



by courtesy of Mammoet van Cord BV

Q7 Offshore Wind Farm

In the Q7 Wind Farm, located outside the 12-mile limit off the Dutch coast in the sector Q7, 61 Vestas V80 – 2.0 MW turbines were to be installed. In a water depth of 20–24 m, monopiles with an outer diameter of 4.0 m and a length of approx. 50 m were chosen as foundation. This project presented three record-breaking challenges: the greatest number of monopiles to be installed in one area, the first monopile installation during autumn and winter, and the deepest water for a monopile foundation to date. MENCK was con-

tracted to supply and operate a MENCK MHU 800S hammer, delivering 800 kJ impact energy. The hammer was equipped with the MENCK 5.2 m hammer pile adaptation system and MENCK's patented divisible 5.2 m pile sleeve, as well as a MENCK MHP 1600 power pack. At the beginning of 2007, the MHU 800S was replaced by its big brother MHU 1900S combined with the same hammer pile adaptation and power pack. The monopile installation was successfully completed ahead of schedule.

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| Project name | Q7 Offshore Wind Farm |
| Client (end customer) | Econcern/Energy Investment Holding, ENECO Energy |
| Contractor | Mammoet van Oord BV |
| Location | North Sea, Dutch EEZ, block Q7 |
| Turbines | Vestas 2.0 MV/V80 |
| MENCK operational start | September 22nd, 2006 |
| MENCK operational end | March 26th, 2007 |
| Water depth | 20–24 m |
| Installation vessel | Jumping Jack |
| Quantity of piles | 61 |
| Pile diameter | 4.0 m |
| Pile soil penetration | 26–32 m |
| Number of blows per pile | 2,600–3,500 |
| Hammer | MHU 800S/MHU 1900S, 5.2 m and winch |
| Power pack | MHP 1600 |
| Mobilisation/Demobilisation by | MENCK GmbH |
| Mobilisation harbour | Schiedam, The Netherlands |
| Demobilisation harbour | Schiedam, The Netherlands |
| MENCK's scope | Mobilisation/Demobilisation of hammer and equipment |
| MENCK engineering | Sea fastening of hammer, driveability report |



MENCK 800S while finishing pile driving

MENCK 1900S passing the monopile guide

Final driven monopile ready for transition piece installation

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