

ARGUMENTS FOR HARTING IN WIND



Case Study: HARTING connects the supply chain of the offshore wind industry

What could a vessel from the UK, a nacelle from France, a tower segment from Portugal and a transition piece from Belgium have in common? Yes, they all have HARTING pluggable connectors to be connected seamlessly on the various global offshore sites so that the offshore wind turbines are installed in a professional but efficient way.

It's no secret that today's global supply chain to the offshore wind industry is more complex than ever. It has become an ecosystem of suppliers, logistics companies, developers and other value chain partners that stretch across the globe. The supply chain relies on the synchronized movement of interrelated parts to meet growing demand for better, more powerful turbines and on-time, low-cost delivery. Therefore, it is very important to have one defined interface so that the supply chain could be well "connected" with each other. HARTING's installation pluggable connector series Han® have been selected to be the "defined interface" between the parts of the supply chain to the offshore wind industry.

A modern offshore wind turbine is "an unattended power plant" with an autonomous control system. The main control objects are the mechanical control, the power conversion control and the auxiliary control. The mechanical control mainly covers the nacelle to the wind direction (yaw control) and the blades to the wind speed (pitch control). The power conversion control covers the generator, power converter, transformer and switchgears. And the auxiliary control takes care of the slipping, cooling, lighting, lifting, lubrication, monitoring, dehumidifier, and communications. HARTING's connectors are applied to connect the electrical lifelines of power, signal and data to all the control systems. During installation, the main power source comes from the diesel generator on the installation vessel. Therefore, even on the vessel, HARTING connectors are applied for on-site installation. Besides the electrical loops, in modern offshore wind turbines of 100+ Meters, HARTING also supports a very comprehensive fiber-optic network with Han® connectors. The fiber-optic network is based on glass fibers and covers the industrial ethernet for the control and various communications for CCTV, Wi-Fi, IP-Phone, LTE etc.

The offshore wind industry's big challenge is to realize a level of "standardisation" of the supply chain for serial production of repetitive tasks, as stated by Torgeir Ramstad of Green Ducklings in his article on Feb. 23, 2023¹. HARTING's practice with the "defined interface" between supply chain parts could provide a positive case study for the offshore wind industry to tackle this challenge.



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Find out more: <https://www.harting.com/UK/en-gb/markets/wind-energy> .

The link to the article of Torgeir Ramstad:

<https://www.rechargenews.com/energy-transition/the-greatest-contributor-to-wind-supply-chain-pressure-is-the-drive-for-ever-larger-turbines/2-1-1409171>