

WINDDAYS 2018  
DECOMMISSIONING WINDPARK LELY



Wiebbe Bonsink  
CEO HEBO Maritiemservice BV



## GENERAL INFO HEBO

- Founded in 1989
- 100 FTE
- 60 vessels / pontoons / cranes
- 10 Locations
  - 7 in Holland
  - 2 in Germany
  - 1 in Denmark



## SERVICES

- Oil & chemical spill response
- Emergency response
- Salvage
- Special transport
- Heavy lifting
- Dredging



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- Located 600 meters off the port on Medemblik (IJsselmeer)
- 4 x 500 KW
- Built in 1992
- After 22 years in service 1 turbine lost its rotor head due to metal fatigue in 2014



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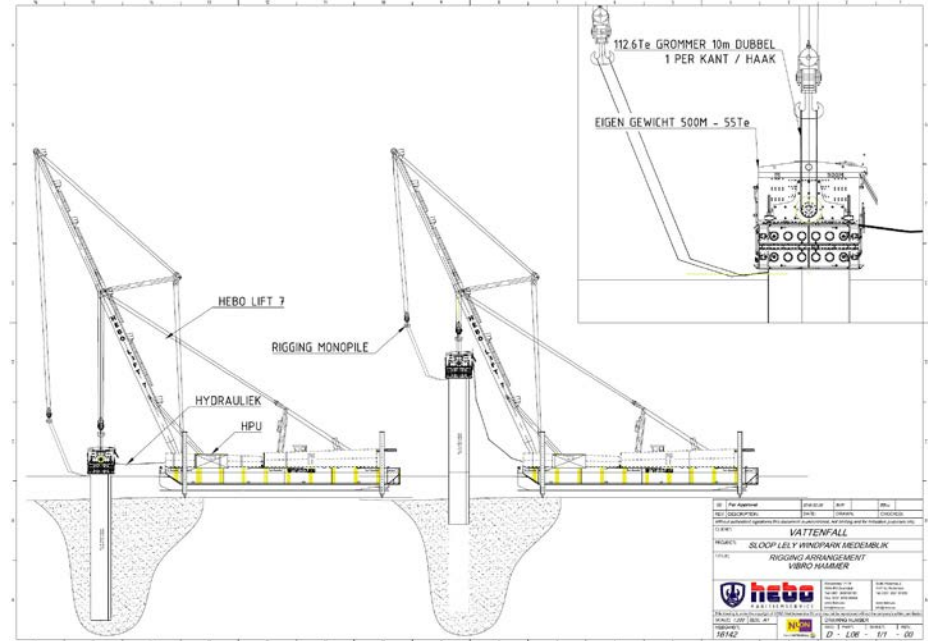
- Vattenfall – Nuon tender for decommissioning including removal of the cables and recycling the materials
- Lump sum for total scope of work minus revenues recycled materials

## DECOMMISSIONING WIND PARK LELY

- For decommissioning of the wind farm Lely the following permits were needed
  - Permit from Rijkswaterstaat (water authority)
  - Permit from municipality
  - Permit from dike authority

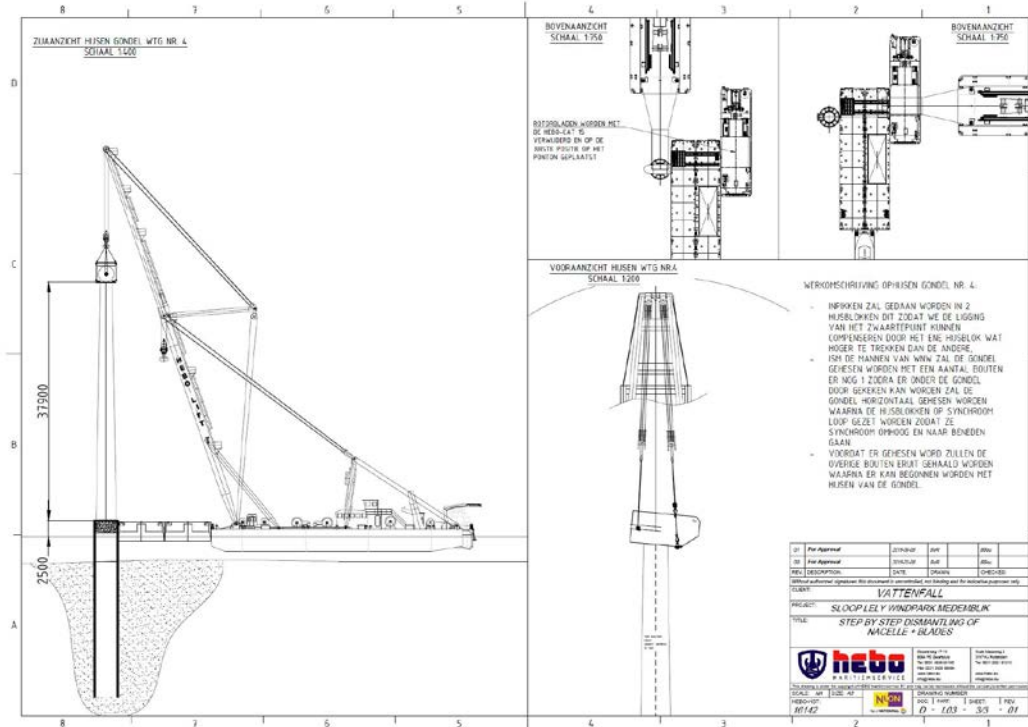
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- Complete Engineering package incl. drawings, calculations, HSE method statements, Risk assessments.





# DECOMMISSIONING WIND PARK LELY



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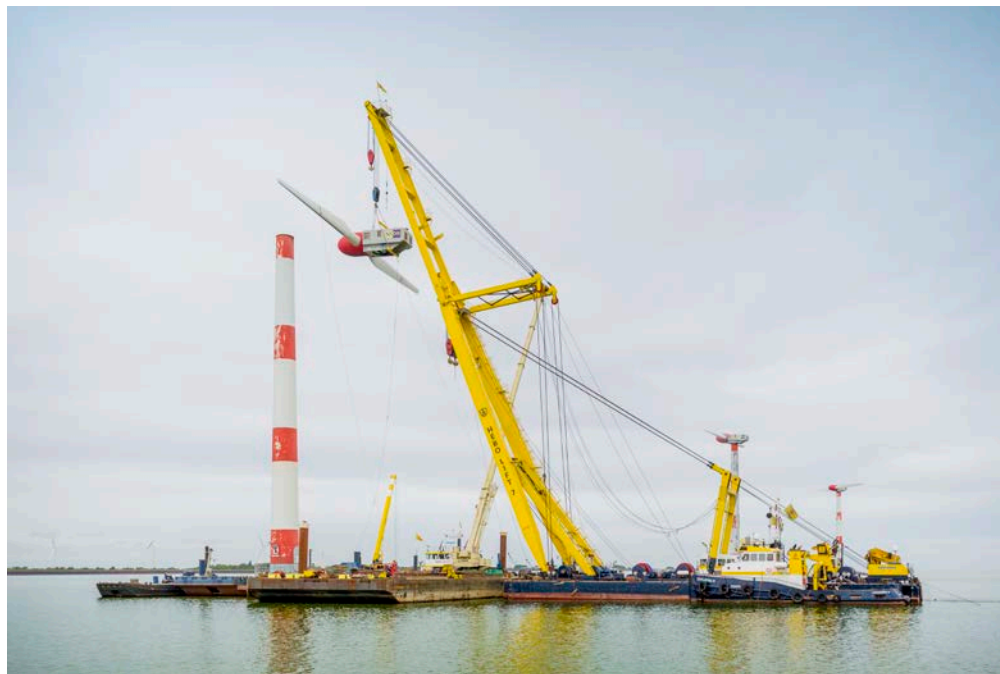
- Mobilising equipment
  - Pontoons
  - Tugboats
  - Safety boat / tender
  - Crane barge
  - Sheerlegs
  - Vibro hammer

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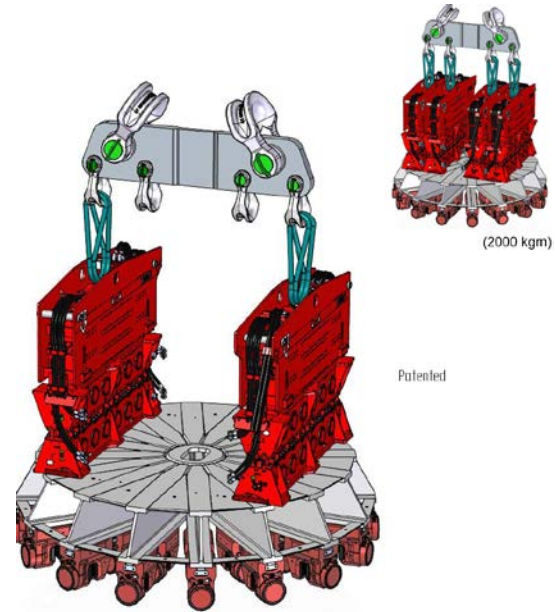
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# PVE GIANT 500M to 2000M



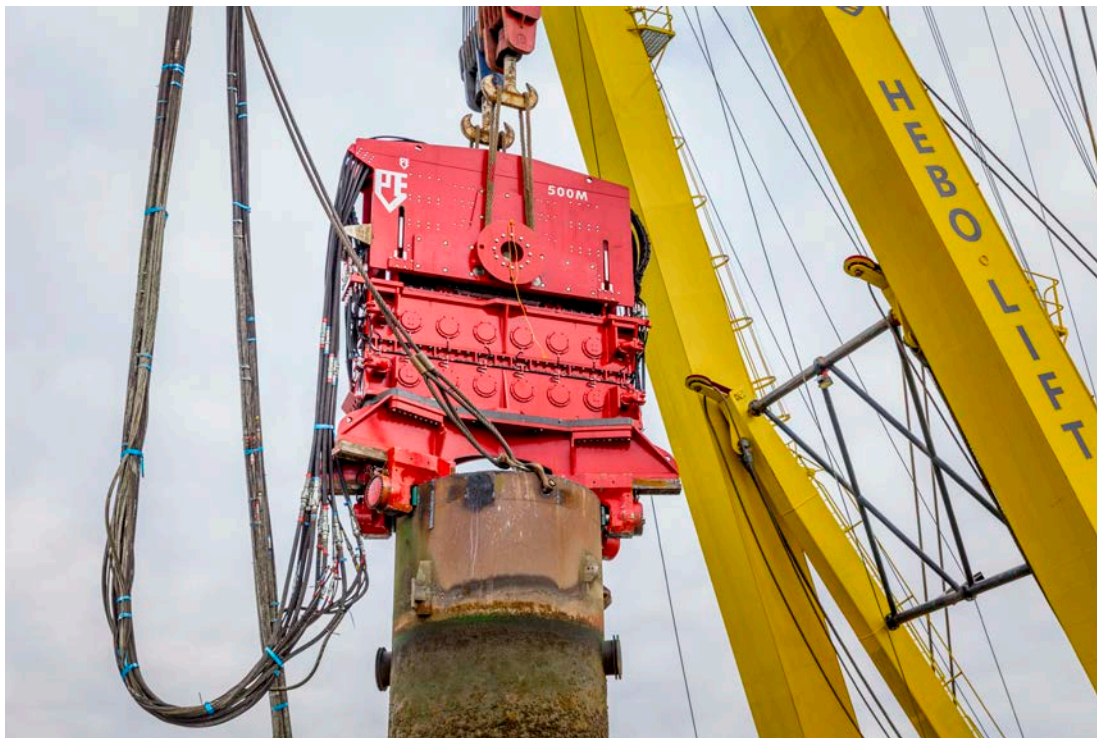
Ecc. moment:	1000 kgm
Max. Frequency:	1400 lpm
Centr. Force:	21496 kN
Line Pull Cap.:	10080 kN
Amplitude:	10.5 mm
Total Weight (incl clamps):	231000 kg
Dyn. Weight (incl clamps):	174000 kg
Max. Pressure:	350 bar



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## DECOMMISSIONING WIND PARK LELY

Special thanks to:

- Nuon (Hidde Seidel)
- Light at work (Jorrit Lousberg)
- PVE (Herald Wattenberg)

