



OFFSHORE CONSTRUCTION SPECIALISTS

“A One Stop Shop for All Your Engineering and Marine Construction Requirements”

**OCS UTILITY BARGE (UB-01) “MISS PENNIE” AND
ATTENDANT AHT MULTICAT “MISS BEE”**



OCS UTILITY BARGE (UB-01) “MISS PENNIE” AND AHT MULTICAT “MISS BEE”



- The UB-01 “Miss Pennie” and AHT Multicat “Miss Bee” are fully owned assets of OCS.
- The UB-01 is purpose built, 160ft x 45ft x 10ft (lengthening to 200ft x 50ft x 10ft is in progress) and based in Batam, Indonesia.
- The vessel unique characteristics with long boom excavators, crawler crane, trailing arm and other support equipment provide an holistic complete solution to pipeline shore approaches
- For specific projects the vessel can be configured for pipelay.
- The UB-01 is supported by Multicat “Miss Bee” for running anchors and providing other support functions for the barge.

OCS UTILITY BARGE (UB-01) “MISS PENNIE”



The UB-01 is designed to support shallow/ medium water depth marine construction projects and can be configured in a multiplicity of operational modes including:

- Pipeline pre-trenching or general trenching work with long boom excavators and trailing arm for deeper water.
- Pipelay operations
- Pipeline post Trenching
- Support vessel on which either Linear pull winch or Horizontal Directional Drilling equipment can be based
- Shallow Water Decommissioning projects
- Miscellaneous Marine Construction support work such as dolphins & Jetty work etc.

OCS MULTICAT “MISS BEE”



- The Multicat “Miss Bee” has twin 380 BHP engines (380 HP each) shallow work vessel, capable of anchor handling off her bow roller or stern A frame using a 14-tonne winch. She has on board accommodation for 8 pax and is equipped with 25mT.m knuckle boom crane.
- The vessel supports OCS Utility Barge UB-01 “Miss Pennie” or can provide support to 3rd party vessels.



BASELINE CONFIGURATION OF UB-01 “MISS PENNIE”



- Hull designed with strengthened keel and side shell to facilitate grounding and strengthened stern to accommodate stinger and A frame
- Operating draft min 1.5 metres
- Deck strengthened for crane and excavator tracking

- Built-in Diesel, Fresh water and Ballast tanks for trimming
- Timber Decking to facilitate Deck Crane and excavator tracking
- 90 tonne Crawler crane



BASELINE CONFIGURATION OF UB-01 “MISS PENNIE”

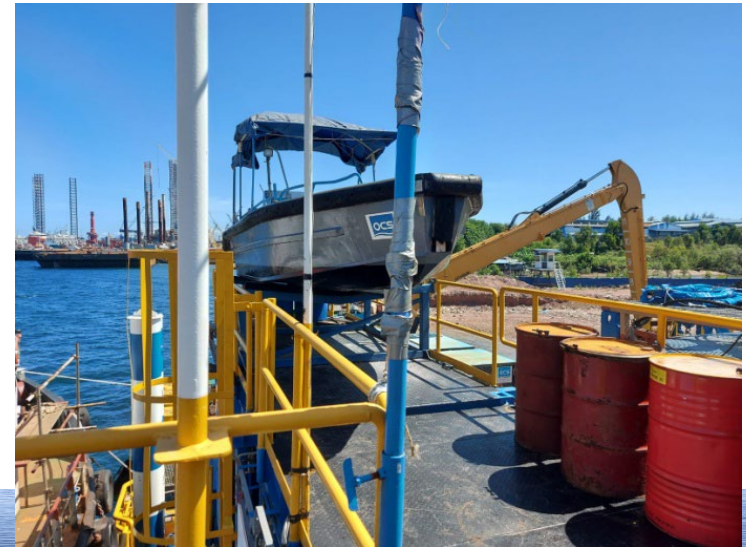
- Below deck mooring system consisting of 8 x 10 tonne winches each with 1000 metres 28mm wire along with 1.5 tonne Delta Flipper anchors and pennant buoys. Centralised control system with load cells and winch cameras.
- 2 units x 22 m³ air receivers below deck to power winches and provide air for post trenching and ancillary applications supplemented with electric and diesel air compressors.
- 3 Independently driven spud piles.



Equipped with three 18-m spuds for shallow water (<15m) Pre-trenching

BASELINE CONFIGURATION OF UB-01 “MISS PENNIE”

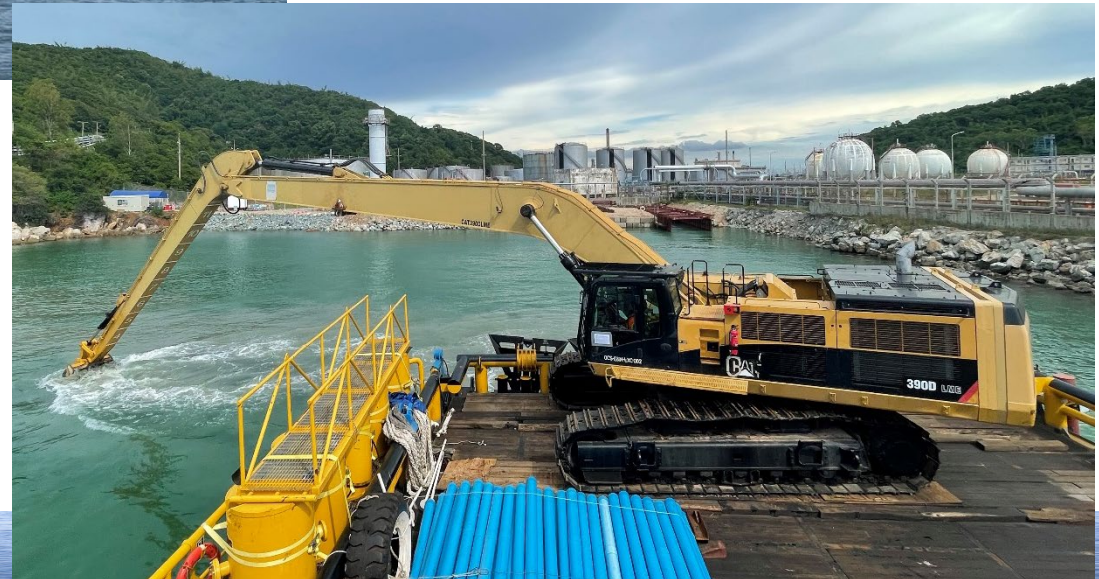
- Power generation system with 2 x 300kVa Generators, 25kVa Emergency and fully automated switchboard.
- Day Messing facilities.
- OCS in-house DGPS Survey System for Barge and Tug Management.
- Diving / Fast rescue Boat.
- Integrated Welding and cutting equipment.
- 32 ton-metre fixed knuckle boom crane on starboard side.
- Lifting padeyes to enable handling with HLV fully loaded with equipment for remote projects.



UB-01 “MISS PENNIE” CONFIGURED FOR PRE-TRENCHING USING EXCAVATOR



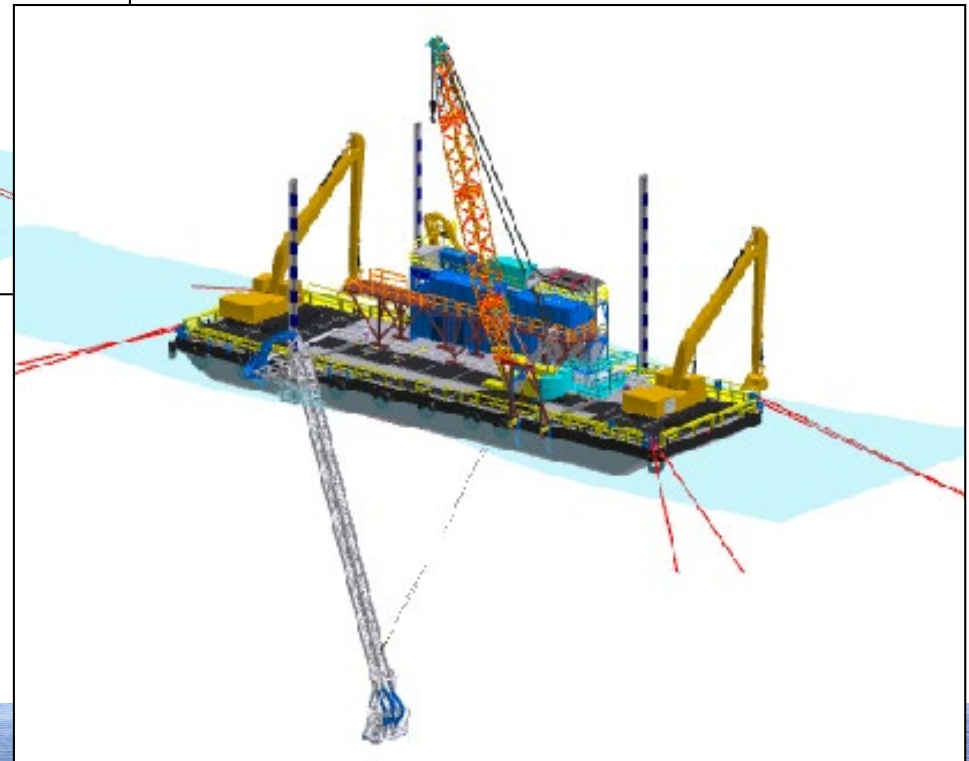
- 2 x Long Boom Cat 390 (90 tonne) Excavators c/w 2.0 m³ buckets are loaded on board stern and bow.
- Trench depth monitoring using Excavator Buckets / Trailing arm graduations confirmed using readings from Multicat or Dive boat.



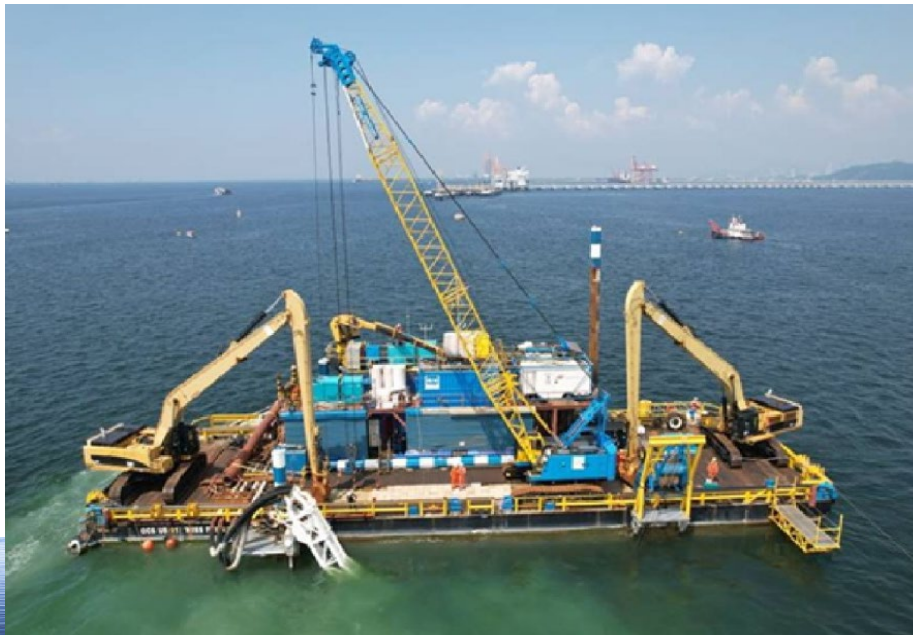
UB-01 “MISS PENNIE” CONFIGURED FOR PRE-TRENCHING USING TRAILING ARM



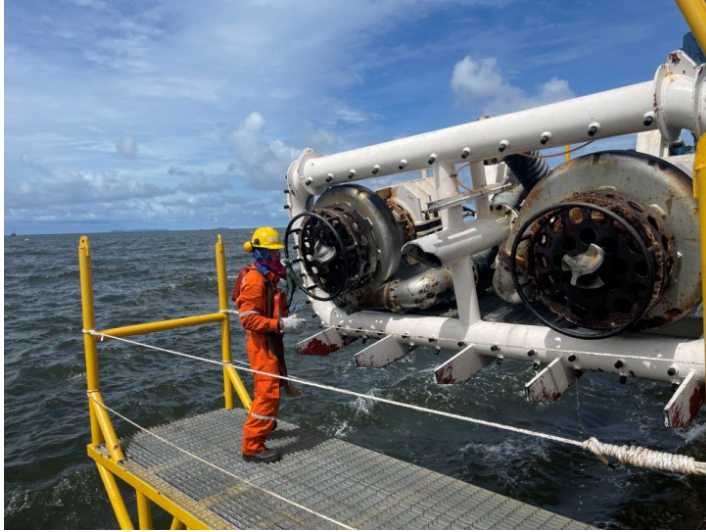
- Trailing Arm can be used for trench maintenance and for water depths between 12 and 31m. The arm is equipped with high pressure jets and submersible dredge pumps and air lifts to remove trenched material.



UB-01 "MISS PENNIE" CONFIGURED FOR PRE-TRENCHING USING TRAILING ARM



UB-01 "MISS PENNIE" CONFIGURED FOR PRE-TRENCHING USING TRAILING ARM

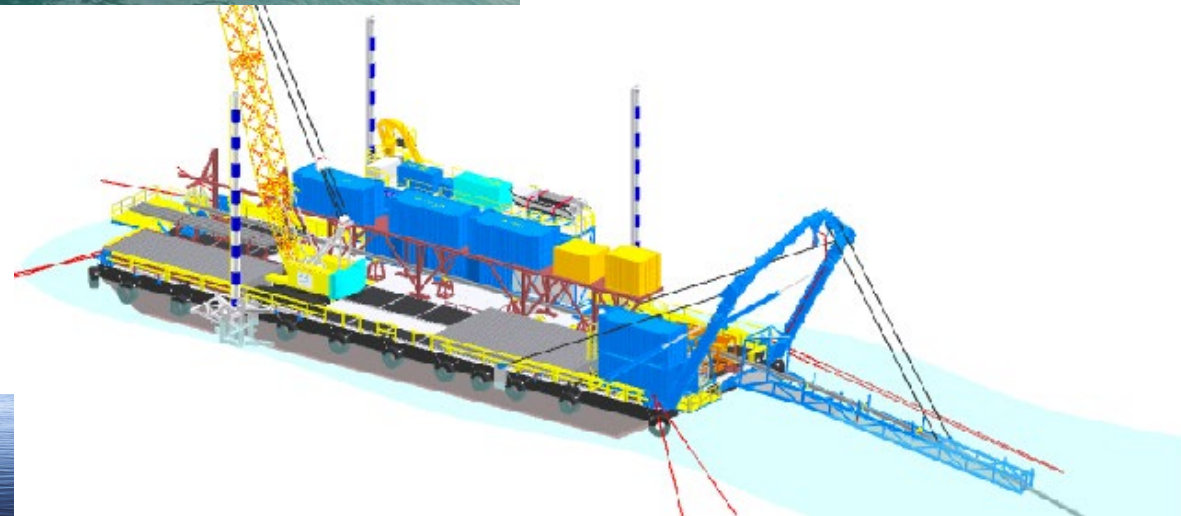


UB-01 "MISS PENNIE" CONFIGURED FOR PIPELAY



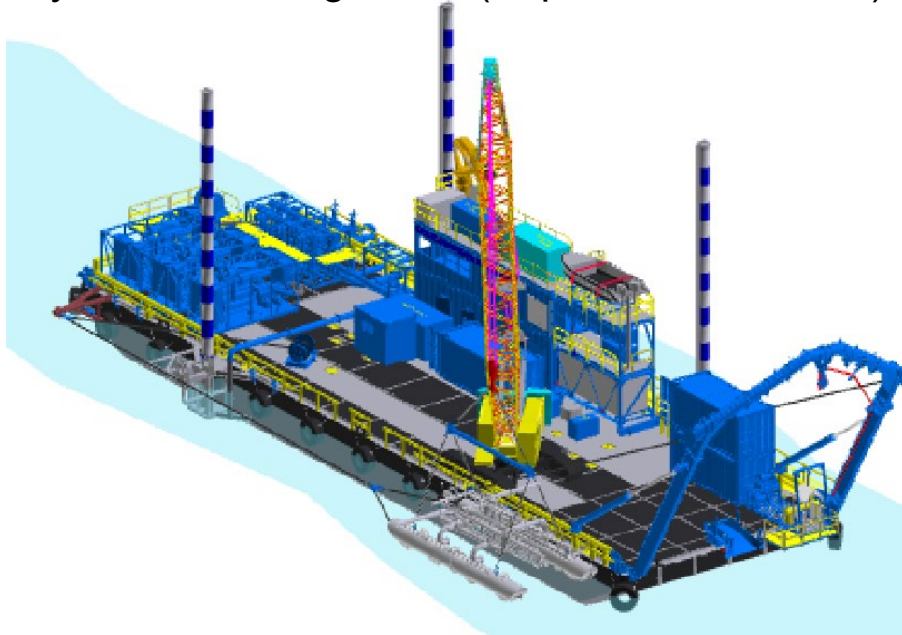
- 60T A-Frame installed at vessel stern.
- Portable Pipe ramp and rollers with 3 welding stations and one field joint station.
- Tension machine

- Ladder stinger hung from A-frame at vessel stern.
- Air Diving system / ROV installed.
- Welding, NDT and Field Joint systems established.



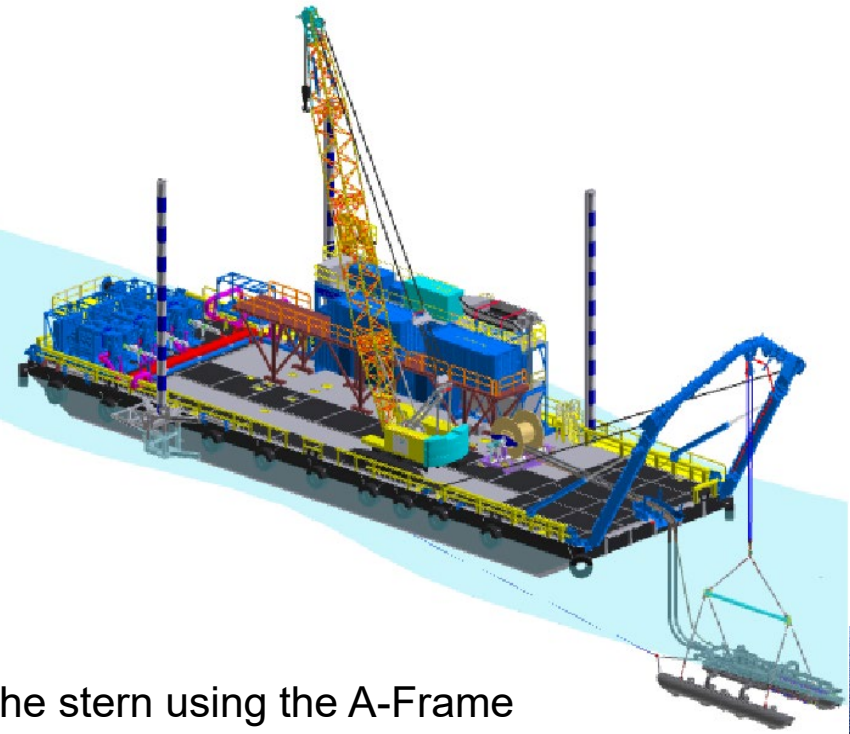
UB-01 "MISS PENNIE" CONFIGURED FOR POST TRENCHING

By the side using crane (or portable A-Frame)



- Well proven pontoon Articulated Arm and pipe riding jet sleds
- Trailing Arm (capable of reaching 31m water depth) equipped with Jetting Head
- 90 tonne deck crane
- 60 tonne stern A frame

- High volume feed pumps
- High Volume pressure pumps – 4 stage and 5 stage centrifugal pumps
- Large volumes of compressed air



By the stern using the A-Frame

UB-01 "MISS PENNIE" CONFIGURED FOR POST TRENCHING



UB-01 "MISS PENNIE" CONFIGURED FOR POST TRENCHING



OCS UTILITY BARGE (UB-01) "MISS PENNIE" UPGRADE PLANS

Design has been completed and Steel has been purchased to lengthen the barge, add sponsons and accommodation facilities to the vessel. Draft plans are shown below.

