some ideas of how they wanted to improve their process. One of the top priorities was to minimise the machine's overall footprint and streamline their process with a transition to automation. Through close collaboration, a solution was identified to replace their previous system with our tall and compact Leopard Cub automatic wet blasting machine.

In operation, they have found the Leopard Cub to be very reliable and capable of consistently delivering specified results via a more cost-effective and efficient method. The over 5m (16ft) tall machine accommodates propellers of different sizes that are processed based on the recipes programmed and stored in the machine's PLC.

The control comes from the housed vertical and horizontal oscillation axes that can be manipulated to traverse the blast guns across the whole of the blade in relation to their position on the turntable. Additionally, the automation removes the necessity for any manual blasting ensuring safe use by all personnel whilst saving time.

We've produced a video of this impressive machine in action which can be found on our dedicated Leopard Cub website page:

[vapormatt.com/machines/automatic/leopard-cub](http://vapormatt.com/machines/automatic/leopard-cub)



\*Our wet blasting systems deliver distinct productivity and quality competitive advantages to our customers, because of this we are often asked to honour Non-Disclosure Agreements (NDAs) to keep our customers' details confidential. That is why we cannot include the name of the manufacturer in this case study.



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