

Decom Tools Mid-Term Conference 2021

Complete removal of (mono)piles with a Vibro Lifting Tool

By:

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online – 10 February 2021



Why remove offshore foundations completely?

- No ongoing liability for field owner
- Sustainable use of materials (metal recycling)
- No limitations for future use of the seabed
- Future removal of cut piles will be very expensive and more difficult

And last but not least:

- Good practice, clear up your mess!
 - Learn from the past, don't leave it for future generations



Seemed like a good idea at the time...



Now we're paying the price!

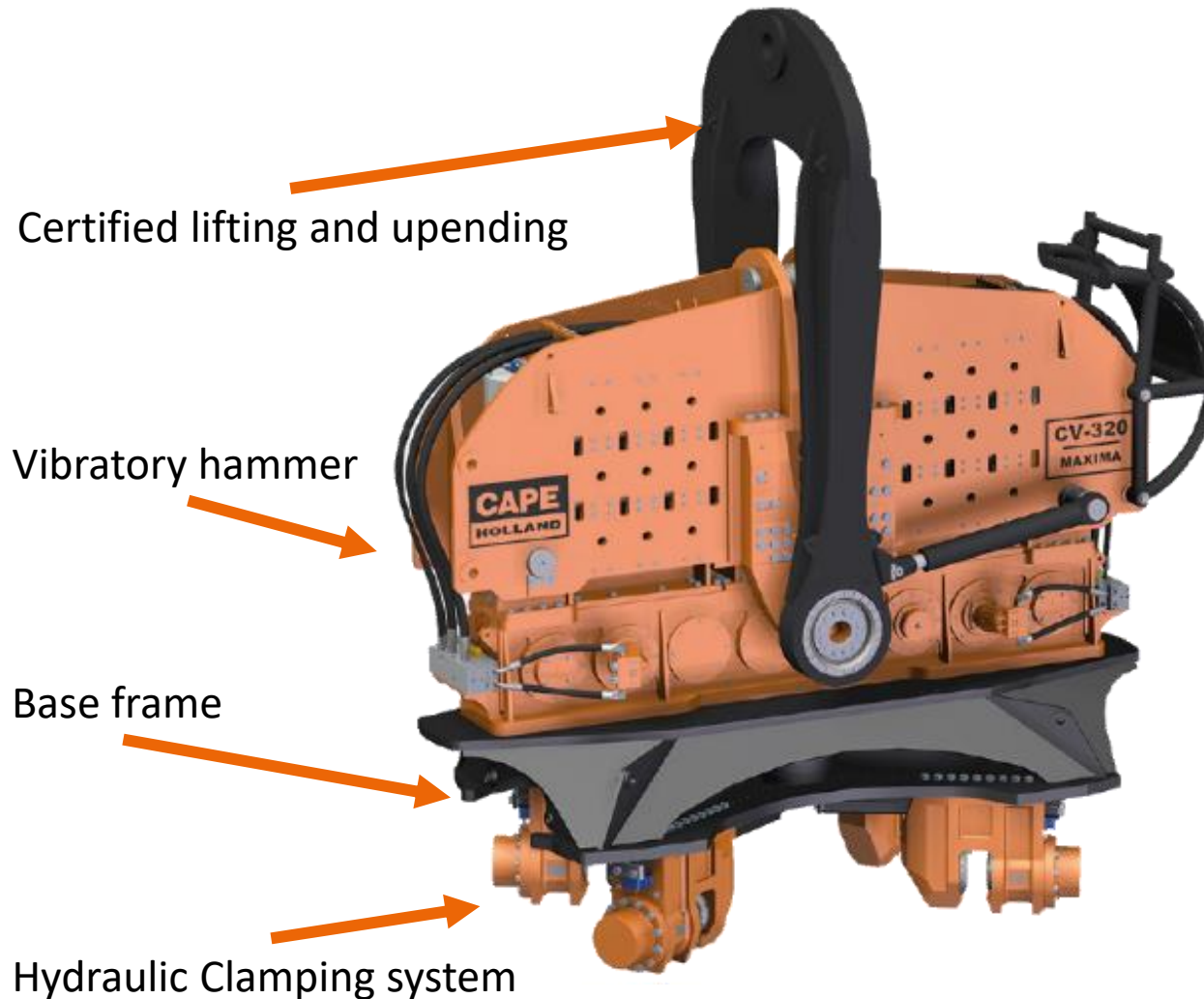
Who and where?



- Established in 2002, run by 6th generation of Piling Expert Family
- Global leader in Offshore Vibro Technology
- Manufacturer of the **only** offshore certified Vibro Lifting Tool (VLT)
- Offshore installation equipment and service provider



What is a Vibro Lifting Tool (VLT)?

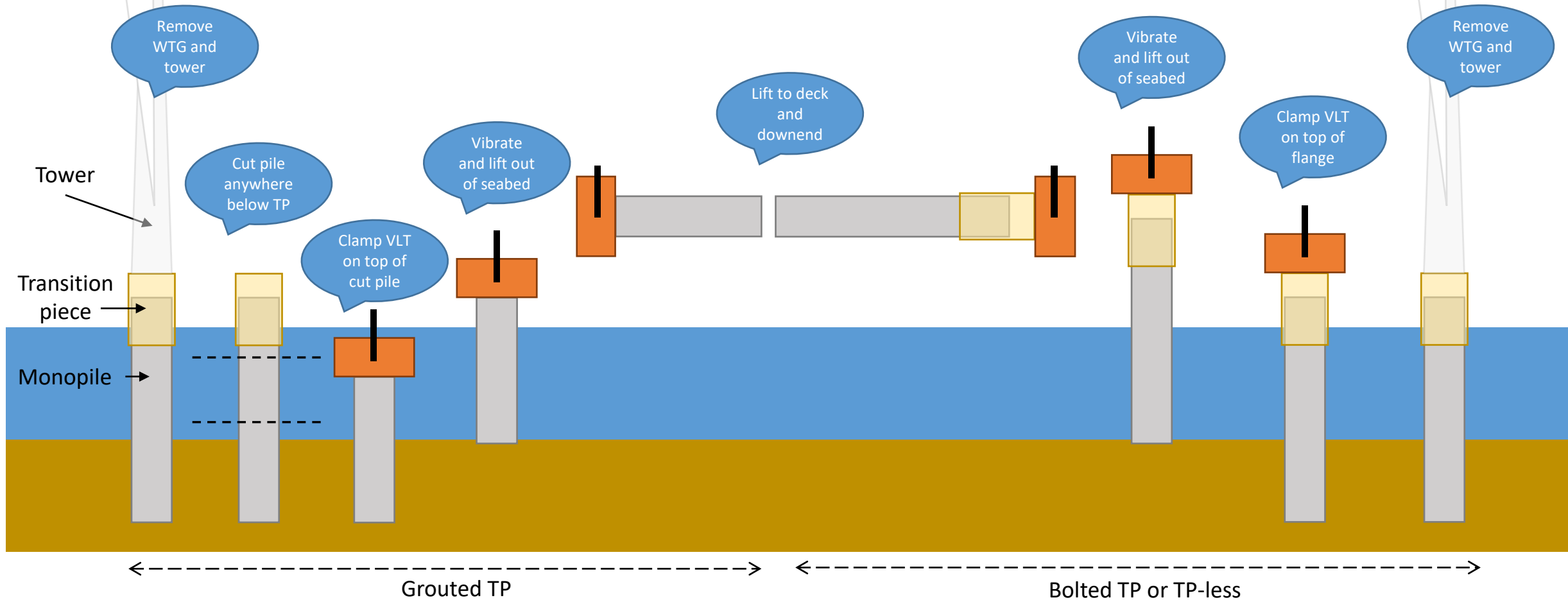


- Hybrid vibro hammer and certified lifting tool

Under Lloyd's Register; Code for Lifting Appliances in a Marine Environment (CLAME)

- Scalable to very large XXL Monopiles
- Commercial available product (TRL9)

How to remove (mono)piles completely?



Why use a Vibro Lifting Tool (VLT) for decommissioning?

Advantages

- Fast
- Little preparation
- Single operation from extraction to downending
- Little environmental impact
- Suitable for subsea

Disadvantages

- Requires heavy lift vessel with crane with sufficient lifting capacity
 - total weight of pile + VLT with an additional 10 to 20%

What is extraction used for already?



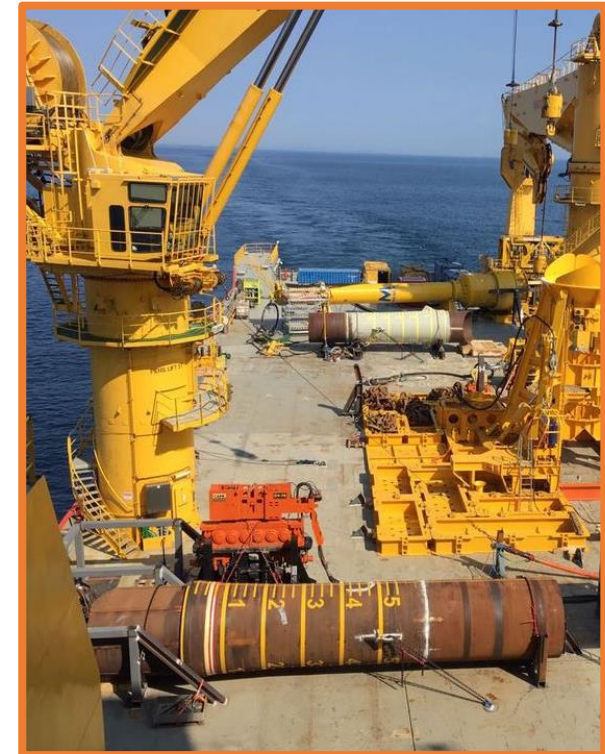
Removal of damaged piles



Large diameter soil sampling



Pipe line initiation piles



Removal of stuck followers

What about monopile extractions?



2016 – DOT turbine test
Ø4m, 1x extracted



2018 – SJOR project
Ø4m, 2x extracted



2019 - MP on DP test
Ø6.5m, 2x extracted

How does it work?





Thank you for your attention!

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