

# Fume Extraction at Hamble Point Marina

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## Case Study Key Facts

- Hamble is described as a 'boating Mecca'
- Home to a variety of estuary life
- The popular yachting spot has three different marinas
- Within cruising distance of Brittany and the Channel Islands
- Just 20 miles from the Isle of Wight

Hamble Point is regarded as one of the UK's most prestigious marinas. The port is located on the Solent in the south of England, a major shipping lane for passenger, freight and military vehicles.

The marina itself offers 230 berths and extensive shore-side facilities, including a first-class maintenance and repair facility run by Hamble Yacht Services. 50 on-site tenants provide boat owners with a wide range of marine services, from routine maintenance to full restoration.

## The Challenge

Hamble Yacht Services recently refurbished the hull of a 50ft yacht located within the marina. They needed to sand the hull smooth, re-spray it with coating, and then smooth and polish the surface – a major undertaking but one that would see this prestigious yacht restored to its true excellence.

- Project involved refurb of 50ft yacht
- A temporary tent was placed around it
- Essential to protect workers in tent from airborne fibreglass
- Also vital to protect visiting public from dust and fume created
- RVT's WandaFilta Plus brought in

## Key features of the WandaFilta Plus

- A powerful extraction and filtration kit
- Ensures effective air purification in high-dust settings
- Fan moves 6000m<sup>3</sup> of air per hour
- Maintains pressure over long duct runs
- Washable filters
- Dust capture hood options
- Mobile

Although Hamble Yacht Services had created a temporary scaffold tent around the yacht, the work carried out would still present two challenges. The first would be to protect those working within the tent from airborne fibreglass; and the second would be to protect people enjoying the marina from the dust and fumes ejected from the enclosure. The project presented certain hazards and RVT was approached for control solutions.

## WandaFilta Plus

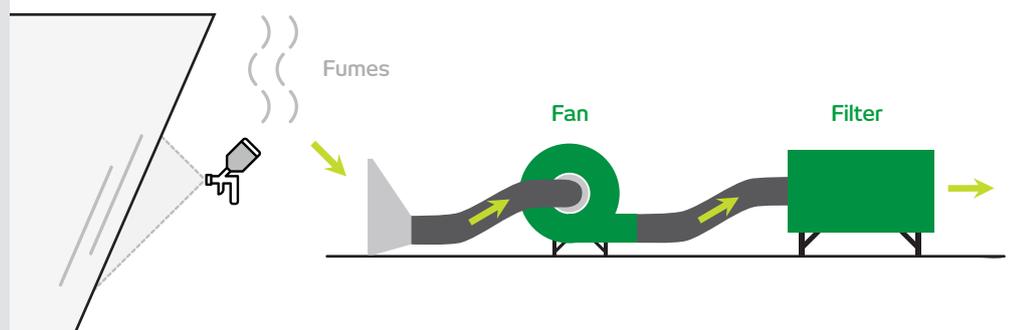
Hamble Yacht Service's need to contain dust and fumes was met fully by the WandaFilta Plus. This extraction unit is particularly suited to removing GRP and paint fumes, so it was ideal for the hull restoration.



The equipment's sectional three-stage vent box enables precision filtering and control. When spraying the hull with its new coating, the hood of the WandaFilta Plus was positioned as close to the spraying as possible, to ensure that the dangerous styrene fumes were captured at source. The powerful centrifugal fan then extracted the dangerous fumes, forcing them through the carbon filter, before venting the filtered air outside of the isolation tent. The centrifugal fan is important, because unlike an axial fan, the motor sits outside the airflow, making it ideal for extracting volatile fumes.

The WandaFilta Plus performs impressively even with duct-runs up to 80 metres, and this feature coupled with the portability of the unit provided flexibility and convenience for all the team as they moved around the hull.

This extraction solution ensured that both workers inside the tent and general public outside of the tent were kept safe from dangerous fumes at all times.



**“The vent box, being sectional, was a great help and as a fully portable system, the fan suited us very well as all the individual parts could be sited and taped into position as best suited our needs”** Ainslie Hunt, Hamble Yacht Services