

AQUACULTURE · INJECTION BUOY

Mussel Farming Buoy.

HDPE injection-moulded buoy for long-line mussel farming. Two halves joined by hot-plate welding into a single watertight body — no gas port, no foam fill. Pressure-rated for 30 m submersion. Standard Ø500 × 1,200 mm body, extendable by hot-plate welding.



VIEW IN 3D
Scan to launch
AR · 3D model
ASAKUA.COM/3D/MUSSEL-FARMING-BUOY

Ø500 mm
BODY DIAMETER

235 L
BUOYANCY
(STANDARD)

12 mm
MIN. WALL
THICKNESS

30 m
SUBMERSIBLE
DEPTH

HDPE
INJECTION-
MOULDED

FIG. 01 · MUSSEL FARMING BUOY — ORTHOGRAPHIC + ISOMETRIC PROJECTION

SCALE: NTS · UNITS: MM · DWG-MUSSEL-BUOY-500-MV

A · ISOMETRIC

B · TOP VIEW

HANDLE
Integrated · Moulded
FOR QUICK & EASY ROPE HITCHING

PLAN

C · SIDE

FRONT ELEVATION

D · BACK

REAR ELEVATION

ENVELOPE
Ø 500 mm
L 1,200 mm
WEIGHT 25 kg

WATERTIGHT MONOBLOCK GEOMETRY

TECHNICAL SPECIFICATION

Watertight. Pressure-rated.

01 BODY — PRODUCTION

Industry standard	Roto-moulded with foam fill
ASAKUA	Single-shot HDPE injection
Material	HDPE PE100
UV stabilisation	Carbon-black integrated
Min. wall thickness	12 mm uniform

03 GEOMETRY

Diameter	Ø 500 mm
Length	1,200 mm (standard)
Weight	25 kg
Buoyancy	235 L
Extension	Hot-plate weld to project length

05 SUBMERSION

Surface deployment	Standard
Submerged deployment	Up to 30 m
Internal cross-ribs	Yes – pressure distribution
Foam absorption	None
Service position	Surface or below wave zone

07 PRODUCTION

Facility	5,000 m ² Menemen, İzmir
Method	Pressure injection moulded
Joining	Hot-plate welding
Capacity	90 kg max single shot
Heritage	Since 2009

02 BODY — JOINT

Industry standard	Welded gas port + foam fill
ASAKUA	Hot-plate welded halves
Gas port	None
Foam fill	None
Watertightness	Sealed by design

04 COMPLIANCE

Material standard	EN 12201 raw material
Quality system	ISO 9001 certified
Service standard	NS 9415 cage compatible
Pressure rating	Hydrostatic – 30 m
Origin	İzmir, Türkiye

06 HANDLES

Top handle	Integrated, moulded
Bottom handle	Integrated, moulded
Auxiliary fittings	None required
Rope work	Direct – tighten / loosen
Wear surface	Body-integral

08 SERVICE LIFE

UV protection	Carbon-black stabilised
Corrosion	None – full HDPE
Design life	20+ years
Foam absorption	None – foam-free
Replacement	Direct rope re-fit

INSTALLATION

Tie on, deploy.

STEP 01

≈ 2 min

TIE TO LONG-LINE

STEP 02

0 tool

DIRECT ROPE WORK

SERVICE

20+ yr

DESIGN LIFE

Long-line ready.

Buoys ship factory-finished and ready to deploy. Tie to mussel long-line at the calculated spacing for the target buoyancy load — integrated top and bottom handles for direct rope work, no auxiliary fittings, no welding, no special tools. Single farm operator handling.

SHIPPING & LOGISTICS

Stack-packed buoy array.

Buoys nest into adjacent units for compact stacking. Container capacity scales with buoy size; standard Ø500 mm shown below.

Per-buoy weight	≈ 25 kg
20 ft container capacity	TBD
40 ft container capacity	TBD
Welding consumables	None

USER NOTES

- Application: designed for offshore mussel farming long-line systems — surface or submerged deployment for cultivation droppers.
- Watertight monoblock: two halves joined by hot-plate welding into a single sealed body — no gas port, no foam fill, no leak paths. Pressure-rated for 30 m hydrostatic submersion.
- Custom sizing: Ø500 × 1,200 mm is the standard model. Body length extendable on request via hot-plate welding to match site-specific buoyancy load.
- Handles: integrated top and bottom handles moulded into body for direct rope attachment. No metal hardware, no auxiliary fittings, no corrosion.
- Manufacturing: single-shot injection moulded in 5,000 m² Menemen, İzmir facility. EN 12201 certified raw material, ISO 9001 quality system.