

Wavestream filters for all levels of oil pollution and microfibres

Wavestream International's founder Paul Gullett's interest in water filtration dates back to his early days of working in the oil industry in the early 90's. Aware of the contaminants and pollution created by discharges into waterways and seas, Paul set up Wavestream International and invested £0.5m through EU grants and industry research body funding plus his own personal investment to develop in the UK the extremely complex and difficult mix of filter technology which could capture micro size contaminants, heavy metals, carbon, oils etc.

This was in 1999, well before there was any widespread knowledge or interest in water pollution, and few even considered the implications of plastics in the oceans, microplastics and microfibres. Wavestream chose to bring all filter manufacturing in-house, in the UK. Paul established a company called AFL which makes filters for all types of industrial and commercial applications. As a world leader, AFL enables Wave International, which is a commercial marine and leisure marine industry specialist company, unrivalled access to the latest filter technology, such as multi-media cartridges, new carbon technology etc.

Paul Gullett says: "I was told, and thought, that bringing new technology to the market would take about 5 years to gain traction. But this was completely new, innovative, environmental technology – most people didn't even understand the issue, let alone have any awareness of it. It was very hard to generate a market for this new environmental-protection product."

Now nearly 25 years later, Wave International sells its products worldwide, through a network of distributors and direct to customers such as OEMs/boat builders.

For commercial vessels MARPOL Appendix 1 covers control of overboard discharge, for example oily water. This was set at 15 ppm (parts per million oil in water) unless in a specific special scientific, ecological or sensitive area. Now there is also regulation down to 5ppm which is great news, as at that level Wavestream filters will catch even the tiniest levels of oil pollution and microfibres.

The Wavestream works on all vessels right up to ocean going liners, we're a preferred supplier to a major oil water separator company for example, where our systems are used on the centrifuge systems in order to get discharges down to the very low 5 ppm levels required in specially sensitive areas. But this took nine years of work from first introduction of the product to them, to getting an order. Now we supply to them for use all around the world and it's a standard fit. This is what we need to see within the unregulated marine leisure sector – that it's a 'no-brainer' install on all vessels with a bilge.

The Wave MiniBOSS IMO Bilge Filter System is MEPC 107/49 certified bilge filter system that gives effective control and prevention of oily bilge water discharge using Wavestream System 3 filters. It has an IMO certified Oil in Water monitor with 18 months data logging, and is US Coast Guard Type Approved and MED Approved.

www.waveinternational.co.uk/wavestream.html

The Wavebrite SMART is a grey water filter, and was runner up in the 2023 Seawork Commercial Marine Awards for Innovation in the Marine Equipment, Electronics & Materials category. The unit takes emissions down to 5ppm. It's completely self-contained, in a sound-proofed, robust box. The technology for this was available in 2009, but it's taken till now to combine it with an intelligent monitor and display, which shows you how environmentally conscious you really are. We've built this unit to suit the demands of OEMs who have been asking for a simple easy to fit, 'plug and play' grey water unit which avoids them having to build in grey water holding tanks. This creates more space within the hull and reduces weight. The Wavebrite SMART not only shows your water use, but also what the filters are collecting and therefore what you are not discharging overboard.

Conclusion

Paul Gullett says: "More people are now aware of the issues about pollution in water, not only what you physically see, but also the unseen microfibres and microplastics. Our products have always had the highly sophisticated multi-media filters to capture these, right down to 0.5 ppm in our Flostream drinking water filters. Now we're working more closely with OEMs such as some of the world's leading boatbuilders getting Wave products integrated within the build process. The Wavebrite SMART is an example. It's a grey water filter system, which comprises 5 stages of filtration contained within a single unit, so it can be easily installed as a compact, single unit. It has a separate digital display which gives detailed information – for example on the amount of water being discharged overboard, the flow rate, and also the amount of pollutants being extracted and when the filters need changing. We have worked with a number of OEMs and some leading naval architects to ensure the size, shape and design of the Wavebrite SMART meets their needs."



Wavestream™

BILGE WATER FILTRATION



Wave MiniBOSS
MEPC 107(49) compliant

Removes oil, grease & dissolved metals

Removes microplastics

Easily installed after the bilge pump

Available for all sizes of craft from small leisure to commercial shipping

All Wavestream Systems are 15ppm and 5ppm regulation compliant

Lloyds Register Type Approval

Worldwide support and distribution

CLEANER OCEANS & WATERWAYS

