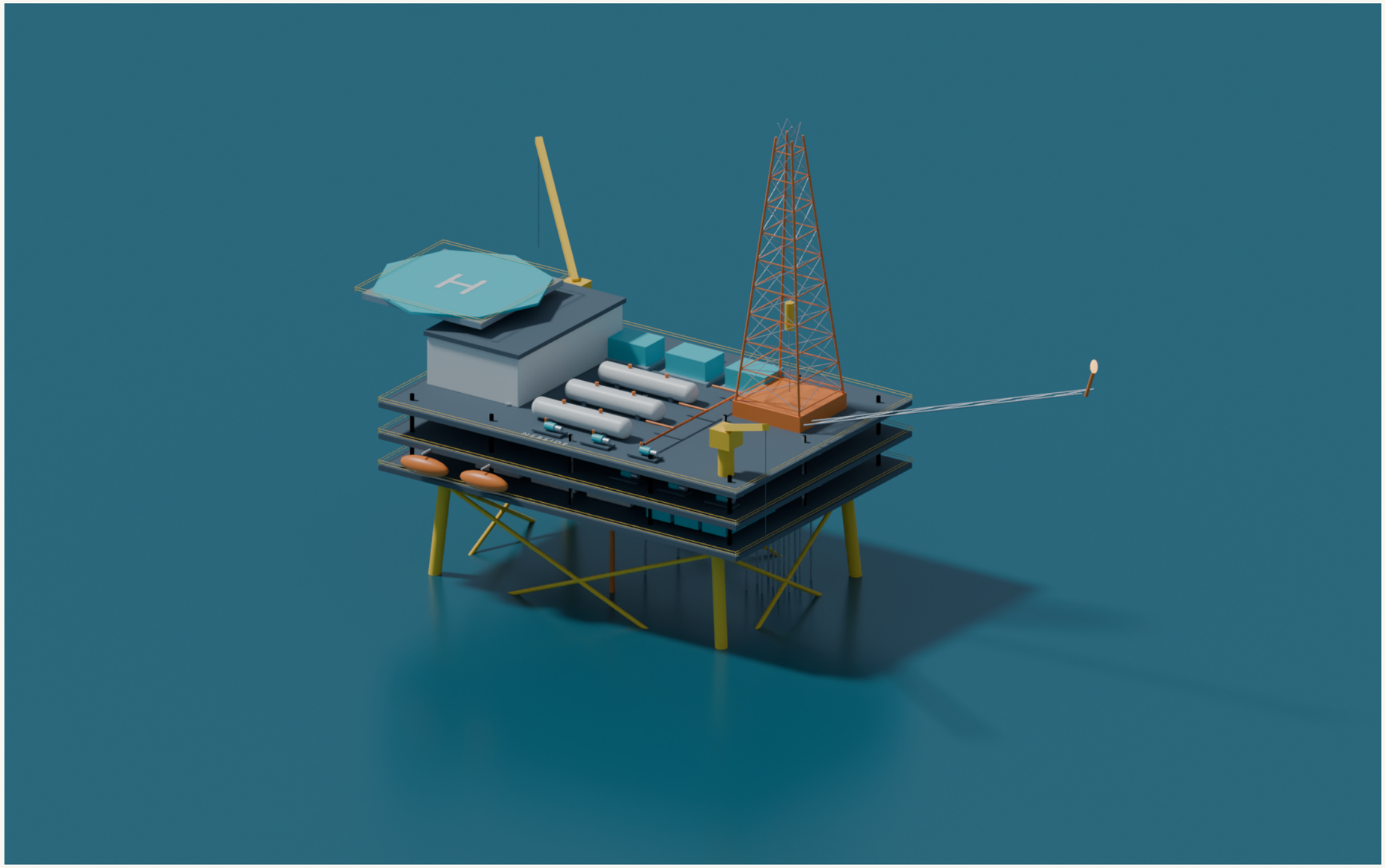
Complete facility

Modello 3D effettivamente generato / Actual generated 3D model



CASE DATA

Fixed jacket offshore platform

Topside 90 x 64 m

Nominal seabed -95 m

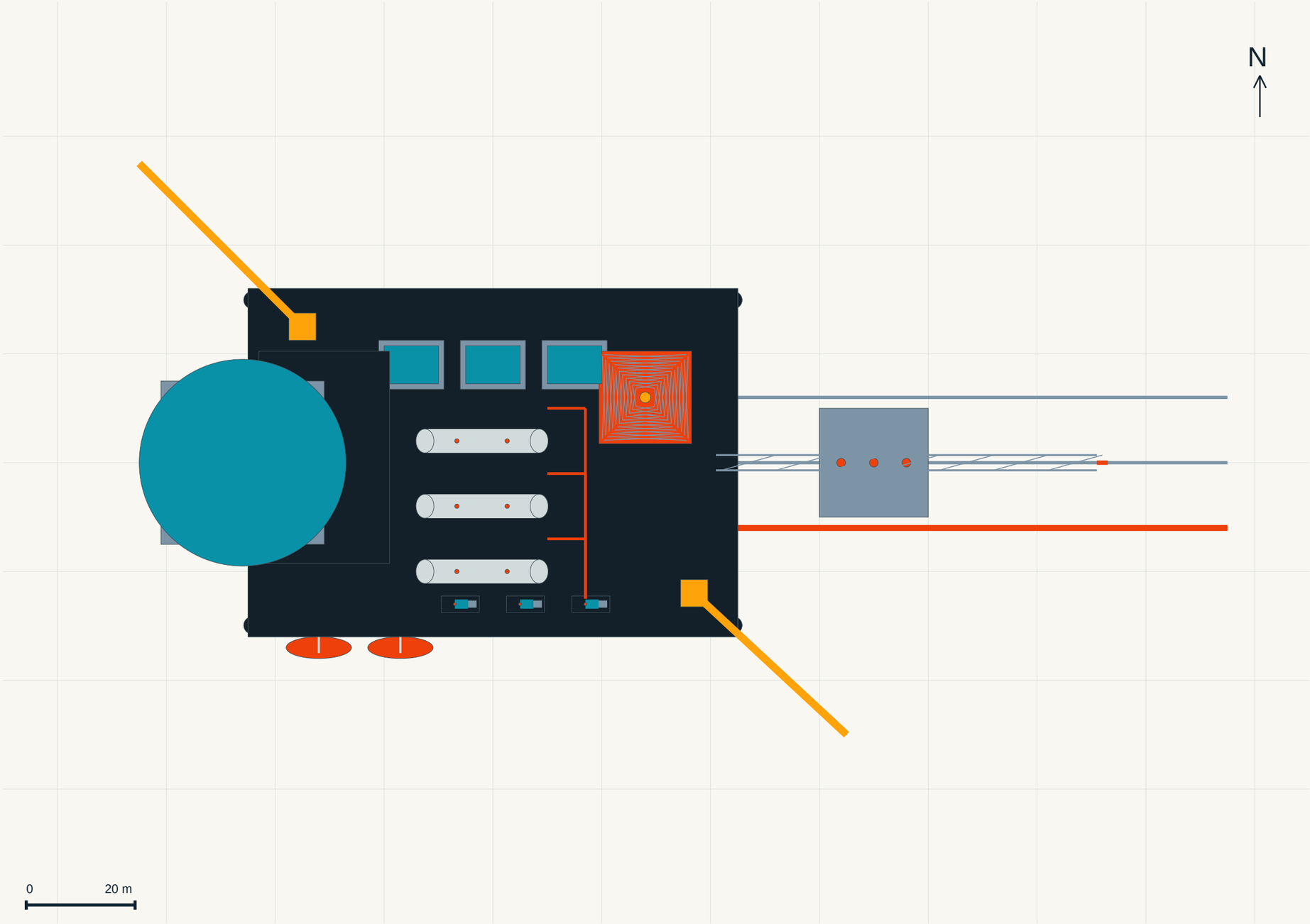
Decks +24 / +31 / +38 m

12 well slots; 60,000 bbl/day assumed

Capacities are narrative assumptions, not process simulator results.

Model plan

Proiezione vettoriale dei solidi principali | Local coordinates in metres



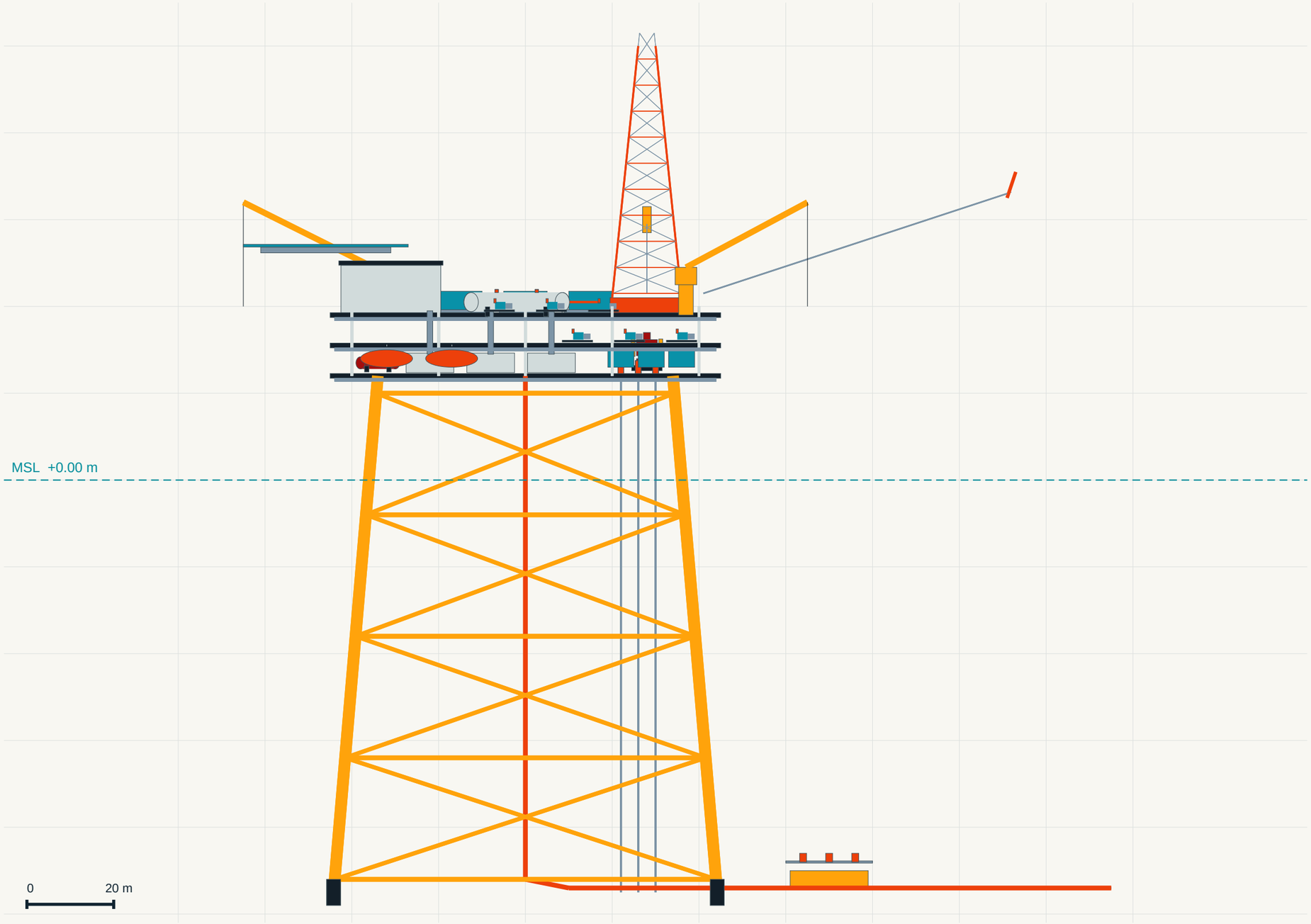
ENVELOPES

Topside 90 x 64 m. Helipad and flare boom extend beyond the deck rectangle.

Arbitrary local north. No EPSG reference or real cadastral position.

South elevation

Proiezione volumetrica | Schematic envelope projection



LEVELS

MSL +0.00 m

Mudline -95 m (nominal)

Deck +24 m

Deck +31 m

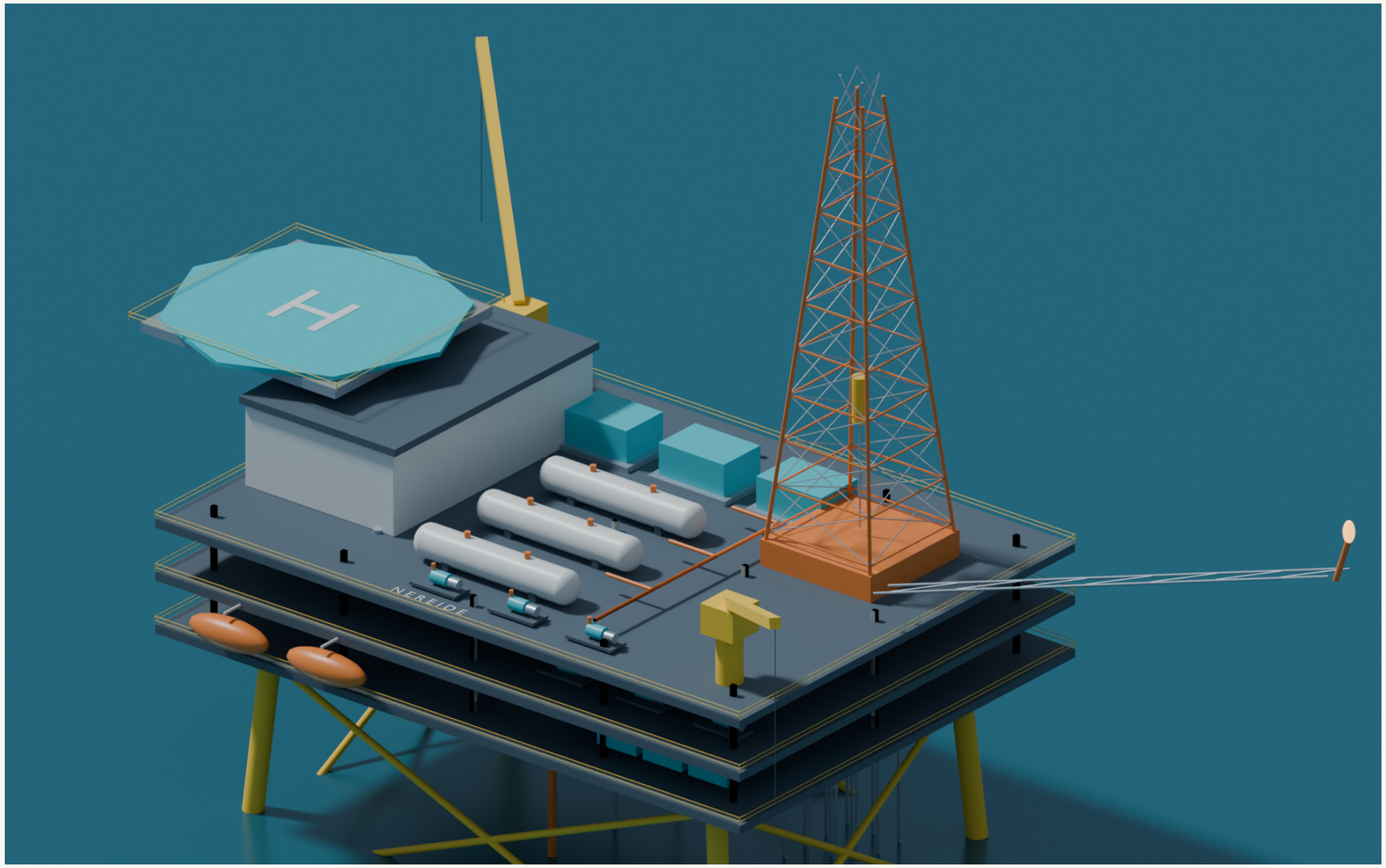
Deck +38 m

Derrick top +100 m

Geometry does not verify loads, vibration, wind, seismic action or structural resistance.

Machinery and systems

Vista di dettaglio + conteggio geometrie | Detail view + geometry counts



SISTEMI / SYSTEMS

10 JACKET	**60**
20 TOPSIDES	**57**
30 PROCESS	**45**
40 DRILLING	**154**
45 WELL CONTROL	**21**
50 LIVING	**4**
60 UTILITIES	**24**
70 LIFTING	**8**
80 FLARE	**10**
90 SUBSEA	**14**

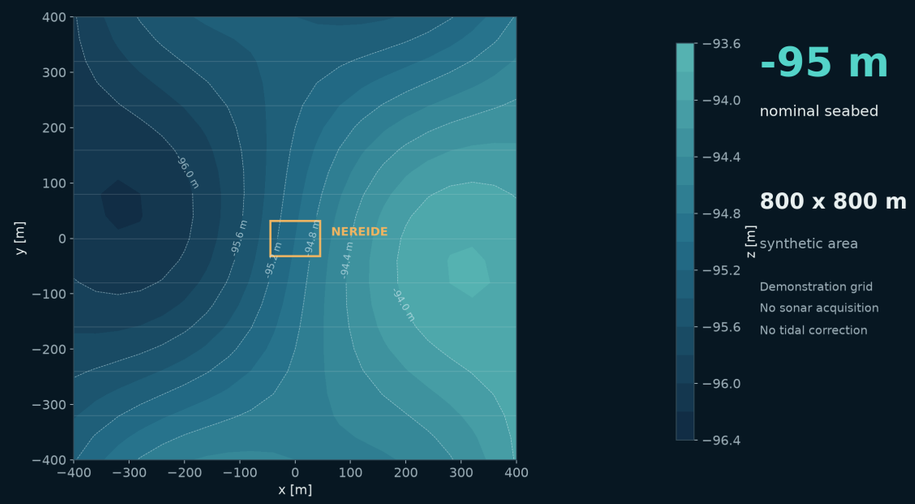
Counts are solids, not equipment quantities. CSV files separate components from functional references.

Synthetic surveys and drilling concepts

Dati sintetici dichiarati | Explicitly synthetic datasets

NEREIDE / SIMULATED BATHYMETRY

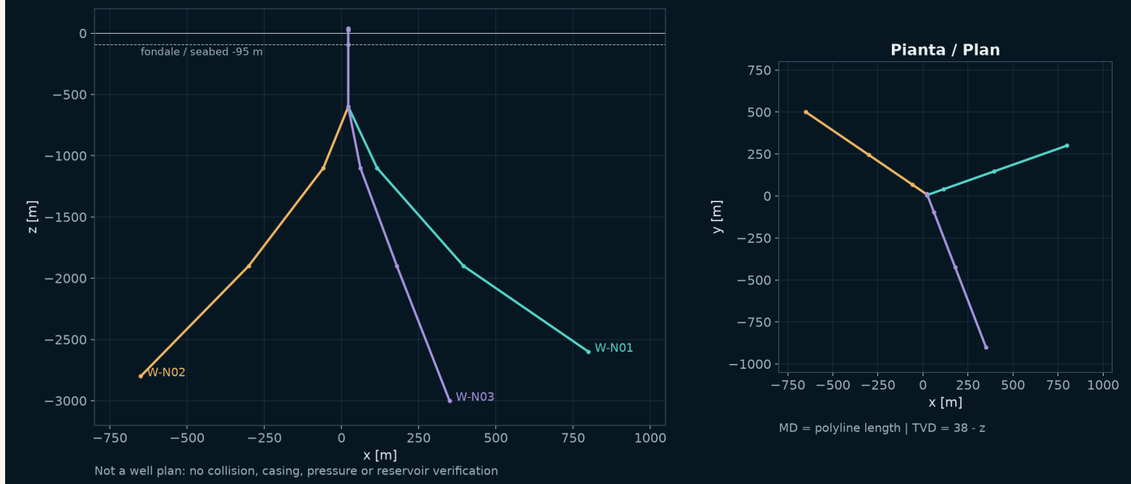
441 generated points on a 40 m grid



SYNTHETIC DATA | arbitrary local coordinates | concept, not for construction

NEREIDE / ILLUSTRATIVE WELL PATHS

Three fictional polylines; diagrams use different horizontal and vertical scales



Not a well plan: no collision, casing, pressure or reservoir verification

SYNTHETIC DATA | arbitrary local coordinates | concept, not for construction

Bathymetry, boreholes and well trajectories are synthetic examples. Well paths are not a drilling plan. No reserves or operability have been estimated.

Data, interoperability and limitations

Legenda del pacchetto | Package legend

RVT	Revit: DirectShape envelope solids, levels and views; no calculated MEP networks.
IAM / IPT / STEP	Inventor: conceptual geometric assembly and parts; no manufacturing verification.
IFC / GLB / BLEND	BIM exchange and 3D presentation. Decorative detail may vary by representation.
CSV / JSON	Geometry, survey samples and assumptions are recorded separately.
REVIEW	No HAZOP, CFD, FEA, fire design, pipe sizing or regulatory verification.

Revit was observed running in NON-COMMERCIAL trial mode. Check Autodesk licensing terms before commercial reuse.

FONTI PRIMARIE / PRIMARY SOURCES

EIA - The refining process	https://www.eia.gov/energyexplained/oil-and-petroleum-products/refining-crude-oil-the-refining-process.php
EIA - Crude oil distillation and refinery capacity	https://www.eia.gov/TodayinEnergy/detail.php?id=6970
EPA AP-42 - Petroleum Refining	https://www.epa.gov/sites/production/files/2020-09/documents/5.1_petroleum_refining.pdf
OSHA Technical Manual - Petroleum Refining	https://www.osha.gov/otm/section-4-safety-hazards/chapter-2
BSEE - General Life Cycle of Offshore Oil and Gas Exploration and Pr	https://www.boem.gov/sites/default/files/documents/oil-gas-energy/national-program/BSEE%20Lifecycle%20of%20Oil%20and%20Gas%20Offshore%20Explorati
BSEE - Decommissioning	https://www.bsee.gov/decommissioning
NOAA - Hydrographic Survey Equipment	https://nauticalcharts.noaa.gov/learn/hydrographic-survey-equipment.html
SLB - Directional drilling and measured depth	https://glossary.slb.com/en/terms/d/directional_drilling