Johan Sverdrup is one of the 5 largest oil fields on the Norwegian continental shelf. Located 155km west from Stavanger, the field extends over an area of approximately 200 km², with expected resources between 2.1 and 3.1 billion barrels of oil equivalent. Its development will span the next 50 years and will constitute 25% of all Norwegian petroleum production at this time.

Project started in 2016 with commissioning planned for end of 2019. Equinor, formerly known as Statoil, invested more than 6 billion euros in the 4 modules of the first phase of the project. During the period 2016-2018, the main construction phase of the project, more than 12,000 people every day around the world contributed to Johan Sverdrup. 70% of the companies involved in this project were Norwegian.

However, for the noise control of the 4 gas compressor trains that will be used to push the gas towards the shore and the consumers, Equinor turned to BOËT StopSon, considering the French company’s long noise control experience and track record in the oil and gas industry and difficult environments. Oil and Gas standards are very stringent, but Norwegian NORSOK are the most stringent in the world and excellency was just what was expected from Equinor.

3000 design hours, calculation, simulation and conception, 15000 manufacturing hours and more than 6000 parts have been required to meet the set target: 75 dBA at 1m from the enclosure wall.

Made from 316L stainless steel custom made acoustic panels, the enclosures are of the bell type, designed to be lifted in a single piece to be installed over the gas compressors during the RP1 module erection in Busan, South Korea, under BOËT StopSon specialist supervision. A technical challenge and the demonstration of the BOËT StopSon know-how, which has successfully met the target, with enclosures 10 to 15% lighter than the norm, allowing huge savings on the platform structure and budget.

BOËT StopSon enclosures are not only light and perform acoustically: they are also extra strong, designed to operate in the North Sea severe marine outdoor conditions and to withstand explosion blast, hence ensuring the best possible safety for the personnel who will work on the platform.

Not surprisingly, BOËT StopSon has again been selected to supply the noise enclosures for the new gas compressor trains that will be installed during the phase II of the project, already underway.

Challenge 100% met!