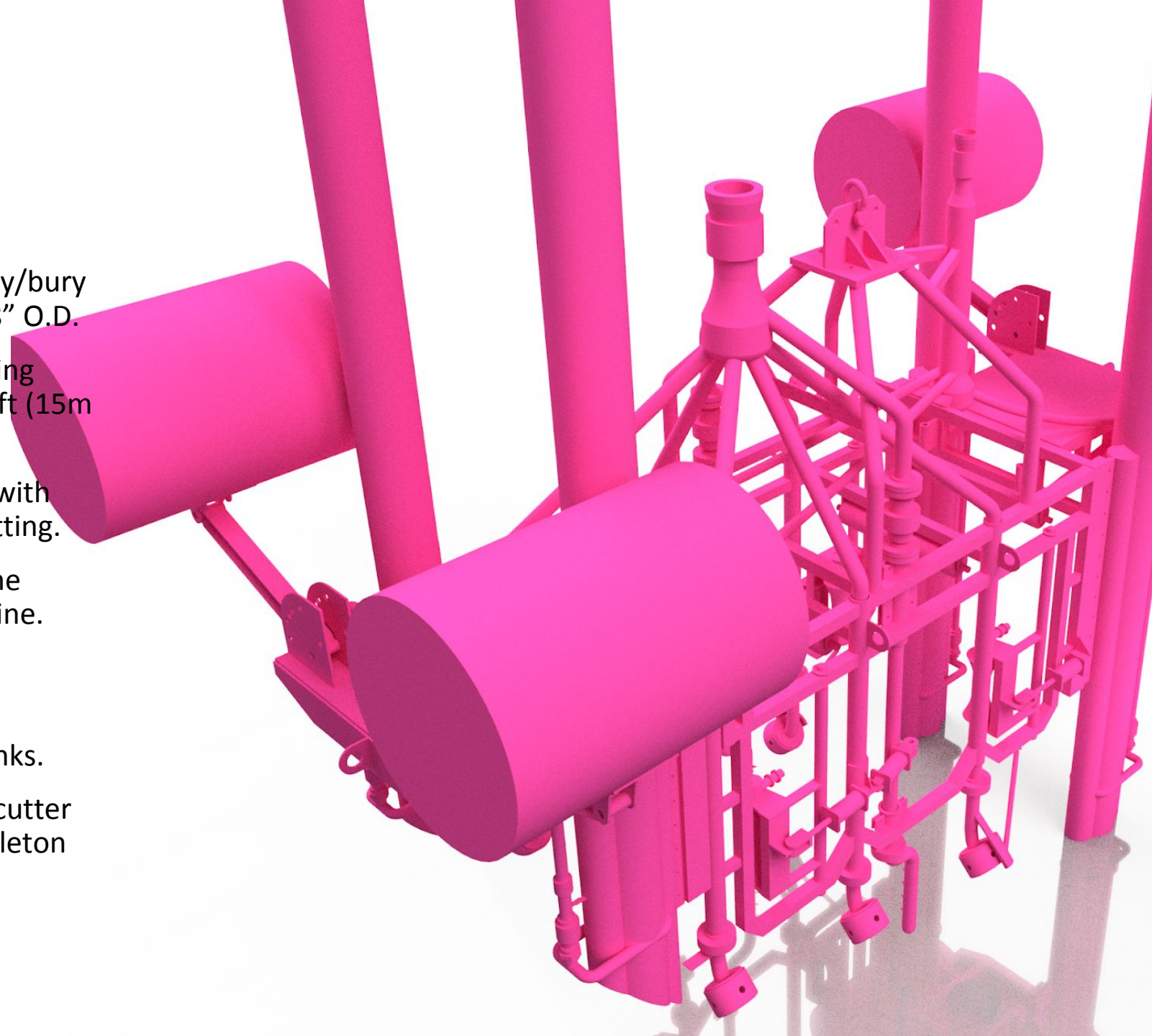


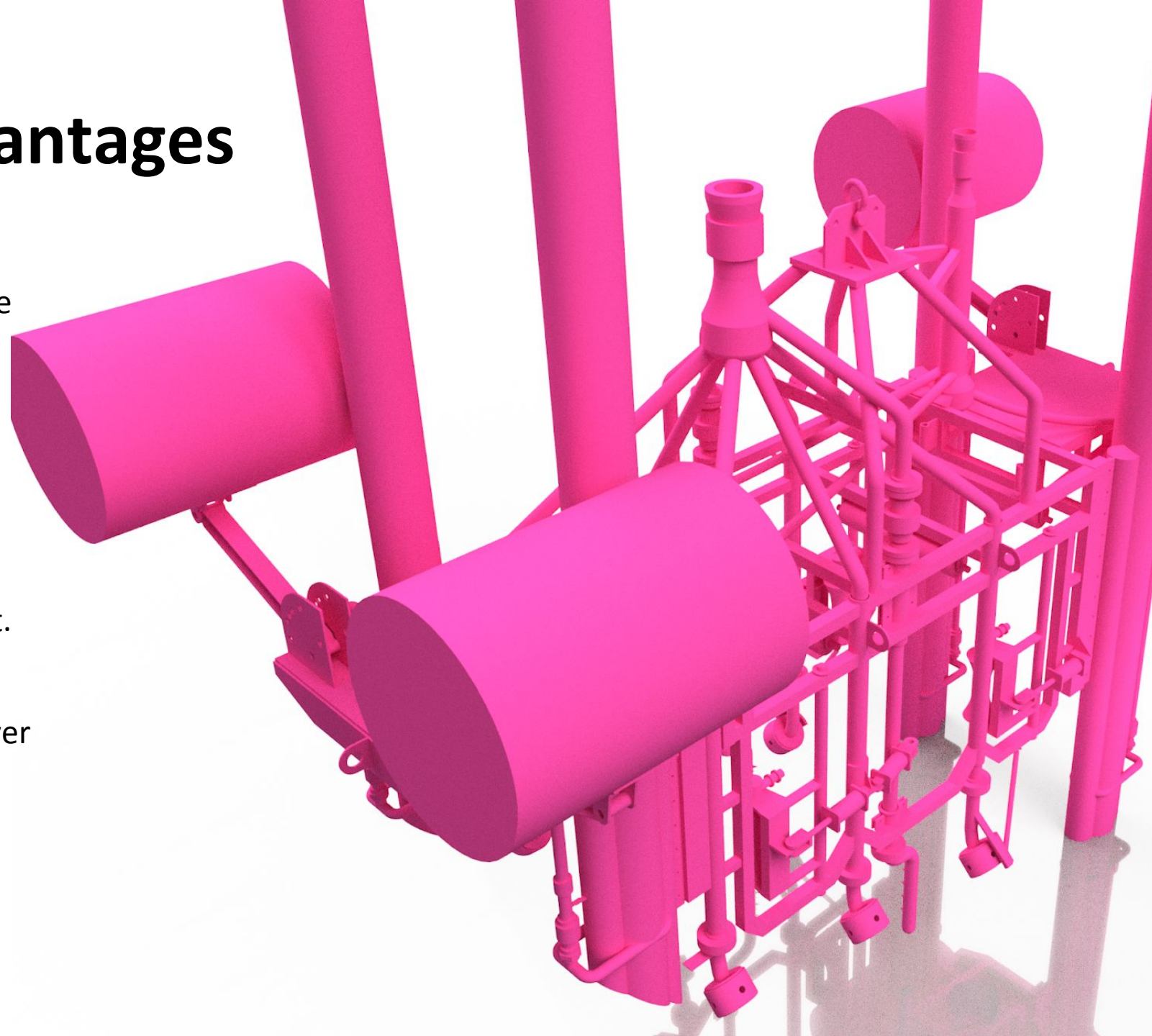
PBS Langostino

- “The Langostino” allows for simultaneous lay/bury operations for subsea pipelines from 24”-58” O.D.
- It’s a self-propelled pipeline trencher, allowing work from a DP-2 vessel with 5 metric ton lift (15m radius) capacity.
- Its structural frame is designed for stability with three (3) certified padeyes for lifting and setting.
- Four (4) hourglass rollers, centered under the machine, hydraulically track down the pipeline.
- Four (4) airlifts mounted on the machine lift cuttings away from the ditch.
- Buoyancy is controlled by four (4) ballast tanks.
- Adjustable jetting nozzles, four (4) rotating cutter heads, along with 3000GPM and 900psi Hazleton jet pumps provide ample cutting capacity.



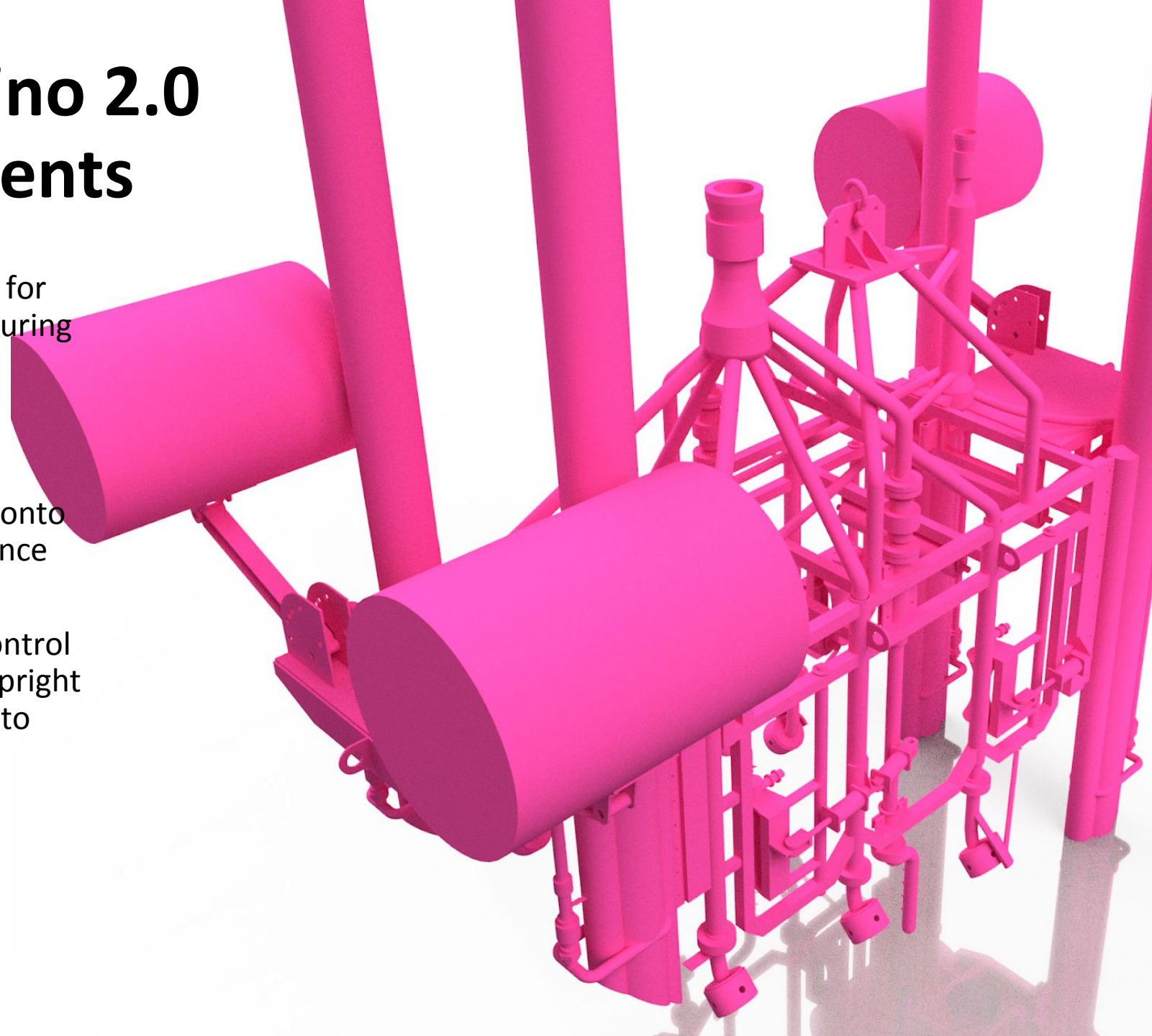
PBS Langostino Advantages

- It can trench pipeline 3ft TOP in a single pass, and up to 16ft TOP with multiple passes.
- Average trench speed 100ft-250ft per hour (soil dependent).
- It can accommodate hard soil cutting >153kPa.
- It can work in water depths up to 300ft.
- Efficient over field joints and crossings.
- Tool improvements allow for either diver or ROV deployment and recovery.



PBS Langostino 2.0 Improvements

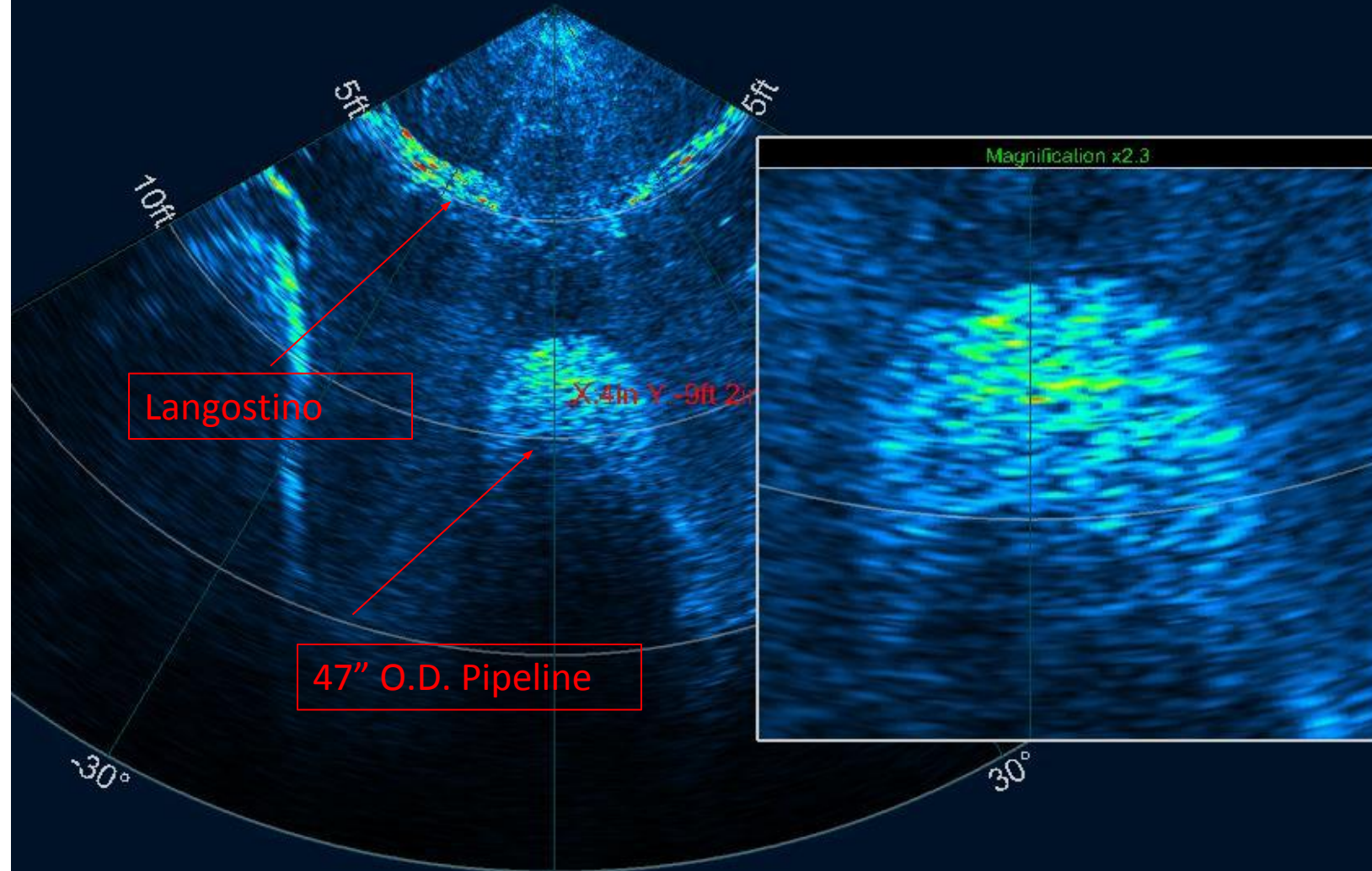
- Tool is equipped with SONAR, allowing for the locating of the proposed pipeline during deployment of the tool.
- SONAR is used to align tool over the proposed pipeline.
- THRUSTER is activated to position tool onto the proposed pipeline (no diver assistance needed).
- BALLAST is digitally controlled in the control cabin, by jet tech operator, to assure upright and lowering positioning of the tool onto proposed pipeline (no diver assistance needed).



Sonar Features

Gemini 720i

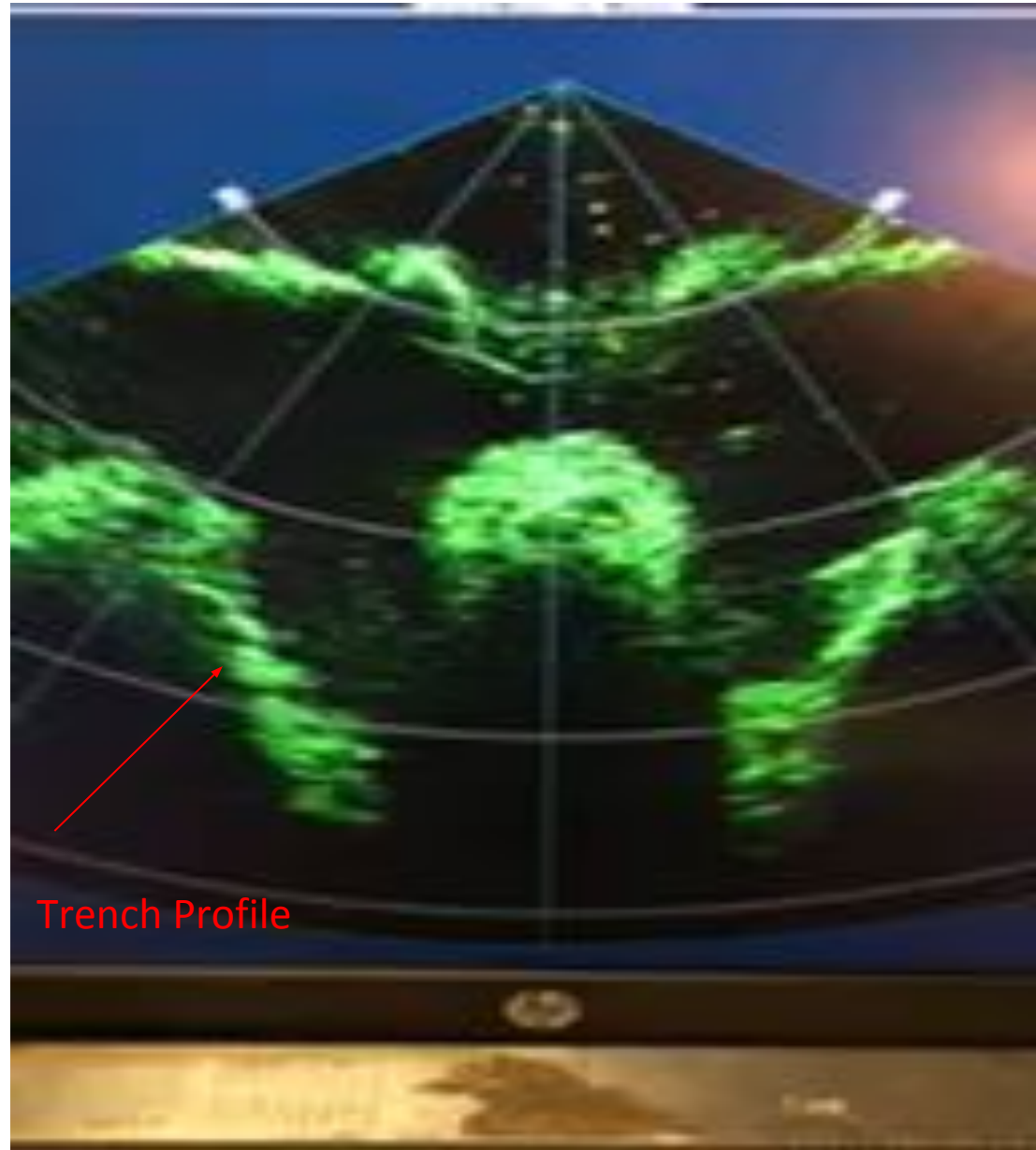
- Sonar is used for tool positioning over the pipeline.
- By using sonar to locate position of tool and alignment over pipeline, this decreases deployment time up to 50%.
- Sonar is used for visual observation of tool location onto pipeline, as well as to provide a visual of trench profile.



Sonar Features

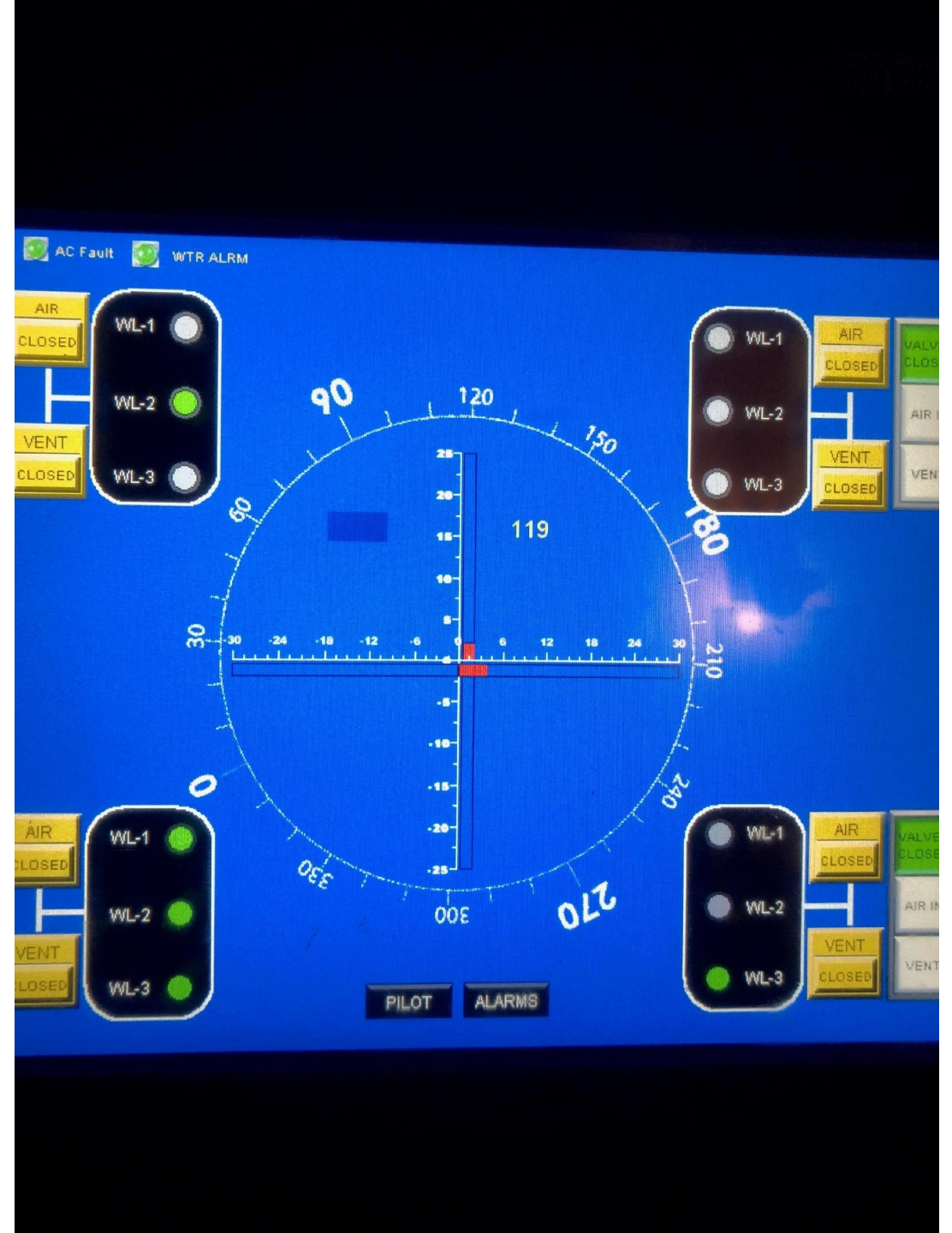
Gemini 720i

- Sonar is controlled and viewed from the control cabin, allowing operator complete awareness of tool's position (alignment).
- Sonar allows for a visual view of trench depth and profile, as well as trench backfilling.



Digitally Controlled Ballast System

- Our newly installed, digitally controlled ballast system is controlled from the control cabin by the jet tech operator.
- Digitally controlled ballast system allows for monitoring and maintaining of tool alignment, both vertically and horizontally, improving efficiency of operations up to 20%.
- This ballast system eliminates the need for manual ballasting by divers.



**Deployment
June 2018**

