

Hornsea 3 The North Sea

Hornsea 3 is a landmark offshore wind development that is redefining the scale of renewable energy in the UK. Located more than 120 kilometres off the Norfolk coast, the project will become the world's single largest offshore wind farm, generating up to 2.9 gigawatts of clean electricity. That's enough to power more than 3million homes. Severfield is delivering a critical package of secondary steelwork that forms a key part of this ambitious infrastructure.

Working directly with Ørsted, the world's largest offshore wind developer, Severfield is delivering this scope alongside our strategic key contractor, Hutchinson Engineering. Together, we will manufacture, assemble, and commission the secondary steelwork package which includes fabricating and supplying 64 major components. These include boat landings, ladders, Supported Internal Platforms (SIPs), and large anode cages. Each element plays a vital role in ensuring safe access, protecting against corrosion, and maintaining structural integrity in demanding marine conditions.

The size and complexity of the steelwork required a new approach. With anode cages reaching up to 14 metres in diameter, traditional transport and fabrication methods were not viable. To overcome this, Severfield is designing a temporary bespoke production hub at Teesworks, located next to Ørsted's marshalling yard. The facility will include four temporary buildings, specialist paint and preparation areas, and a six-bay fabrication shed with overhead cranes. This fully integrated site is being created specifically to meet the needs of Hornsea 3. Hornsea 3 marks a strategic milestone for Severfield. With the UK's offshore wind market forecast to exceed £1 billion in secondary steelwork over the next decade, this project places Severfield at the centre of a fast-moving and future-focused sector. It aligns with national climate goals and supports long-term industrial growth.

To meet the specialist demands of offshore fabrication, Severfield has invested in upskilling its workforce. Colleagues have been retrained in advanced welding and assembly techniques, and a full-scale mock-up of a boat landing has been constructed for testing and training purposes. This proactive approach ensures precision in delivery and builds capability for future offshore projects.

Hornsea 3 is more than a renewable energy milestone. It is a showcase of engineering innovation, strategic foresight, and collaborative delivery. Severfield's contribution may be smaller than the mighty monopile that the turbine is connected to, but while our steel doesn't sit below the surface (apart from the anode cage), everything provided stands proudly above the waterline, and its impact is clear. It enables progress, supports sustainability, and helps power the UK for generations to come.

Location

The North Sea

Client

Ørsted

Main Contractor

Ørsted

Engineer

Ørsted

Tonnage

64 units of boat landings, ladders, anode cages, and Supported Internal Platforms (SIPs)

