

CHAOPAYAR CONSTRUCTED CO., LTD.

EV ALUMINIUM WORKBOAT

12 m electric cargo landing craft with
a 3-ton crane

8 t

MAX PAYLOAD

100 kW

TOTAL PROPULSION

400 kWh

BATTERY CAPACITY

EST. RADIUS: 60 km light / 42 km loaded*

*Theoretical, zero reserve; same loading both legs. See page 3.

Electric propulsion system by CAMY



Vessel configuration

A compact aluminium landing craft for cargo transfer at piers and beaches



3-ton crane, landing ramp and twin 50 kW electric outboards

OVERALL LENGTH

12.0 m

BEAM

3.0 m

HULL DEPTH

1.5 m

MAXIMUM PAYLOAD

8 tonnes

DECK CRANE

3-ton class

ELECTRIC PROPULSION

CAMY 50 kW × 2 units

Crane lifting capacity depends on boom reach and the approved load chart. Final payload and lifting limits require stability verification.

Electric propulsion and performance



Concept image. Confirmed motor rating: 50 kW per unit.

400 kWh

BATTERY CAPACITY

4.0 t

BATTERY PACK

4.5 t

PACK + 2 OUTBOARDS

PROPULSION

2 × 50 kW

CAMY electric outboards | 100 kW rated total

13 kn

CRUISE SPEED
LIGHT CONDITION

9 kn

CRUISE SPEED
FULL 8-TON PAYLOAD

ENERGY AND ENDURANCE BASIS

80% setting: assumed 40 kWh/hour per motor

Combined battery draw: 80 kWh/hour (80 kW)

400 kWh / 80 kW = 5.0 h theoretical

20% reserve: 320 kWh / 80 kW = 4.0 h

CALCULATED RANGE PER CHARGE

	LIGHT (km)	FULL LOAD (km)
Total - zero reserve	120.4	83.3
Radius* - zero reserve	60.2	41.7
Total - 20% reserve	96.3	66.7
Radius* - 20% reserve	48.2	33.3

Range assumes stated speeds at 80 kW battery draw. Auxiliary loads and unusable battery capacity are excluded; current, sea state and losses affect range. Confirm by trials. *Radius assumes equal out-and-back legs at the same loading.

Service profile

Configured for daily transport where fixed cargo-handling infrastructure is limited

INLAND WATERWAYS

**River and canal
cargo delivery**

ISLAND SUPPLY

**Resort and coastal
logistics**

PIER-TO-SHORE

**Cargo transfer by
ramp or crane**

UTILITY WORK

**Maintenance and
project support**

Cargo capability in a compact 12 m platform

Bow landing ramp

Direct loading at beaches and low piers

3-ton crane

Self-contained cargo handling at the destination

Electric drive

No exhaust at the point of operation and lower propulsion noise

8-ton payload

Supports daily supply and project logistics

Suitable for inland transportation and approved near-coastal or inter-island routes

Final service limits, payload, crane operation and safety equipment remain subject to stability verification, authority or class approval, weather limits and local operating conditions.

Weight, displacement and draft

Preliminary calculation for the 12.0 m x 3.0 m x 1.5 m aluminium workboat with 3-ton crane

WEIGHT BUILD-UP



RECOMMENDED DESIGN DISPLACEMENT **17.5-18.0 t** Includes crew, EV auxiliaries, safety equipment, mooring gear and allowance

ESTIMATED DRAFT



3-TON CRANE NOTE 3 t at 1 m = 3 t.m | 3 t at 2 m = 6 t.m | 3 t at 3 m = 9 t.m
Allowable lift depends on boom reach, vessel loading and the certified crane load chart and stability assessment.

Calculation basis: LWL 11.4 m; BWL 2.85 m; block coefficient 0.65-0.70; seawater. Freshwater draft is approximately 2.5% greater.
All values are preliminary and require final hull lines, detailed weight take-off, stability analysis, inclining test and authority or class approval.