

MARINE SERVICES

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The Ultimate in Waterjet Sophistication

# WATERJETS WITHOUT COMPROMISE

High Thrust Capability. Agile Manoeuvrability. Superior Durability.

HamiltonJet represents the latest in efficient, robust, high performance propulsion technology and is the leading supplier to the global wind farm support sector.

We're trusted the world over for our expertise, innovation and end-to-end integration. Interface simplicity and reliability have seen our jets and controls become the leading choice in the most demanding marine applications.

This capability has seen us become the number one provider of waterjets to the wind farm support sector – with more than 80 wind farm support vessels currently in service around the globe.

With HamiltonJet, wind farm support operators can have absolute confidence our waterjets and controls represent the pinnacle of high thrust capability, agile manoeuvrability and superior durability.

These features deliver more efficient and safer operations to ultimately deliver peace of mind on the high seas.

# BOLLARD PULL

Our waterjets are optimised for low to medium speed thrust. This combined with high cavitation margins and high efficiency steering systems delivers some of the highest bollard pull available on today's market, even in adverse weather conditions.

Wind farm support vessels powered by HamiltonJet waterjets stay engaged on turbines with minimal loss of performance. This makes off and on-loading crew and equipment at turbines much safer and easier – even if conditions turn bad.



## AGILE MANOEUVRABILITY

We have combined high efficiency steering with our fast and responsive Advanced Electronic Control system (AVX) and JETanchor.

AVX has redefined the operator experience, delivering instant, smooth and reliable control during complex operations, bringing safety to new levels.

For skippers of wind farm support vessels, this means thrust can be moderated without increasing vessel speed, delivering superior control on approach to the turbine, regardless of sea conditions.

Further, JETanchor's station keeping mode will autonomously hold position when the vessel is standing by. Manoeuvrability at this level maximises vessel control and drastically reduces skipper stress and fatigue.

### Fast Reverse Response

High speed reverse actuation gives precision control on the approach to the turbine and during extraction of crew and equipment.

It can be delivered with no change in engine rpm, gear box direction or thrust levels. This leads to highly responsive and predictable operations on approach, engagement and extraction from turbines. Ultimately, this gives vessel operators absolute confidence they will be able to act quickly and safely at all times.



## SUPERIOR DURABILITY

Our waterjets and controls work as hard as the vessels they power. They're particularly durable in the difficult wind farm support environment, where other forms of propulsion are easily damaged, leading to loss of thrust and potentially unreliable, unsafe turbine transfers.

Our highly competitive bollard pull capability means there is no loading of the drivelines or gearboxes when engaging or pushing against the static turbines. This increases overall reliability and reduces the risk of decreased thrust, leading to unsafe turbine transfers. It also reduces time between overhauls.

Our impellers are safely contained within the body of the jet, nothing is exposed beneath the hull. It means our waterjets can operate in deep or shallow water locations, including smaller, draft restricted harbours. It means HamiltonJet can deliver highly competitive vessels able to operate in all environments without restriction. This maximises operations and return on investment.

Fewer rotational parts, and no need to change direction on turbine approach and transfer, results in reduced risk of damage, lower service costs, and, again, longer time between overhauls. "We've been getting 99.8% reliability across the fleet of HamiltonJet vessels and not had a breakdown, which is absolutely key for us, and the reason we've selected HamiltonJet waterjets moving forward for our vessels."

RICHARD THURLOW, DIRECTOR TURNER ICENI.





### case study Iceni Vengeance

Turner Iceni Marine Services (Iceni) provide fast and dependable transport and logistics support to the offshore wind industry. Our waterjets and control systems allow Iceni vessels to undertake missions reliably and safely in the challenging North Sea conditions.

After acquiring a used vessel, Tuner Iceni asked HamiltonJet to replace the competitor waterjets with a pair of our brand new HM651 waterjets to improve reliability and performance. Iceni have many HamiltonJet powered vessels, but Iceni Vengeance is their first to be equipped with AVX and JETanchor.

"The JETanchor system proved its worth in one job with a lot of standby work, which meant being a safety vessel at an oil and gas installation. We were able to use the Virtual Anchor and save the crews a lot of work. They were very thankful after the fiveday job being able to use Virtual Anchor as opposed to dodging all day"

RICHARD THURLOW DIRECTOR TURNER ICENI

#### VESSEL SPECIFICATIONS

Service: Wind farm support vessel Location: United Kingdom Length: 23.3 metres Designer: South Boats/Alicat Builder: Diverse Marine Owner: Turner Iceni HamiltonJet: HamiltonJet AVX controls with JETanchor and Twin HM651 waterjets



## CASE STUDY World Terral and World Levante

World Marine Offshore's World Terral and World Levante trimarans are powered by three diesel driven waterjets in the centre hull and one electrically driven waterjet in each of the outer hulls.

These innovative, hybrid wind farm support vessels for offshore wind support use novel technology and a unique hull form to reduce fuel consumption and emissions while ensuring a stable, comfortable platform for wind farm technicians.

#### VESSEL SPECIFICATIONS

Service: Wind farm support vessel Location: Denmark Length: 32 metres Designer: WIND Naval Architects Builder: Assens Shipyard Owner: World Marine Offshore HamiltonJet: HamiltonJet Modular Electronic Control System (MECS) with Twin HM461 waterjets (outer hull) and Triple HM571 waterjets (centre hulls).



### case study J Cat One

J Cat One was one of a number of BMT Nigel Gee wind farm support vessels designed with HamiltonJet HM571 waterjets. It was the first dedicated wind farm support vessel to enter service for Tokyo Kisen on the Fukushima Offshore Wind Farm test site in Japan.

Tokyo Kisen have since ordered more HamiltonJet powered vessels for the expanding Japanese offshore wind farm market.

#### VESSEL SPECIFICATIONS

Service: Wind farm support vessel Location: Japan Length: 19 metres Designer: BMT Nigel Gee Builder: Veka Shipbuilding Owner: Tokyo Kisen Co. Ltd HamiltonJet: HamiltonJet MECS and Twin HM571 waterjets



### CASE STUDY Atlantic Pioneer

Atlantic Pioneer was the first US dedicated wind farm support vessel for the US offshore energy market. It is the first of this class to be built with HamiltonJet waterjets.

The twin HM571 waterjets provided increased speed, control, manoeuvrability and bollard pull over previous vessels. Atlantic Pioneer was joined by a larger sister ship, Atlantic Endeavour, also equipped with HamiltonJet waterjets in early 2021.

#### VESSEL SPECIFICATIONS

Service: Wind farm support vessel Location: United States of America Length: 21 metres Designer: South Boats IOW Ltd Builder: Blount Boats Owner: Atlantic Wind Transfers HamiltonJet: HamiltonJet MECS and Twin HM571 waterjets



## CASE STUDY Offshore Windservice A/S

HamiltonJet collaborated with Norway-based Offshore Windservice A/S to retrofit waterjet technology into its existing fleet.

The project included converting five vessels from CPP propeller to waterjet propulsion and advanced control technology. The vessels now feature twin HM721 waterjets paired with HamiltonJet's intuitive AVX controls, to really power these boats along.

"The [vessel] speed has significantly increased on what was predicted, while the new set-up has far less vibration and noise than before. It's resulted in a much more comfortable ride for the crew and turbine engineers. That's important in a vessel regularly working out at sea for a week at a time." BILLY THØGER KRISTENSEN

#### VESSEL SPECIFICATIONS

Service: SWATH wind farm support vessel Location: Denmark Length: 25.7 metres Designer: Danish Yachts Builder: Danish Yachts Owner: Odfjell Offshore Windservice A/S HamiltonJet: HamiltonJet AVX controls with JETanchor and Twin HM721 waterjets

## WORLD-CLASS PRODUCT SUPPORT

We are backed by more than 70 years in business as the pioneer and market leader in waterjets and controls.

Our product support and parts availability is truly class-leading. With a global network of regional offices and over 50 appointed distributors, help is always on hand. No matter where you are, in the unlikely event of a problem, downtime is minimised.

Our products all come with a commitment to at least 20 years' support after the end of series production\*.

\*This applies to all HamiltonJet products which reach series production and can be extended longer if a particular project requires it. Beyond this point, we still endeavour to keep you moving where possible.





## WORK WITH US

Over the decades we've become trusted partners to boat builders, naval architects and marine operators around the globe. They tell our story better than we do, so if you'd like some references, please get in touch.

Our network is global. Wherever you are, you'll find experienced distributors supported by our own regional office staff to assist you with your project. We'll walk you through the process and can deliver simple or complex projects.

Our market experience is extensive. It covers offshore, pilot, rescue, fire, military, patrol, wind farm, fast ferry, fishing, aquaculture and recreational applications.

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