

Early Mediterranean Shipwrecks

library and glossary

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Volume 2



ShipLAB Report 17
Version 12 – Jan. 13, 2018

Introduction

This report presents a small glossary, a sample of published Pre-Classical, Classical, and Medieval shipwrecks with hull remains preserved, a summary analysis of their main construction features, some relations between timbers and other hull components, and a short account of possible evolutionary paths through time, as proposed in 2012 by Patrice Pomey, Yak Kahanov, and Eric Rieth.

It is a work in progress and we expect to have a working version by November 2018.



GROPLAN
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EU Horizon 2020
No. 727153



Sponsors

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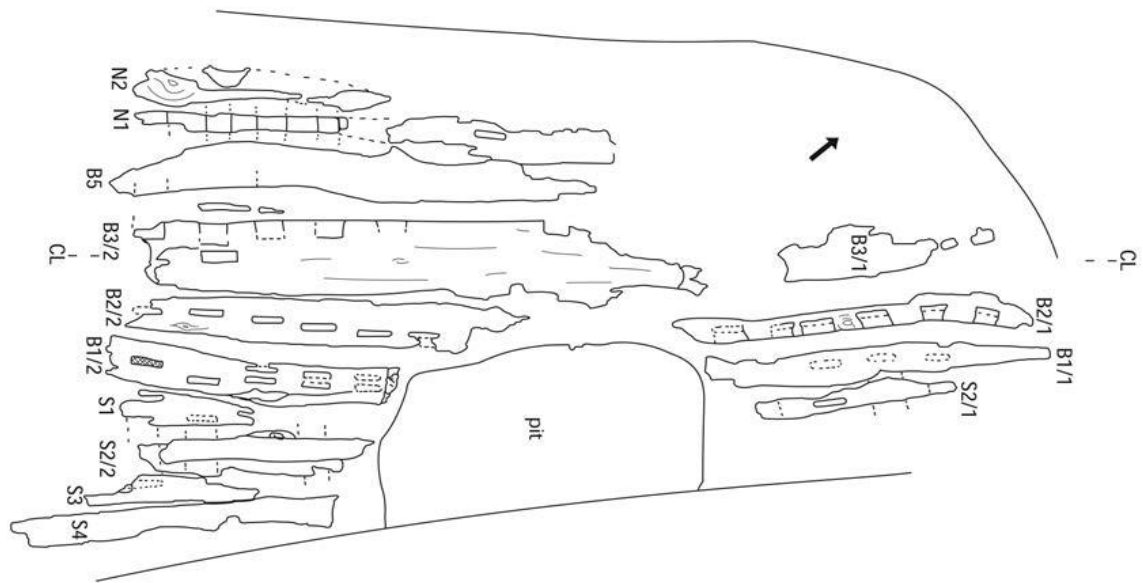
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Abydos BG 10



Chronology: -3050

Preserved – ? x ? m

Length reconstructed – 22 m

Beam reconstructed – 3.5 m

Central plank – ?

Central plank sided dimension – ? cm

Central plank molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – 6 cm

Framing pattern – unknown

Planking method – Lashed

Hull shape – Flat bottom and angular chine

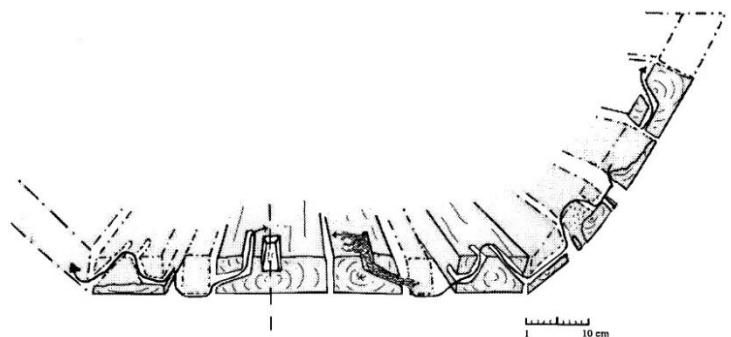
Fasteners – No

Keelson / Maststep – ?

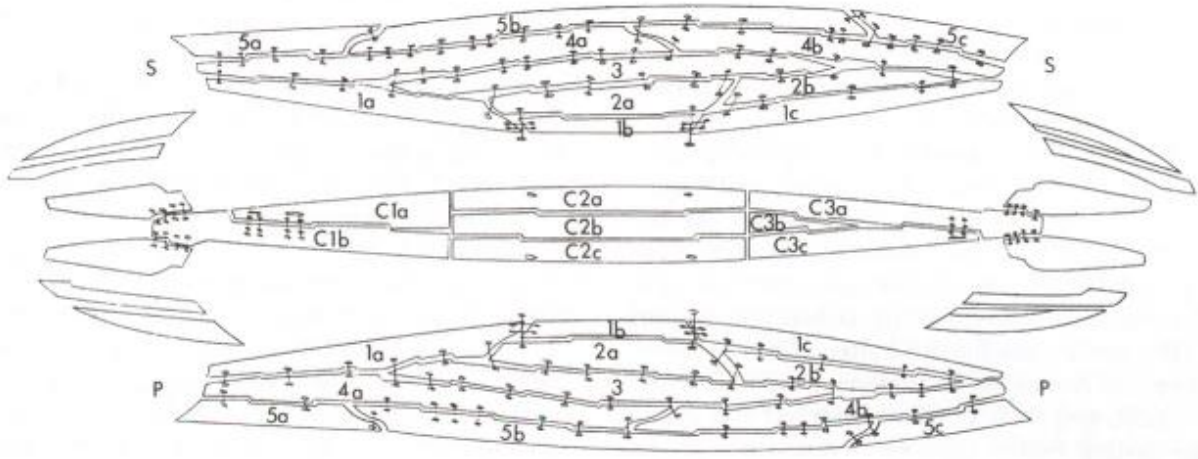
Stringers – ?

Taxa – ; A.S. – ?; Built – Egypt

Notes –



Khufu (Cheops) Barge



Chronology: -2550

Preserved – 42.3 x 5.66 m

Length reconstructed – 42.3 m

Beam reconstructed – 5.66 m

Central strake length – 36 m

Central plank sided dimension – ? cm

Central plank molded dimension – 13 cm

Frames sided dimension – 9 cm

Frames molded dimension – 25 cm

Plank thickness – Bottom 13 cm; sides 12-15 cm

Framing pattern – Floor timbers // 2-3 m

Planking method – npM&T, coaks and lashed // 25 cm

M&T – T 10 x 7 x 1.5 cm // 100-120 cm

Hull shape – Flat bottom and angular chine

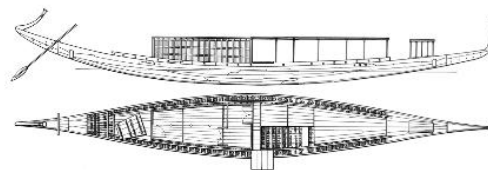
Fasteners – No

Keelson / Maststep – No

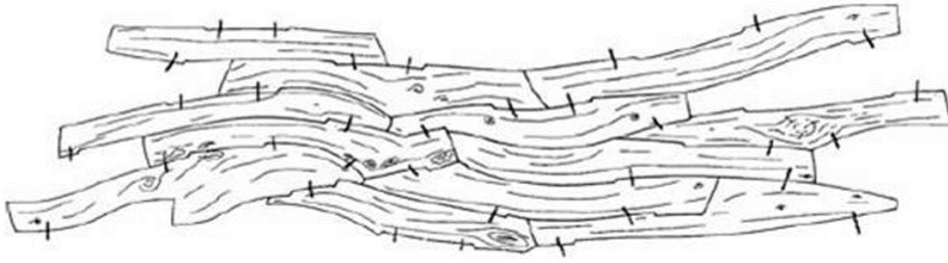
Stringers – No

Taxa – ; A.S. – ?; Built – Egypt

Notes –



Light Timbers



Chronology: -1950

Preserved – ? x ? m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – Bottom ? cm; sides ? cm

Framing pattern – Floor timbers // ? cm

Planking method – npM&T, coaks and lashed // 25 cm

M&T – T 10 x 7 x 1.5 cm // ? cm

Hull shape – Flat bottom and angular chine

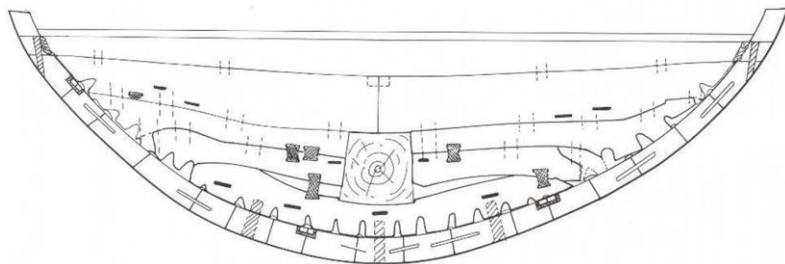
Fasteners – No

Keelson / Maststep – No

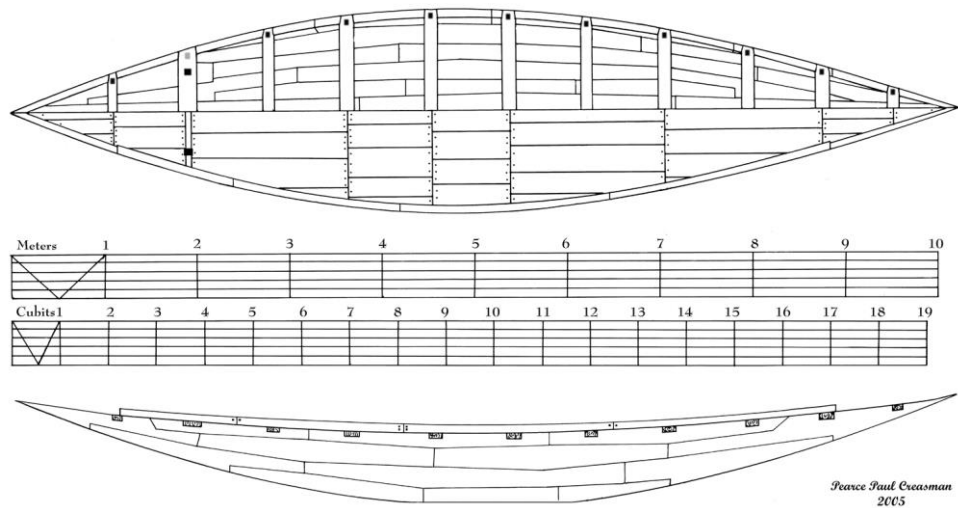
Stringers – No

Taxa – ; A.S. – ? : Built – Egypt

Notes –



Dashur 1 (GC 4925)



Chronology: -1850

Preserved – 10.22 x 2.26 m (0.86 m deep)

Length reconstructed – 10.49 m

Beam reconstructed – 2.26 m

Central strake length – ?

Central strake sided dimension – 27 cm

Central strake molded dimension – 10 cm

Frames sided dimension – no frames; through beams 12-20 cm

Frames molded dimension – no frames: through beams 3.5-6 cm

Plank thickness – Bottom 10 cm; sides taper to 7.5 cm

Framing pattern – No frames; through beams // 70 cm

Planking method – npM&T and dovetail inlays

M&T – M 4-6 x 4 x 1.8 cm // ? cm

Hull shape – Round bottom

Fasteners – Treenails on the caprail; lashing on the extremities.

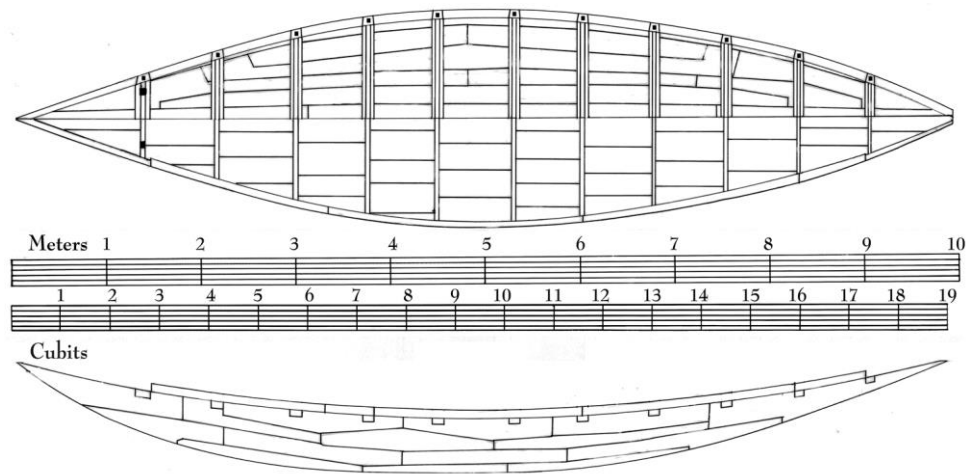
Keelson / Maststep – No

Stringers – No

Taxa – ; A.S. – ?; Built – Egypt

Notes –

Dashur 2 (GC 4926)



Chronology: -1850

Preserved – 9.95 x 2.13 m (0.64 m deep)

Length reconstructed – 10 m

Beam reconstructed – 2.20 m

Central strake length – ?

Central strake sided dimension – 22-26 cm

Central strake molded dimension – 9.5 cm

Frames sided dimension – no frames; through beams 10-13 cm

Frames molded dimension – no frames: through beams 4-4.5 cm

Plank thickness – Bottom 9.5 cm; sides taper to 8-9 cm

Framing pattern – No frames; through beams // ? cm

Planking method – npM&T and dovetail inlays

M&T – M 14 x 7.5 x 1.7 cm // ? cm

Hull shape – Round bottom

Fasteners – Lashing on the upper strakes; lashing on the extremities.

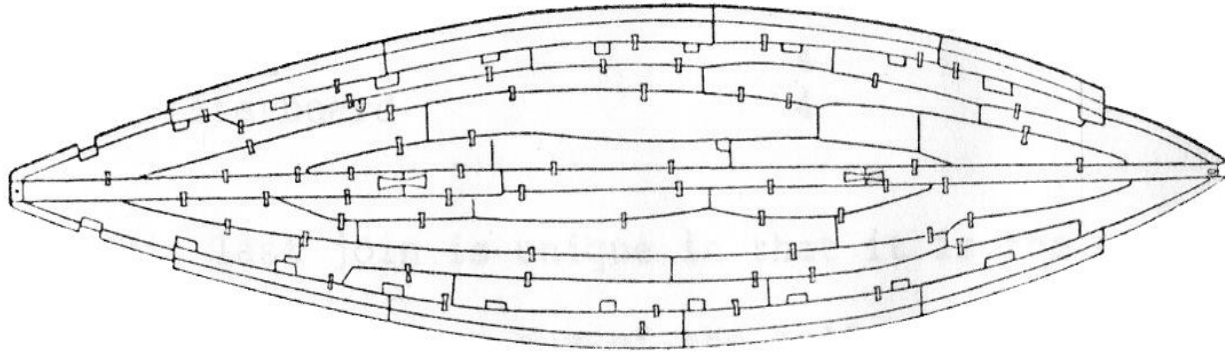
Keelson / Maststep – No

Stringers – No

Taxa – ; A.S. – ?; Built – Egypt

Notes –

Dashur 3 (Pittsburg - EM 4925)



Chronology: -1850

Preserved – ? x ? m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – Bottom ? cm; sides ? cm

Framing pattern – Floor timbers ? // ? cm

Planking method – npM&T, dovetail inlays.

M&T – T ? x ? x ? cm // ? cm

Hull shape – Round bottom

Fasteners – Lashed on the extremities?

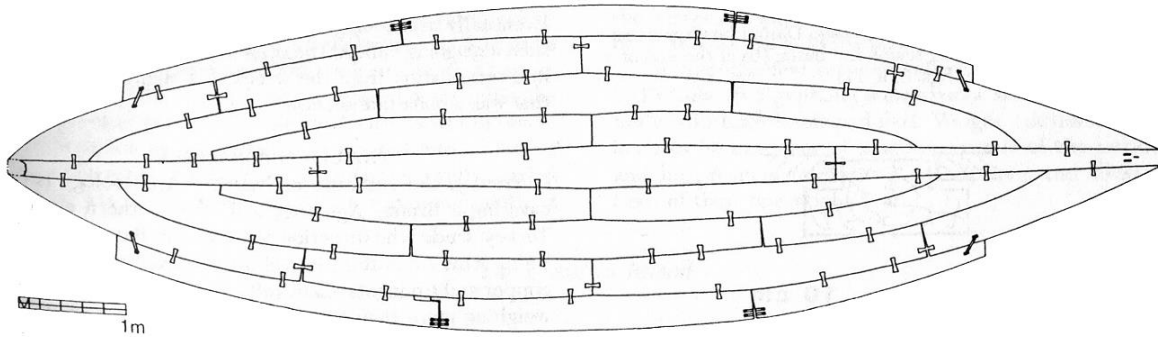
Keelson / Maststep – No

Stringers – No

Taxa – ; A.S. – ?; Built – Egypt

Notes –

Dashur 4 (Chicago)



Chronology: -1850

Preserved – ? x ? m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – Bottom ? cm; sides ? cm

Framing pattern – Floor timbers ? // ? cm

Planking method – npM&T, dovetail depressions (which could be modern) and lashed // 25 cm

M&T – T ? x ? x ? cm // ? cm

Hull shape – Round bottom

Fasteners – No

Keelson / Maststep – No

Stringers – No

Taxa – ; A.S. – ?; Built – Egypt

Notes –

Uluburun

Chronology: -1300

Preserved – 4.5 x 2.5 m

Length reconstructed – 15 m

Beam reconstructed – 5 m

Keel length – ?

Keel sided dimension – 28 cm

Keel molded dimension – 22 cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – 6.5 cm

Framing pattern – unknown

Planking method – pM&T

M&T – T 6.5 x 2 x 14 cm // 28 cm

Hull shape – Round

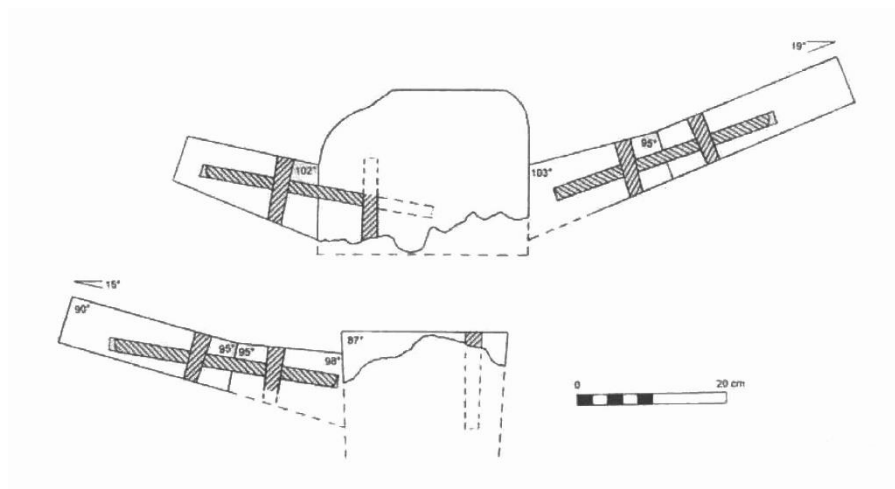
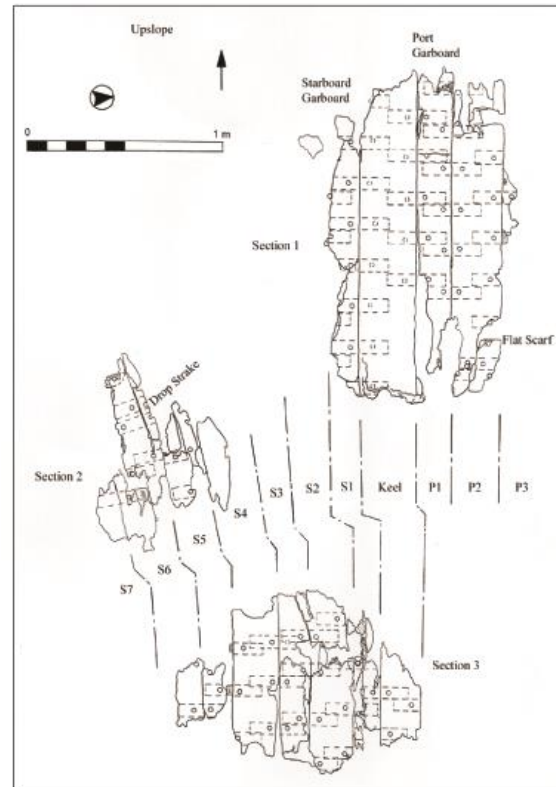
Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa – Bronze Age Phoenician; A.S. – ?; Built proposal – Levant Sirio-Palestine coast

Notes – Earliest shipwreck with pM&T joints.



Cape Gelidonya



Chronology: -1200

Preserved – Only a partial tenon

Length reconstructed – 19 m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – unknown

Planking method – pM&T

M&T – T 6 x ? x 24 cm ?

Hull shape – ?

Fasteners – ?

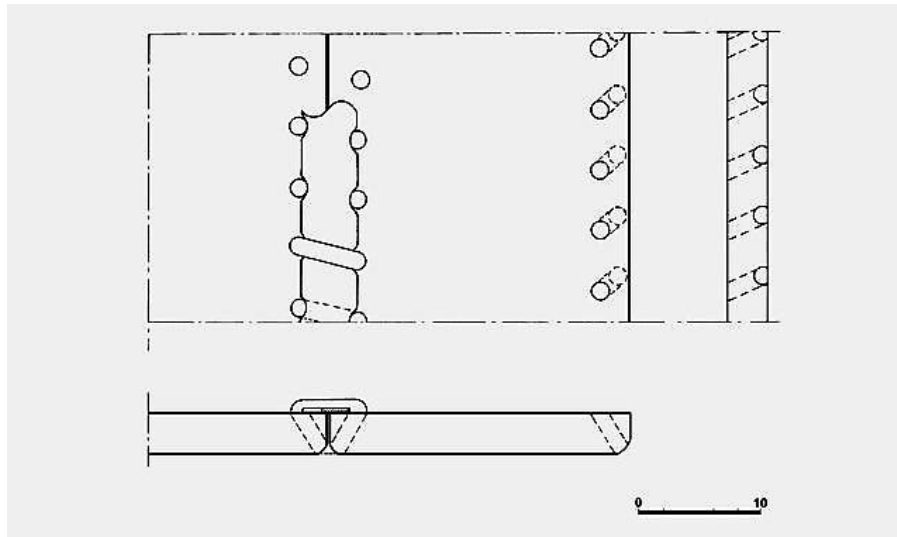
Keelson / Maststep – ?

Stringers – ?

Taxa – Bronze Age Phoenician; A.S. - ?; Built proposal - Levant Sirio-Palestine coast

Notes – Probably assembled with pM&T joints.

Zambratija



Chronology: -1100 / -900

Preserved – 7 x 2.5 m

Length reconstructed – ?

Beam reconstructed – ?

Keel length – ?

Keel sided dimension – ?

Keel molded dimension – ?

Frames sided dimension – ?

Frames molded dimension – ?

Plank thickness – ?

Framing pattern – unknown

Planking method – Laced 2 (Adriatic)

M&T – cm // cm

Hull shape – ?

Fasteners – ?

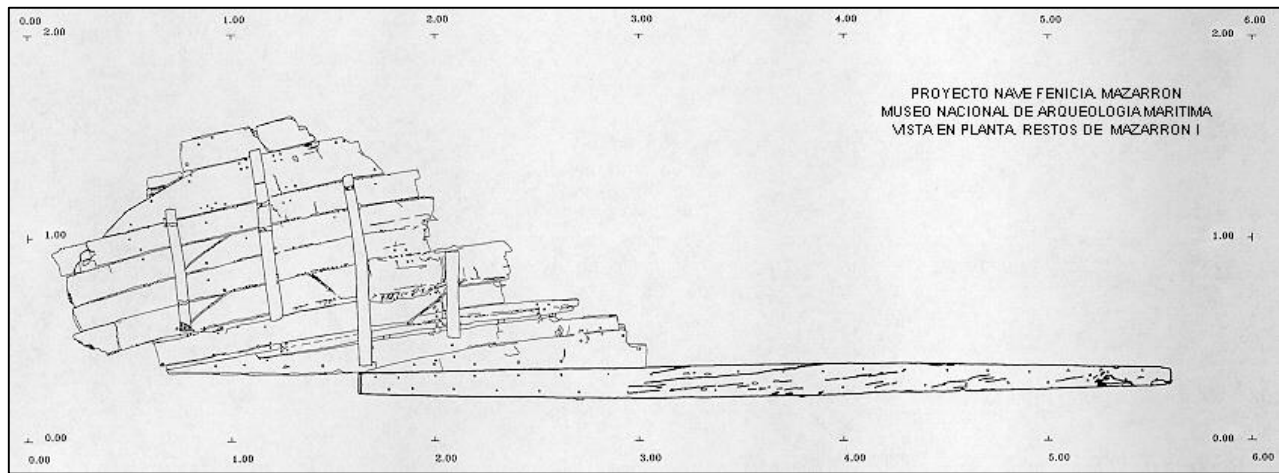
Keelson / Maststep – ?

Stringers – ?

Taxa – Adriatic; A.S. – ?; Built – ?

Notes –

Mazarrón 1



Chronology: -620 / -580 ?

Preserved – 5 x 1.3 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – 3.98 m

Keel sided dimension – 10 cm

Keel molded dimension – 17 cm

Frames sided / molded dimension – Ø 4 cm | 8

Plank thickness – ? cm

Framing pattern – Sub-circular frames // 40 cm, not fastened to the keel

Planking method – pM&T, diag. scarves, unique | two laced caulking

M&T – T ? X ? x ? cm // ? cm; conic pegs

Hull shape – Round floor

Fasteners – floors/planks: lashed 1

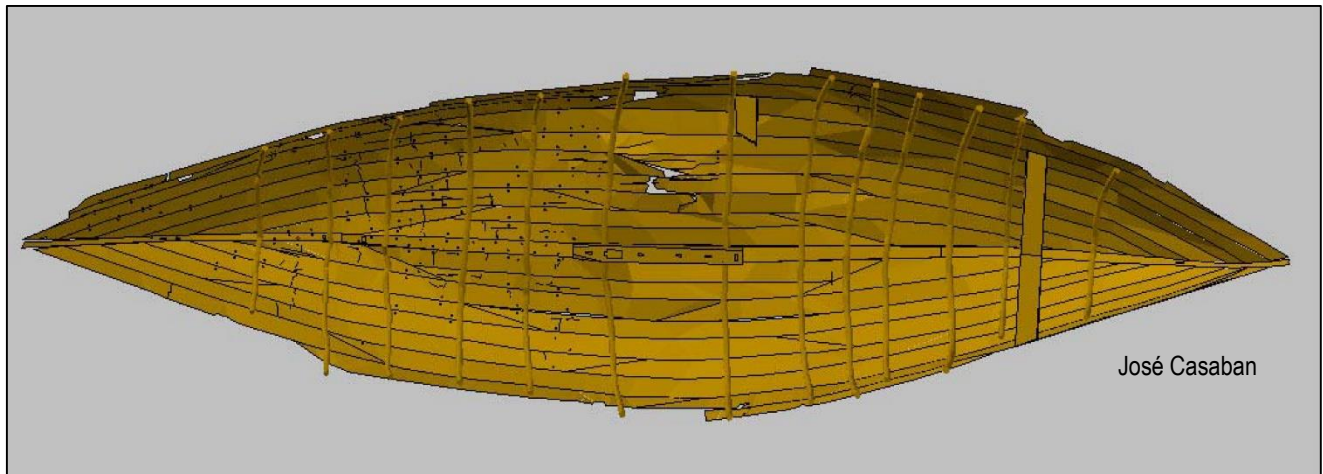
Keelson / Maststep – Not preserved, although mortises on the keel indicate its position.

Stringers – Not preserved

Taxa – Iberian Phoenician; A.S. – ?; Built proposal– SE Iberian Peninsula

Notes – P.K.&R: suggest an Iberian shipbuilding tradition with Punic influence

Mazarrón 2



Chronology: -620 / -580

Preserved – 8 x 3 m

Length reconstructed – 8.15 m; Beam reconstructed – 2.25 m

Keel length – 3.87 m

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided / molded dimension – Ø 4 cm | 8

Plank thickness – 2.1 cm

Framing pattern – Sub-circular frames // 50 cm, not fastened to the keel

Planking method – pM&T, diag. Scarves

M&T – T 3.5 x .0.5 x 18 cm // 19 cm; conic pegs

Hull shape – round bottom; round turn of the bilge

Fasteners – floors/planks: lashed 1

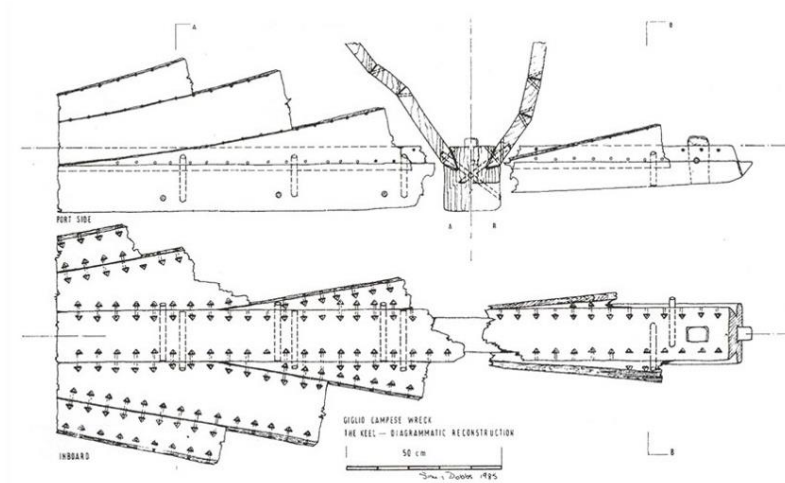
Keelson / Maststep – A maststep was mounted over the keel in central position

Stringers – No

Taxa – Iberian Phoenician; A.S. – ?: Built proposal – SE Iberian Peninsula

Notes – Pomey 2012 suggests an Iberian Shipbuilding tradition with Punic influence

Giglio A



Chronology -580 / -550

Preserved – 4 x 2 m

Length reconstructed – 25 m ; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – 21.3 cm

Keel molded dimension – 22.1 cm

Frames sided dimension – 18 cm

Frames molded dimension – 12.3 cm

Plank thickness – 4.2 cm

Framing pattern – Floors and futtocks aligned, scarved and nailed // ? cm

Planking method – laced w/ dowels // 35 cm

Hull shape – Round floor, round turn of the bilge - ? Only preserved the sternpost

Fasteners – floors/planks: lashed 1

Keelson / Maststep – maststep preserved

Stringers – ?

Taxa – Archaic Greek; A.S. Western Ionian– ?; Built – ?

Notes – Laced 1

Pabuç Burnu

Chronology -575 / -550

Preserved – 3 x 1.5 m

Length reconstructed – 17 m

Beam reconstructed – ? m

Keel length – not preserved

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 15.3 cm

Frames molded dimension – ? cm

Plank thickness – 4.5 cm

Framing pattern – ?

Planking method – Laced with dowels and unpegged M&T. Originally tenons, dowels in reparation strakes.

M&T – T 3.5 x 1 x 11 cm // ? cm

Hull shape – ?

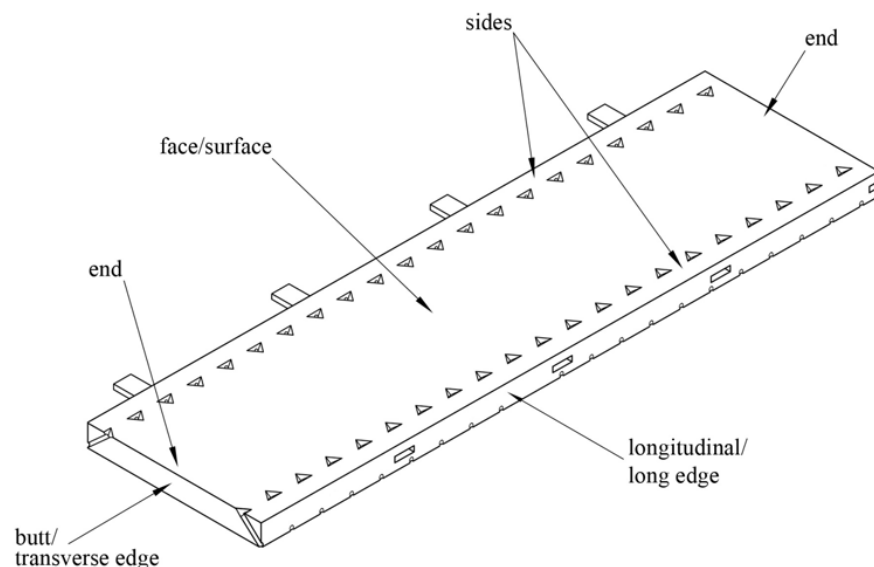
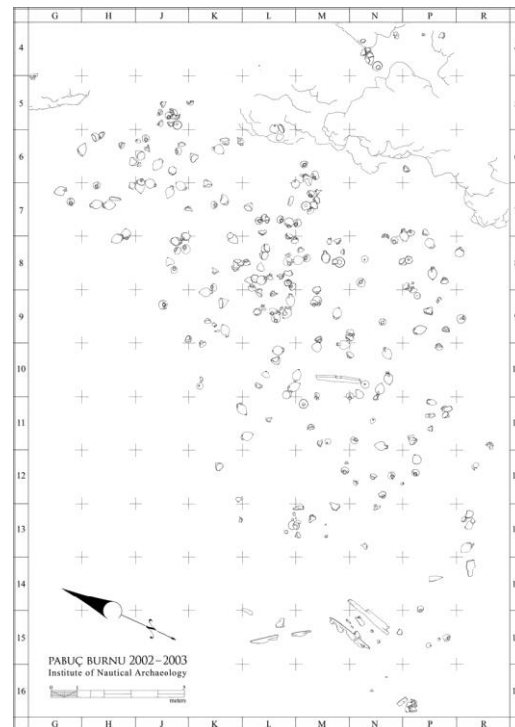
Fasteners – ?

Keelson / Maststep – Not preserved

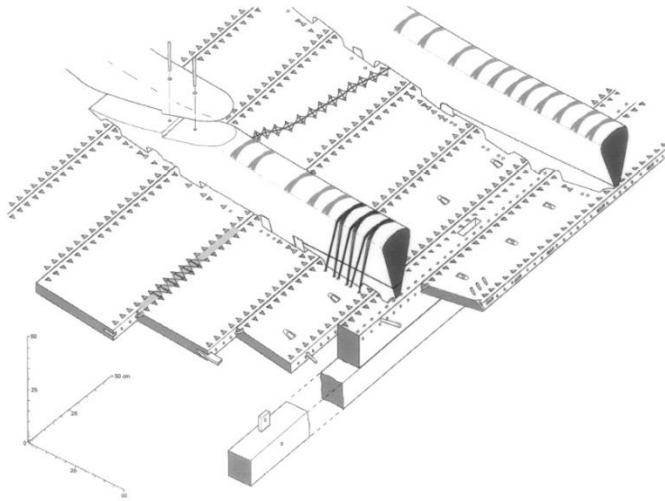
Stringers – Not preserved

Taxa – Archaic Greek; AS ?; Built ?

Notes –



Cala Sant Vincenç



Chronology -550 / -500

Preserved – 5.80 x 4.15 m

Length reconstructed – 20 m; Beam reconstructed – 6.30 m

Keel length – ?

Keel sided dimension – 13 cm

Keel molded dimension – 17 + 13 cm

Frames sided dimension – 20-24 (trapezoidal)

Frames molded dimension – 31 cm

Plank thickness – 4.5 cm

Framing pattern – Floors and futtocks aligned, scarved and treenailed // 90-100 cm

Planking method – laced w/ tenons // 25 cm

M&T - T 3 x 0.9 x 13.5 cm // 26cm

Hull shape – Round floor, round turn of the bilge

Fasteners – floors/planks: lashed 1

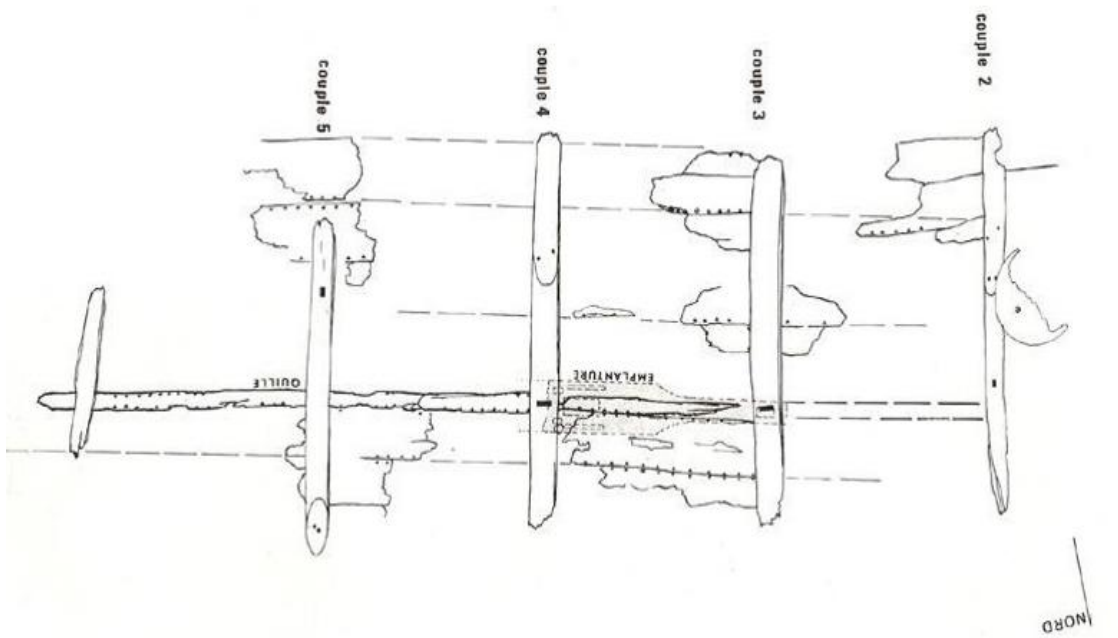
Keelson / Maststep – maststep unpreserved

Stringers – Yes

Taxa – Archaic Greek; A.S. Western Ionian; Built proposal - Marseille

Notes – Laced 1

Bon Porté 1



Chronology -540 / -510

Preserved – 4 x 2 m

Length reconstructed – 10 m; Beam reconstructed – ? m

Keel length – 3 m

Keel sided dimension – 6.4 cm

Keel molded dimension – 9.6 cm

Frames sided dimension – 12 cm

Frames molded dimension – 14.6 cm

Plank thickness – 2.6 cm

Framing pattern – Floors and futtocks aligned, scarved and treenailed // 92-100 cm

Planking method – laced w/ dowels // 15-16 cm

Hull shape – Round floor, flat at the bilge

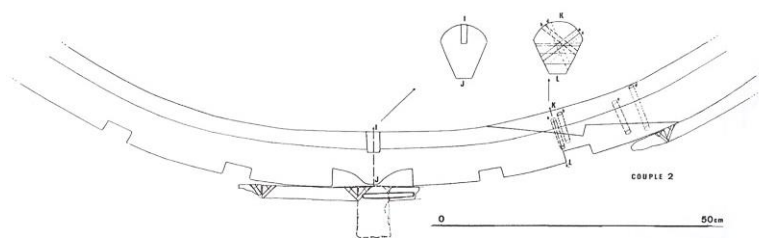
Fasteners – floors/planks: lashed 1

Keelson / Maststep – maststep preserved

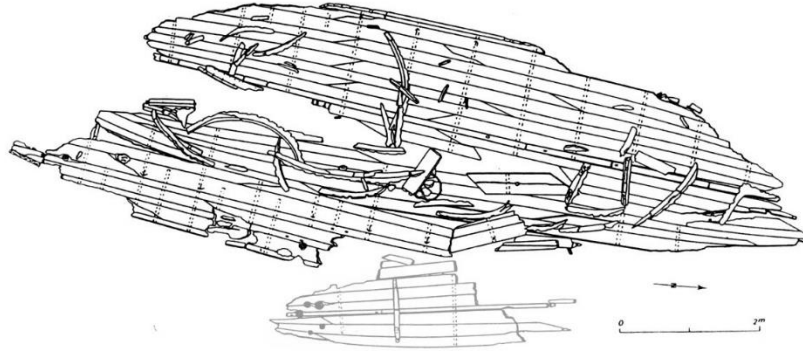
Stringers – ?

Taxa – Archaic Greek; A.S. Western Ionian; Built ?

Notes – Laced 1



Jules Verne 7



Chronology -525 / -510

Preserved – 14 x 4 m

Length reconstructed – 14 m; Beam reconstructed – 3.90 m

Keel length – 10.7 m

Keel sided dimension – 10 cm

Keel molded dimension – 11 cm

Frames sided dimension – 11 cm (trapezoidal)

Frames molded dimension – 13.5 cm

Plank thickness – 3 cm

Framing pattern – Floors and futtocks aligned, scarved and nailed // 90 cm; top timbers between frames above the 7th strake.

Planking method – pM&T, diagonal scarves. Lacing in stem, stern and reparations

M&T – T 3 x ? x 14 cm // 20 cm; conic pegs

Hull shape – Round floor, round turn of the bilge

Fasteners – frames/planks: clinched iron nails

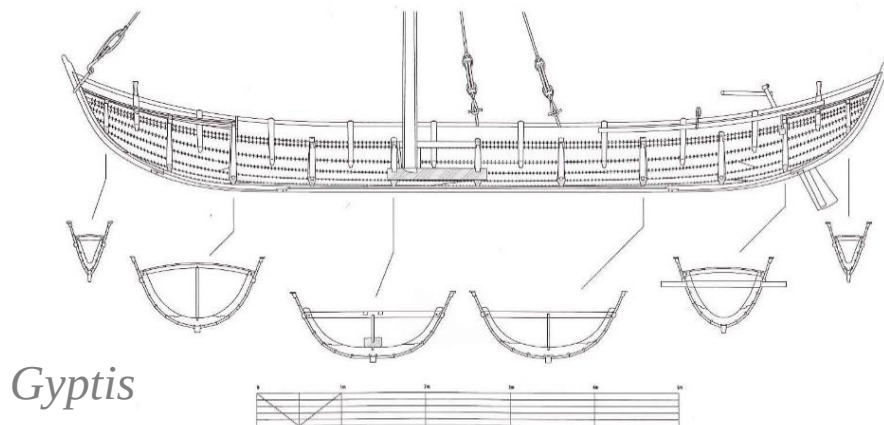
Keelson / Maststep – Not preserved

Stringers – Not preserved

Taxa – Archaic Greek; A.S. - Western Ionian pM&T; Built proposal - Marseille

Notes – Bow and stern laced 1; reparations laced 1

Jules Verne 9



Chronology -525 / -510

Preserved – 5 x 1.5 m

Length reconstructed – 9.5 m; Beam reconstructed – 1.88 m

Keel length – ?

Keel sided dimension – 6.8 cm

Keel molded dimension – 7 cm

Frames sided dimension – 8.5 cm

Frames molded dimension – 10 cm

Plank thickness – 3 cm

Framing pattern – Floors and futtocks aligned, scarved and nailed // 100 cm

Planking method – laced w/ dowels // 20 cm

Hull shape – Round floor, round turn of the bilge

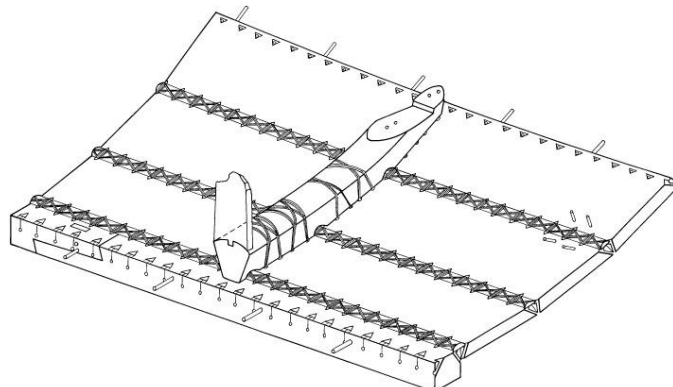
Fasteners – floors/planks: lashed 1; at a top timber lashed 2

Keelson / Maststep – not preserved

Stringers – ?

Taxa – Archaic Greek; A.S. - Western Ionian; Built proposal - Marseille

Notes – Laced 1



Cesar 1



Chronology -525 / -510

Preserved – 6.1 x 0.9 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – Floors and futtocks aligned, scarved and nailed // ? cm

Planking method – pM&T // ? cm

M&T – M ? x ? X ? cm // ? cm

Hull shape – ?

Fasteners – floors/planks: clenched iron nails

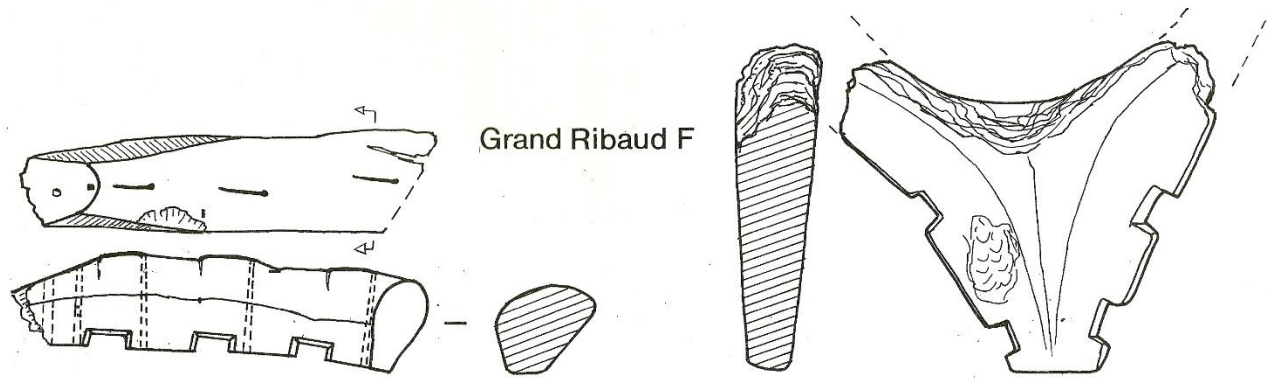
Keelson / Maststep – ?

Stringers – ?

Taxa – Archaic Greek; A.S. - Western Ionian pM&T; Built proposal - Marseille

Notes – ?

Grand Ribaud F



Chronology -510 / -470

Preserved – x m

Length reconstructed – 25 m; Beam reconstructed – 6.80 m

Keel length – ?

Keel sided dimension – 16 cm

Keel molded dimension – 30 cm

Frames sided dimension – 20 cm (trapezoidal)

Frames molded dimension – 26 cm

Plank thickness – 3.5 cm

Framing pattern – Floors and futtocks aligned, scarved and treenailed // 82 cm

Planking method – pM&T

M&T – T 4.5 x ? x 12 cm // 20 cm; conic pegs

Hull shape – Round floor, round turn of the bilge

Fasteners – floors/planks: clenched iron nails

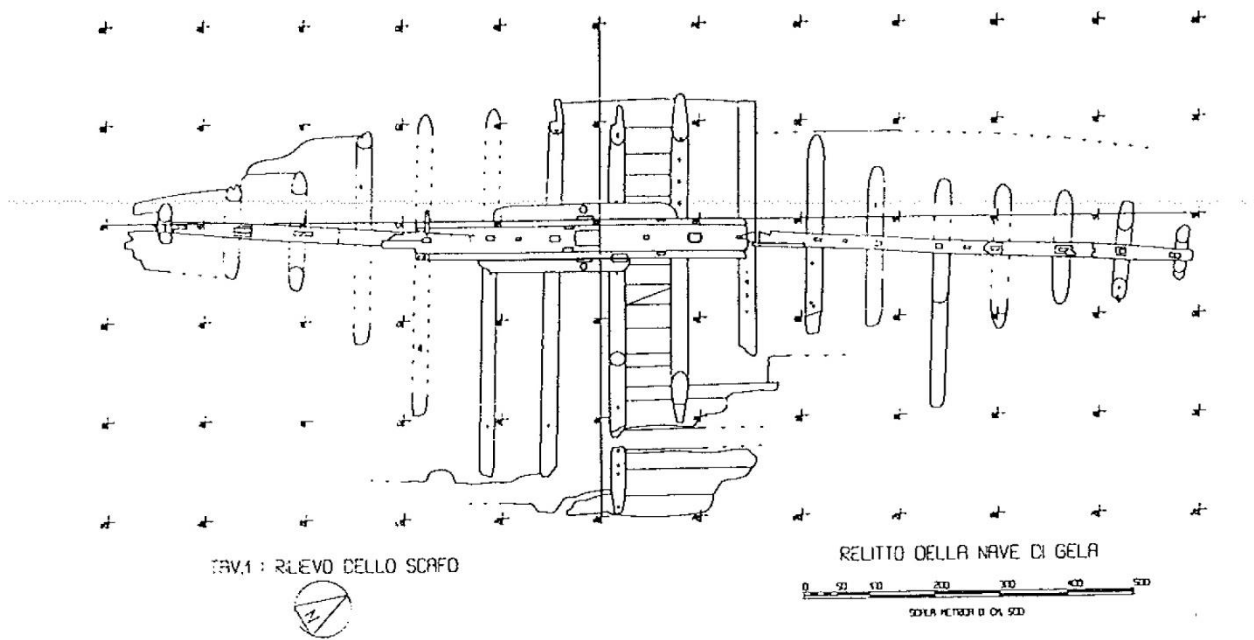
Keelson / Maststep – partially preserved

Stringers – ?

Taxa – Archaic Greek; A.S. - Western Ionian pM&T; Built proposal - Marseille

Notes – Bow and stern laced 1

Gela 1



Chronology -515 / -465

Preserved – 17 x 4.3 m

Length reconstructed – 22 m; Beam reconstructed – 5 m

Keel length –

Keel sided dimension – 25 cm

Keel molded dimension – 37 cm

Frames sided dimension – 25 cm

Frames molded dimension – 14 cm

Plank thickness – 5 cm

Framing pattern – Floors and futtocks aligned, scarved and nailed // 75-90 cm

Planking method – laced w/ dowels // 18 cm

Hull shape – Round floor, round turn of the bilge

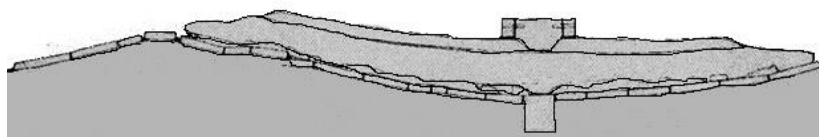
Fasteners – floors/planks: nailed w/ clenched copper nails

Keelson / Maststep – maststep and keelson preserved

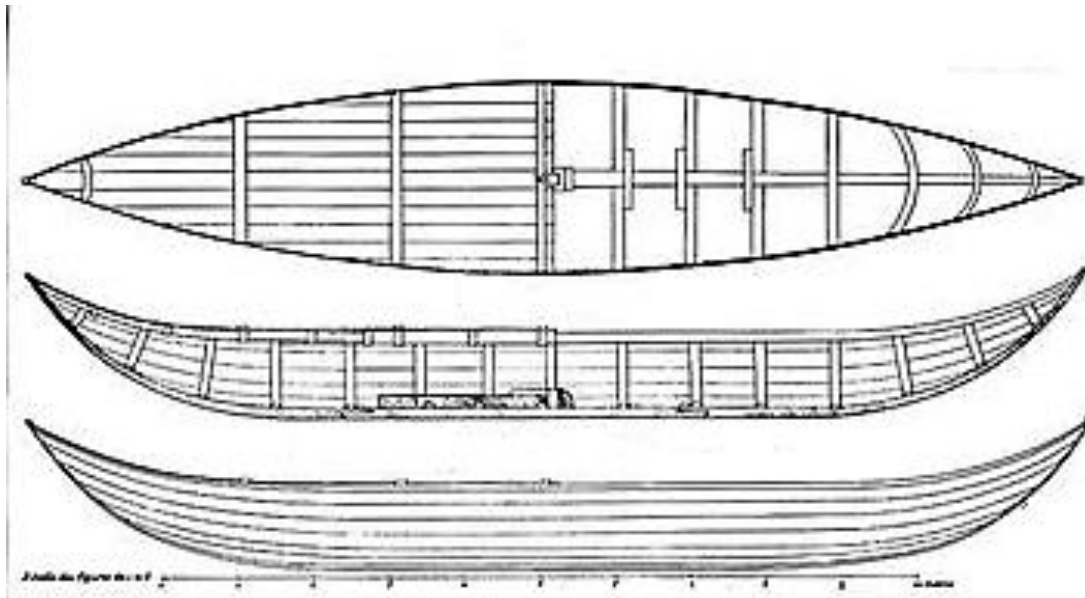
Stringers – ?

Taxa – Archaic Greek; A.S. - Western Ionian; Built ?

Notes – Laced 1



Golo



Chronology -500 / -400

Preserved – 14.95 x 2.60 m

Length reconstructed – 14.95 m; Beam reconstructed – 2.60 m

Keel length – 4.90 m

Keel sided dimension – 15 cm

Keel molded dimension – 18 cm

Frames sided dimension – 11 half frames; 17 floor timbers

Frames molded dimension – 11 half frames; 17 floor timbers

Plank thickness – 3.3 cm

Framing pattern – Sub-circular half frames at keel, connected by floor timbers.

Monoxile frames at bow and stern // 52-76

Planking method – pM&T

M&T – T 4 x ? X 21.6 cm // 18.9 cm

Hull shape – Round floor, round turn of the bilge

Fasteners – floors/planks: nailed w/ clenched copper nails

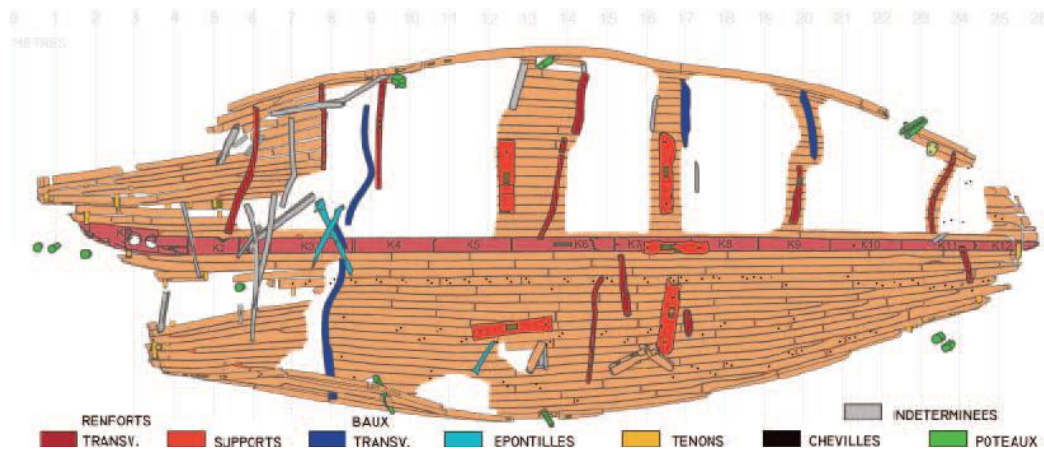
Keelson / Maststep – maststep and keelson preserved

Stringers – ?

Taxa – Iberian Phoenician heritage; A.S. ?; Built proposal?

Notes – Laced 1; An Iberian shipbuilding tradition with Punic influence

Heraklion 17



Chronology -400 / -350

Preserved – ? m x ? m

Length reconstructed – ? m; Beam reconstructed – m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm ?

Frames sided dimension – ? cm (trapezoidal)

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern –

Planking method –

M&T – T 4.60 x 0.70 x 9cm // 15 cm; conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/planks: lashed

Keelson – ?

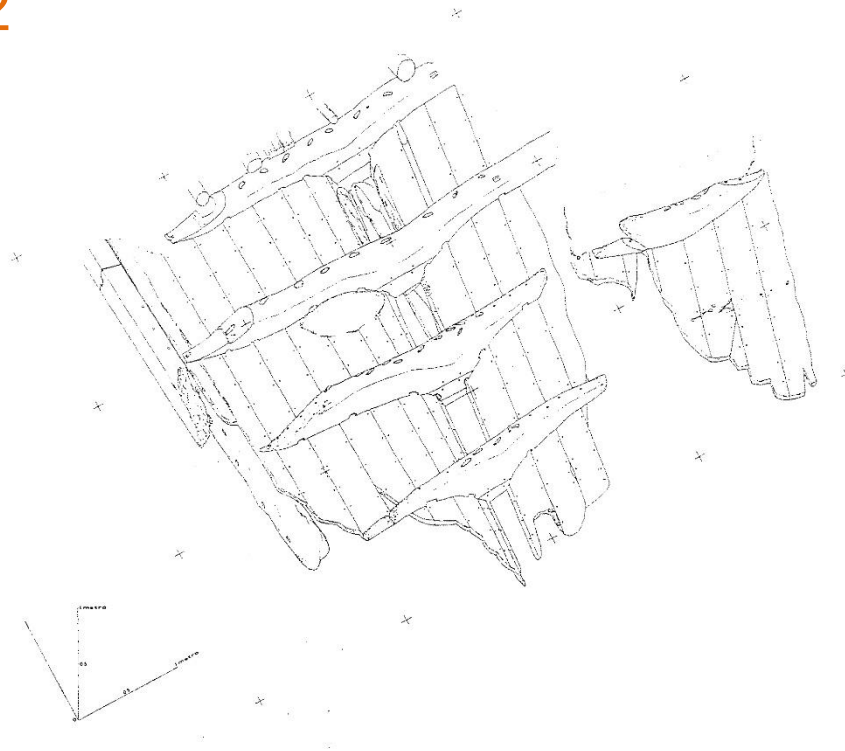
Maststep – ?

Stringers –

Taxa - ?; S.M. - ?; Built proposal - Lower Egypt

Notes –

Gela 2



Chronology -450 / -425

Preserved – 7.5 x 9.5 m

Length reconstructed – 18 m; Beam reconstructed – 5 m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – 50 cm

Plank thickness – 4.5 cm

Framing pattern – Floors (w/chocks) and futtocks aligned, scarved and nailed
// 60 – 70 cm

Planking method – pM&T and lacing

M&T – T ? x ? x ? cm // 20 cm; conic pegs

Hull shape – Wine-glassed

Fasteners – floors/planks: double clenched nails. Iron and copper

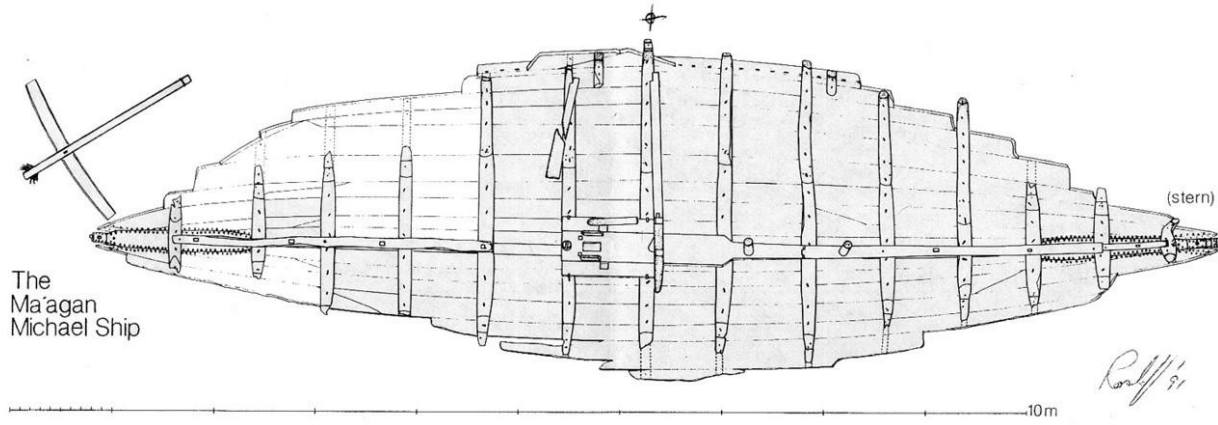
Keelson / Maststep – not preserved

Stringers – ?

Taxa – Greek Transition; A.S. - Western Ionian; Built proposal ?

Notes – Bow and stern laced 1

Ma'agan Michael



Chronology -450 / -425

Preserved – 11.15 x 3.16 m

Length reconstructed – 13.5 m; Beam reconstructed – 4.1 m

Keel length – 8.26 m

Keel sided dimension – 11 cm

Keel molded dimension – 16 cm + false keel 6 cm

Frames sided dimension – 9 cm (trapezoidal)

Frames molded dimension – 9 cm

Plank thickness – 4 cm

Framing pattern – floors and futtocks in line, connected with a hook scarf and copper nailed // 75 cm

Planking method – pM&T, diagonal and s-scarves, laced in the extremities

M&T – T 3.9 x 0.7 x 13.5 cm // 15.5 cm; conic pegs

Hull shape – wine-glassed; round turn of the bilge

Fasteners – frames/planks: clenched copper nails;

Keelson / Maststep – light keelson and large maststep w/ sister timbers

Stringers – No

Taxa – Greek Transition; A.S. - Ionian; Built proposal– Ionian Coast

Notes – Bow and stern laced 1

Heracleion 11 – Osiris Boat



Chronology – 399 / -300

Preserved – 10 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – Alternating floors and half-frames (overlapping)

Planking method – pM&T

M&T – M ? X ? x ? cm // ? cm

Hull shape – Flat floor

Fasteners – Floors/planks

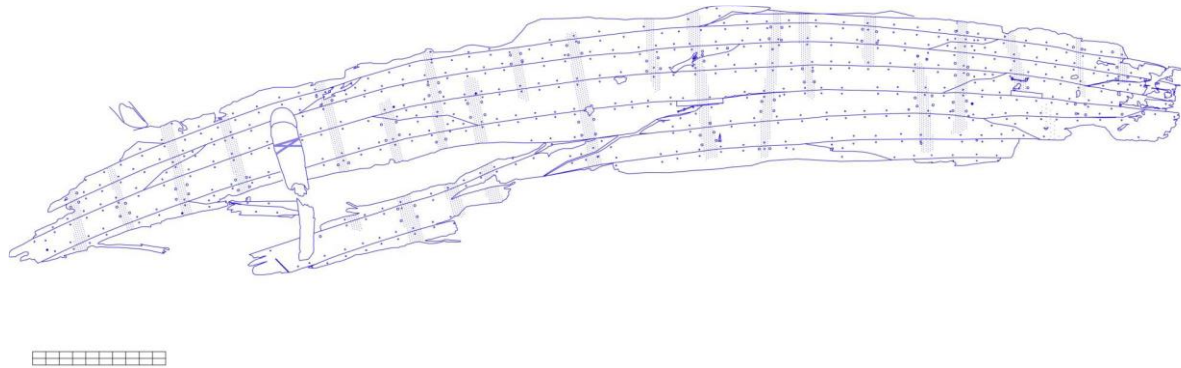
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built proposal - Lower Egypt

Notes –

Binissafúller



Chronology -375 / -350

Preserved – 8.8 m x 1.3 m

Length reconstructed – 13 m; Beam reconstructed – m

Keel length – 1

Keel sided dimension – 14.6 cm

Keel molded dimension – 12 cm ?

Frames sided dimension – 20 cm (trapezoidal)

Frames molded dimension – 11.7 cm

Plank thickness – 3.2 cm

Framing pattern – sub-circular frames and trapezoidal // irregular pattern, not fastened to the keel

Planking method – pM&T, S and Z shape-scarves

M&T – T 4.60 x 0.9 x 18cm // 15 cm; conic pegs

Hull shape – Wine-glassed

Fasteners – floors/planks: lashed 1

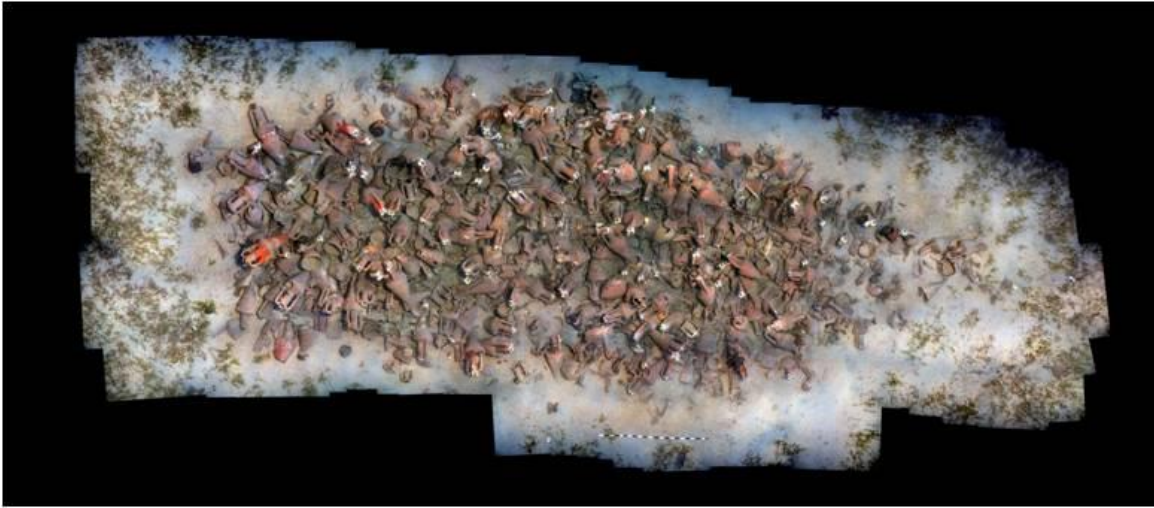
Keelson/ maststep – ?

Stringers – Yes

Taxa – Iberian Phoenician heritage; A.S. - ?; Built ?

Notes – P.K&R.: Pomey 2012 suggests an Iberian shipbuilding tradition with Punic influence. Ship hypothesis under study.

Mazotos



Chronology -325

Preserved – ?

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ? // ?

Planking method – ?

M&T – T ? x ? x ? cm // ? cm;

Hull shape – ?

Fasteners – ?

Keelson – ?

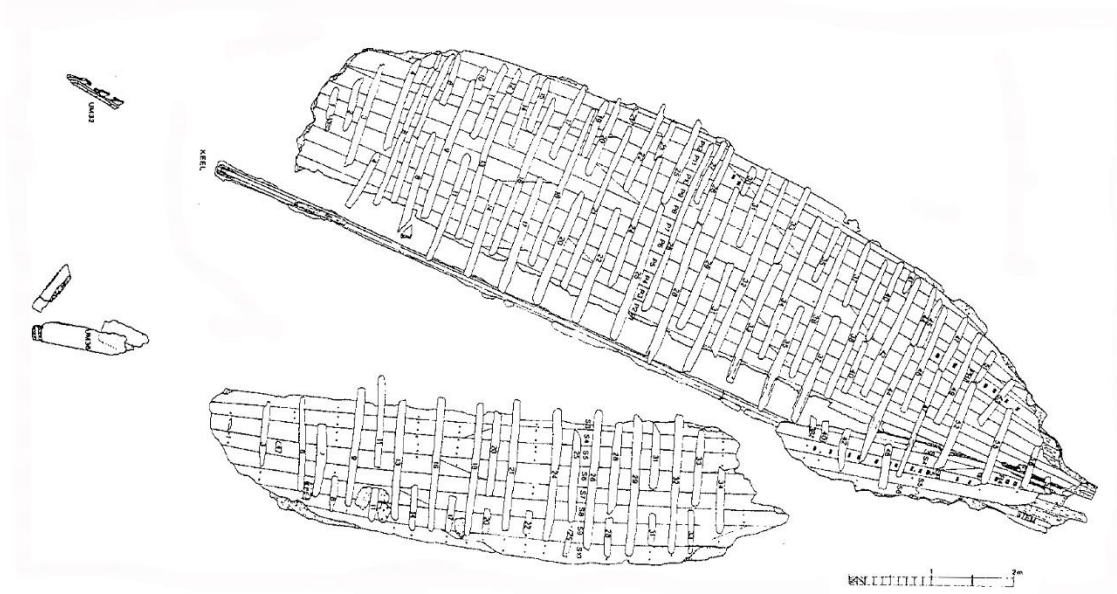
Maststep – ?

Stringers –

Taxa – Greek Transition ?; A.S. - ?; Built ?

Notes – Under excavation

Kyrenia



Chronology -310 / -275

Preserved – 12 x 6 m

Length reconstructed – 13.86 m; Beam reconstructed – 4.2 m

Keel length – 9.33 m

Keel sided dimension – 12.18 cm

Keel molded dimension – 20.3 cm

Frames sided dimension – 9 cm

Frames molded dimension – 9 cm

Plank thickness – 3.8 cm

Framing pattern – Alternating floors (w/ chocks) and half-frames w/ detached futtocks or top timbers // 25 cm

Planking method – pM&T, diag. and z-scarves

M&T – T 4.3 x 0.6 x 16 cm // 11.7 cm; conic pegs

Hull shape – wine-glassed, round turn of the bilge

Fasteners – floors/planking: clenched copper nails over treenails

Keelson / Maststep – complex maststep, no keelson

Stringers – two bottom stringers on both sides of the keel

Taxa – Hellenistic-Republican; A.S. - ?; Built proposal - ?

Notes – P.K.&R.: lead lining

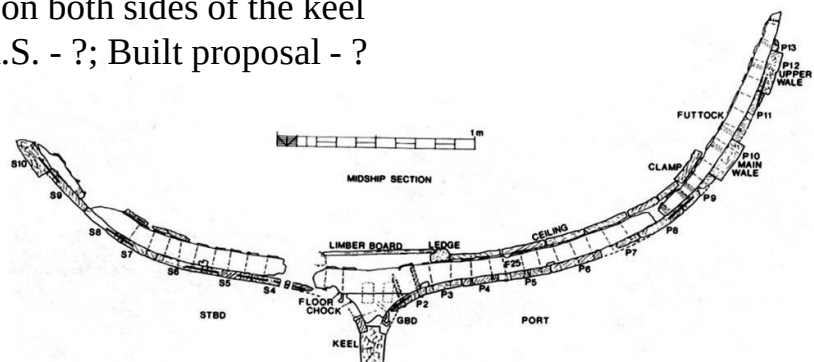
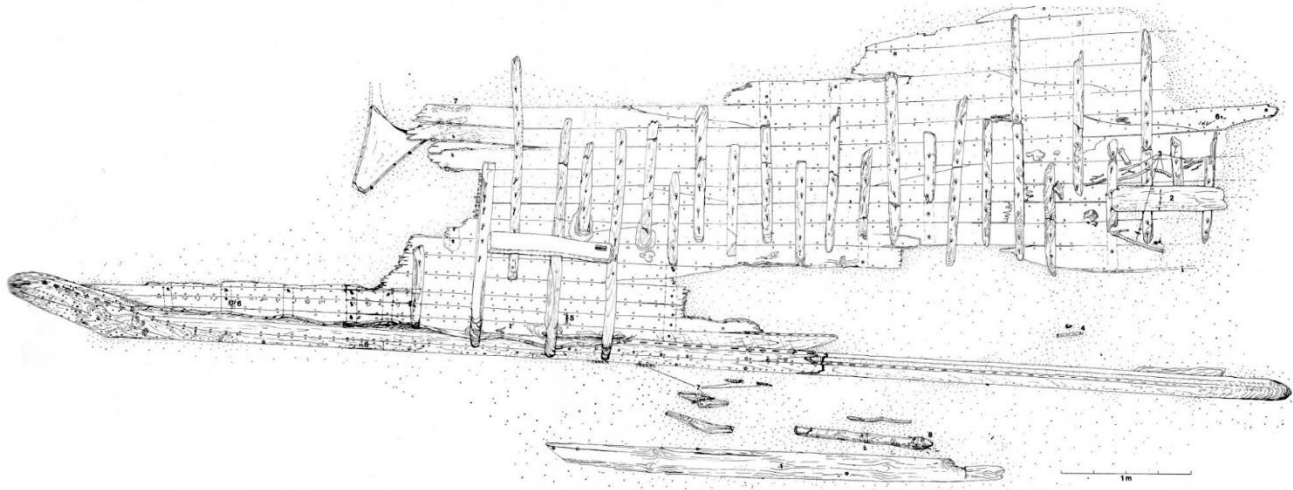


FIG. 3-31. Cross section of the Kyrenia ship's hull at amidships.

Marsala 1



Chronology -285 / -235

Preserved – 10 x 3 m

Length reconstructed – 35 m; Beam reconstructed – 4.8 m

Keel length – 10 m

Keel sided dimension – 14-11 cm (trapezoidal)

Keel molded dimension – 17 cm

Frames sided dimension – 9 cm

Frames molded dimension – 9 cm

Plank thickness – 3 cm

Framing pattern – Alternating floors and half-frames // 25 cm

Planking method – pM&T, diag. and S scarves

M&T – T 6 x 0.8 x 13 cm // 12 cm; conic pegs

Hull shape – Wine-glassed, round turn of the bilge

Fasteners – frames/planks: clenched iron nails over treenails;

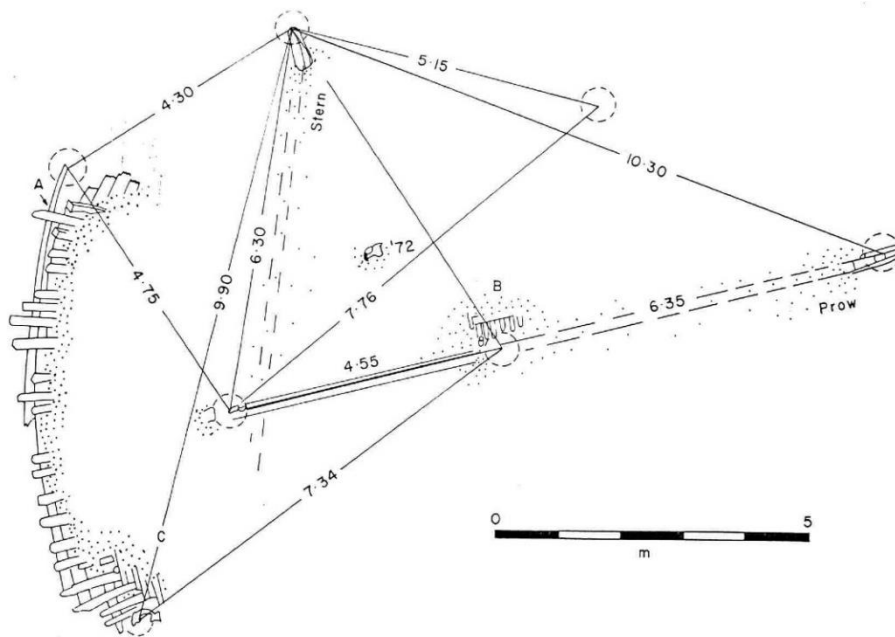
Keelson / Maststep – not preserved

Stringers – not preserved

Taxa – Hellenistic-Republican; A.S. - Punic; Built proposal – Sicily/Carthago

Notes – Discussion about its function

Marsala 2



Chronology -285 / -235

Preserved – 3 x 3 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – 15 cm

Keel molded dimension – 23 cm

Frames sided dimension – 10 cm

Frames molded dimension – 10 cm

Plank thickness – 4.8 cm

Framing pattern – ?

Planking method – pM&T

M&T – T 6 x 0.8 x ? cm // 12.5 cm; conic pegs

Hull shape – ?

Fasteners – frames / planks: ?

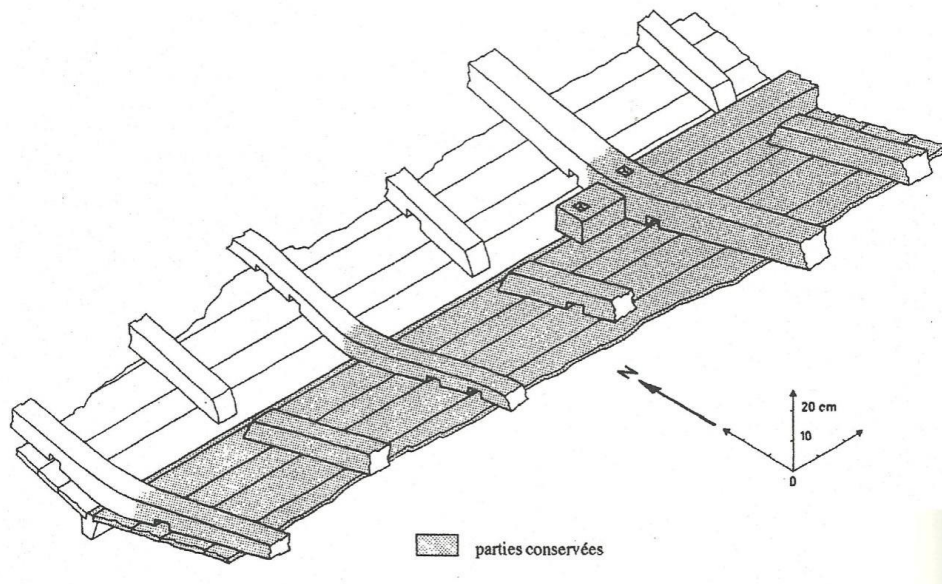
Keelson / Maststep – ?

Stringers – ?

Taxa – Hellenistic-Republican; A.S. - Punic ; Built proposal – Sicily/Carthago

Notes –

Tour Fondue



Chronology -250 / -225

Preserved – 4.45 x 1.40 m

Length reconstructed – 10 m; Beam reconstructed – m

Keel length – 4.45 m

Keel sided dimension – 6.5 cm

Keel molded dimension – 5 cm

Frames sided dimension – 7 cm

Frames molded dimension – 7 cm

Plank thickness – 2.9 cm

Framing pattern – Alternating floors and half-frames // 40 cm

Planking method – pM&T, diag. scarves

M&T – T 5 x 0.7 x 14 cm // 7 cm; conic pegs

Hull shape – Flat floor 7°

Fasteners – floors: planks lashed 2

Keelson – Rare keelson preserved

Maststep – ?

Stringers – ?

Taxa – ?; A.S. - Magnogreek-Massaliot; Built proposal – Marseille

Notes – Oldest of its signature group; internal lashing.

Pisa Hellenistic Wreck



Chronology -200 / -175

Preserved – ? x ? m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

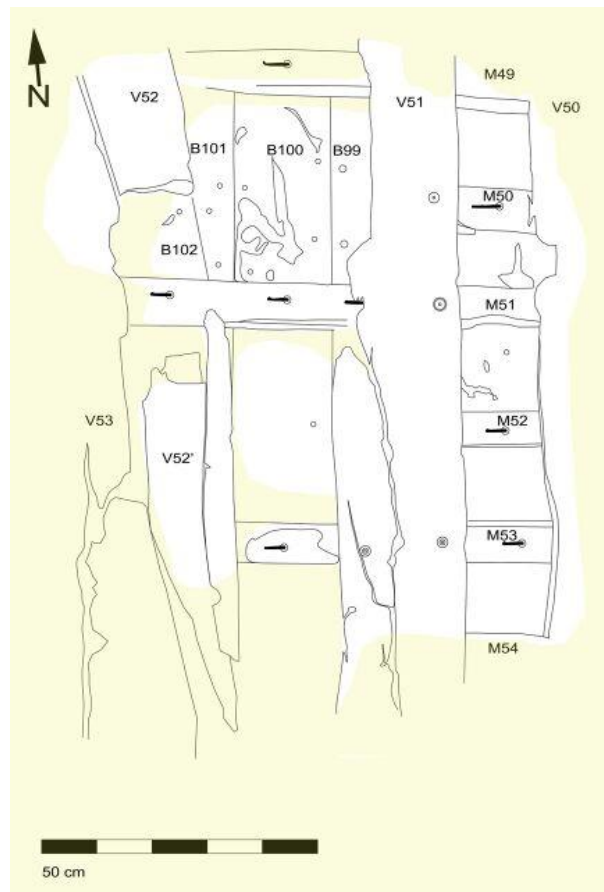
Keelson / Maststep – ?

Stringers – ?

Taxa - ?

Notes –

Tour d'Agnello



Chronology -175

Preserved – ? x ? m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 8 cm

Frames molded dimension – 8 cm

Plank thickness – 6? cm

Framing pattern – Alternating floors and half-frames // 16 cm (where could be done)

Planking method – pM&T

M&T – T ? X ? x ? cm // ? Cm; conic pegs

Hull shape – Wine-glassed

Fasteners – floors/planking clenched iron nails over treenails

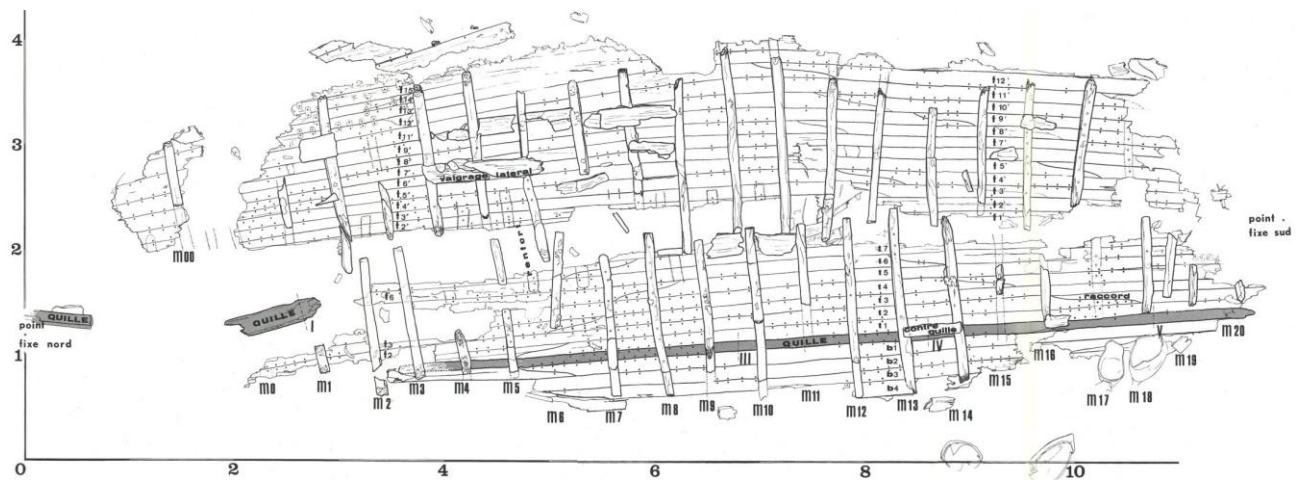
Keelson / Maststep – ?

Stringers – ?

Taxa – Hellenistic-Republican; A.S. - ?; Built - ?

Notes – Baie de Briande type; Big gap between floor timbers and top timbers.

Chrétienne C



Chronology -175 / -150

Preserved – 11 x 3.8 m

Length reconstructed – 15.5 m

Beam reconstructed – 5.5 m

Keel length – 8.13 m

Keel sided dimension – 11 cm

Keel molded dimension – 10.5 cm

Frames sided dimension – 8 cm

Frames molded dimension – 8 cm

Plank thickness – ? cm

Framing pattern – Alternating floors and half-frames // 40 cm

Planking method – pM&T, S scarves

M&T – T 4 x 0.7 x 14 cm // ? cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/planks: vertical treenails

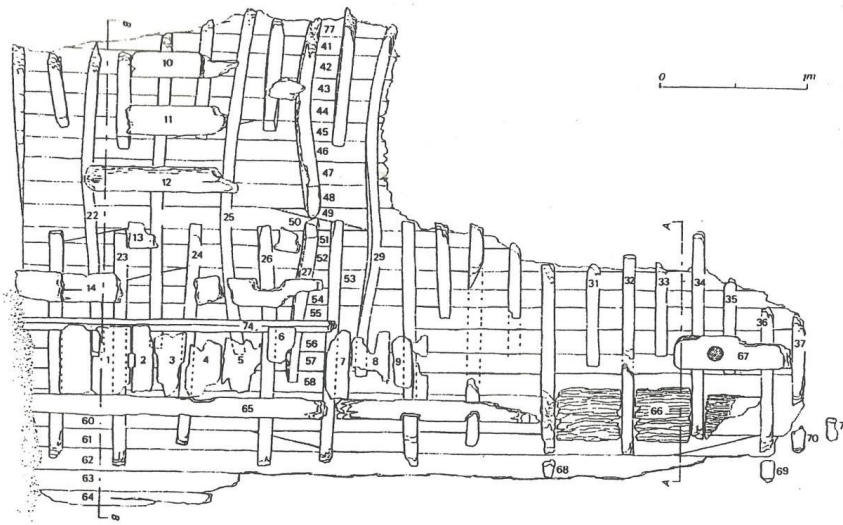
Keelson / Maststep – piece preserved

Stringers – yes

Taxa – ?; A.S. - ?; Built - ?

Notes –

Baie de Briande



Chronology -175 / -150

Preserved – 5.50 x 3.50 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – 5.5 m

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 10 cm

Frames molded dimension – 10 cm

Plank thickness – 3 cm

Framing pattern – Alternating floors and half-frames // 40 cm

Planking method – pM&T, diag. scarves

M&T – M ? X ? x ? cm // ? cm; comic pegs

Hull shape – Wine-glassed, round turn of the bilge

Fasteners – floors/planking clenched iron nails over treenails

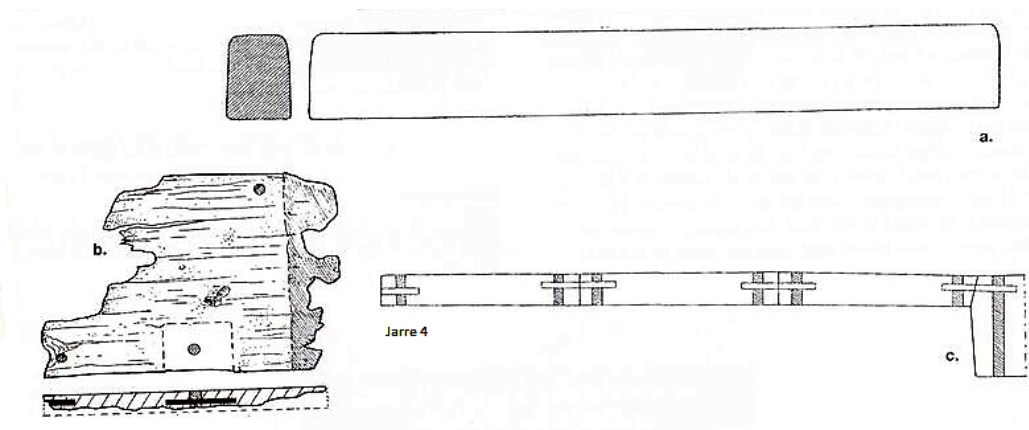
Keelson / Maststep – Piece preserved

Stringers – Yes

Taxa – Hellenistic-Republican; A.S. - ?; Built - ?

Notes – Big gap between floor timbers and top timber

Jarre 4



Chronology -150 / -125

Preserved – 1 x 1 m

Length reconstructed – 10 m

Beam reconstructed – ? m

Keel length – 1 m

Keel sided dimension – 11.5 cm

Keel molded dimension – 10 cm

Frames sided dimension – 9 cm

Frames molded dimension – ? cm

Plank thickness – 2.5 cm

Framing pattern – ?

Planking method – pM&T

M&T – T 7 x ? x 8 cm // ? cm; conic pegs

Hull shape – Flat floor

Fasteners – frames/planks copper and iron nails

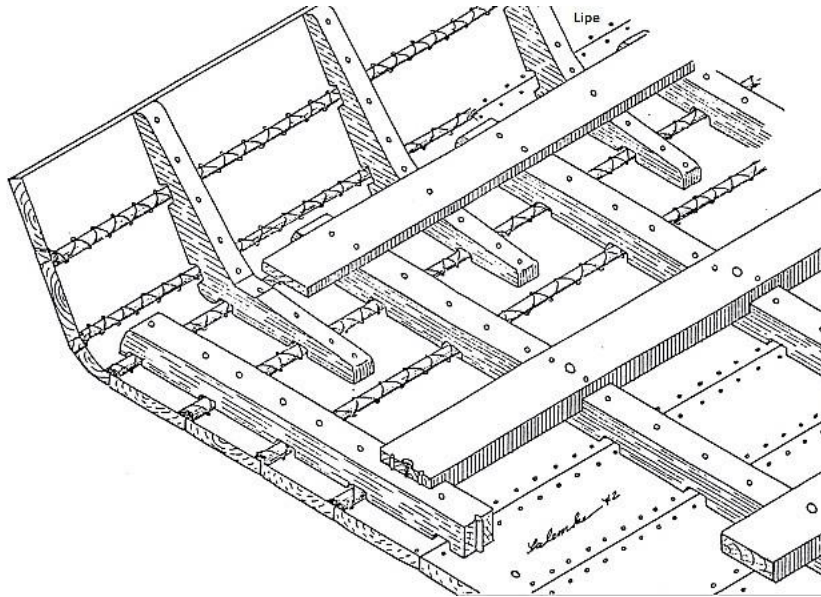
Keelson / Maststep – ?

Stringers – ?

Taxa – ?; A.S. - ?; Built - ?

Notes –

Ljubljana



Chronology -150 / -100

Preserved – ? x ? m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – M ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

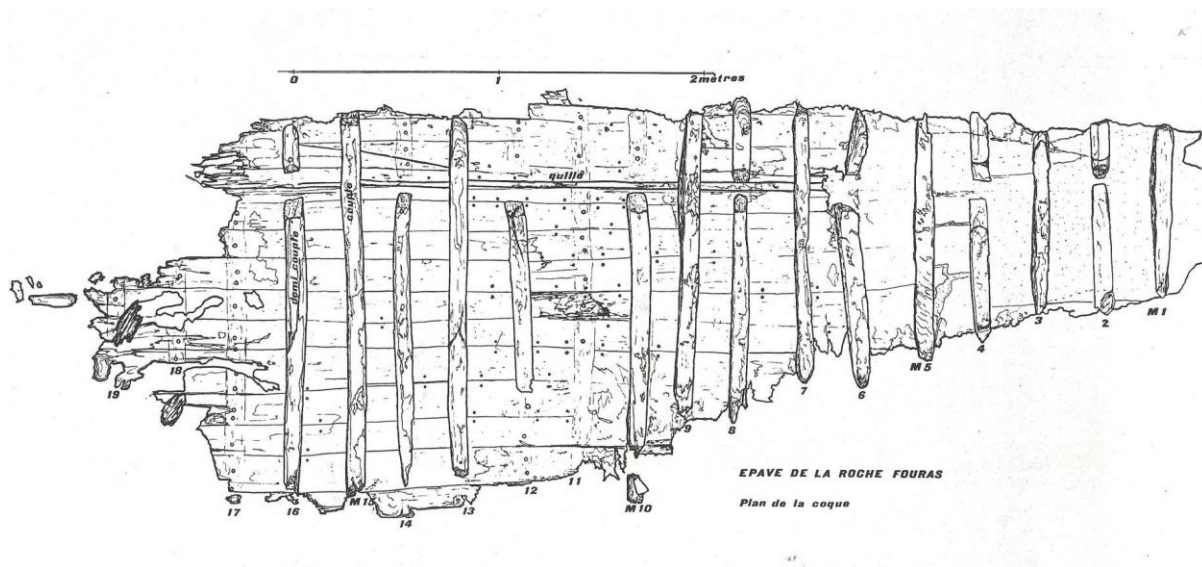
Keelson / Maststep – ?

Stringers – ?

Taxa - Adriatic; S.M. - ?; Built - ?

Notes –

Roche Fouras



Chronology -150 / -100

Preserved – 6 x 2 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – 4 m

Keel sided dimension – 9 cm

Keel molded dimension – 8.5 cm

Frames sided dimension – 9 cm

Frames molded dimension – 9 cm

Plank thickness – 2.8 - 3.9 cm

Framing pattern – Alternating floors and half-frames // 18.4 cm

Planking method – pM&T, diag. scarves

M&T – T 6 x 0.7 x 14 cm // ? cm; conic pegs

Hull shape – Wine-glassed

Fasteners – floors/planks lashed 2. Oblique and vertical drills

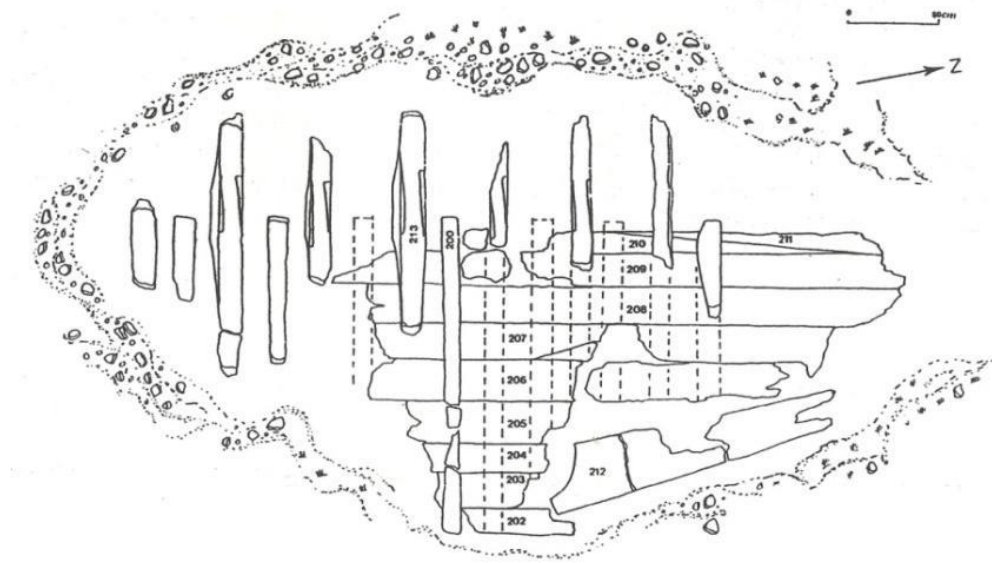
Keelson / Maststep –

Stringers – ?

Taxa – Hellenistic-Republican; A.S. - Magnogreek-Massaliot; Built proposal - Italy

Notes –

Caveaux 1



Chronology -125 / -75

Preserved – 4.25 x 2.5 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 9 cm half frames; 11cm floor timbers

Frames molded dimension – 9 cm half frames; 11cm floor timbers

Plank thickness – 4 cm

Framing pattern – Alternating floors and half-frames // 11 cm

Planking method – pM&T

M&T – T ? X ? x ? cm // ? Cm; conic pegs

Hull shape – Wine-glassed

Fasteners – floors/planking clenched iron nails over treenails

Keelson / Maststep – ?

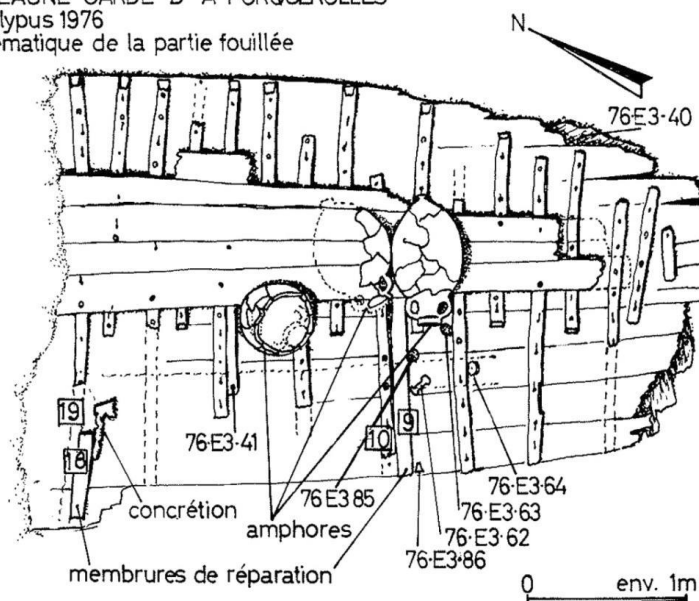
Stringers – ?

Taxa – Hellenistic-Republican; A.S. - ? ; Built proposal– Campanian-Calabrian area

Notes – *Pinus leucodermis*

Jeune Garde B

EPAVE "JEAUNE-GARDE B" A PORQUEROLLES
fouille Polypus 1976
plan schématique de la partie fouillée



Chronology -125 / -75

Preserved – 5 x 3.5 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 10 cm

Frames molded dimension – 10 cm

Plank thickness – 3 cm

Framing pattern – Alternating floors and half frames // 20? cm

Planking method – pM&T

M&T – M ? X ? x ? cm // ? cm

Hull shape – Wine glassed, round turn of the bilge

Fasteners – floors/planking clenched iron nails over treenails; lashed 2 in a reparation

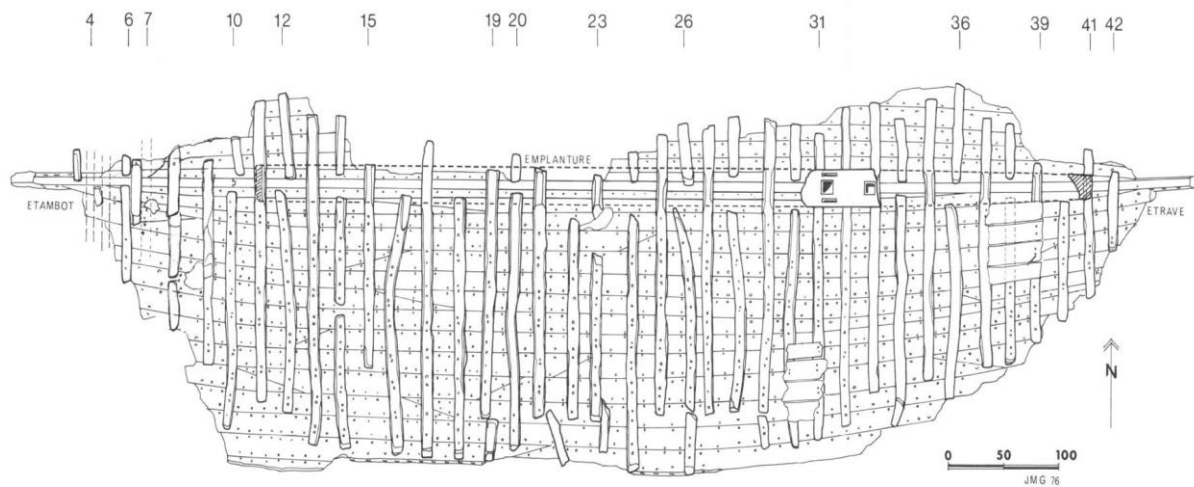
Keelson / Maststep – Not preserved

Stringers – Yes

Taxa – Hellenistic-Republican; A.S. - ?; Built - ?

Notes – Baie de Briande type; big gap between floor timbers and top timbers.

Cavalière



Chronology -100

Preserved – 13 x 3 m

Length reconstructed – 12.98 m

Beam reconstructed – 5 m

Keel length – 9.5 m

Keel sided dimension – 11 cm

Keel molded dimension – 16 cm

Frames sided dimension – 10 cm

Frames molded dimension – 9 cm

Plank thickness – 3 cm

Framing pattern – Alternating floors and half-frames // 18 cm

Planking method – pM&T, diag. scarves

M&T – T 6 x 0.6 x 13 cm // 5 cm; conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/planks lashed 2

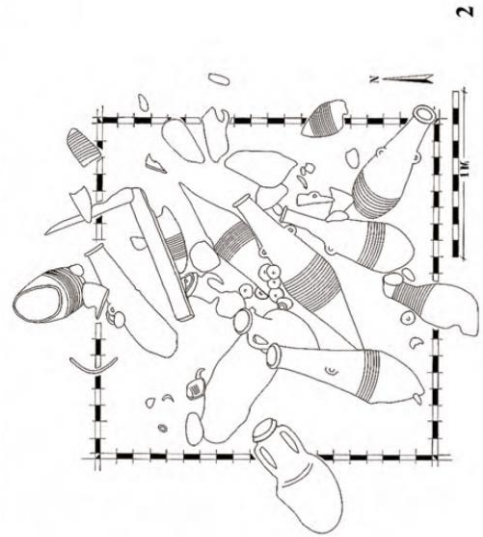
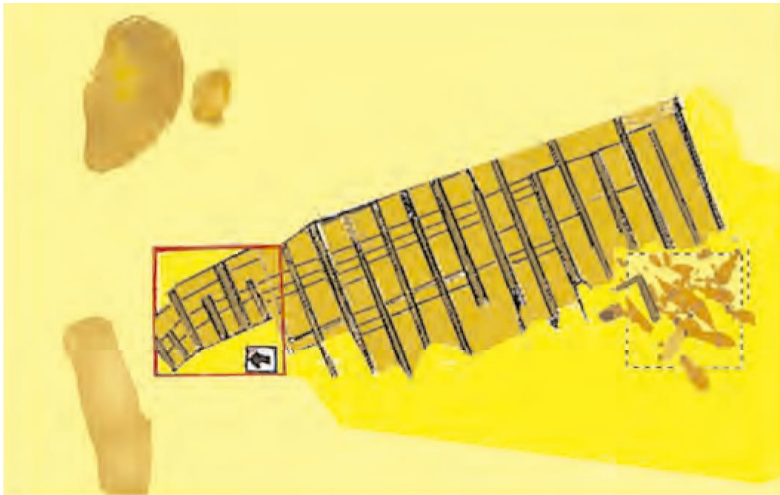
Keelson / Maststep – partially preserved. Keelson rol 7.50 m

Stringers – Yes

Taxa – ?; A.S. - Magnogreek-Massaliot; Built proposal– Campanian – Calabrian area

Notes – *Pinus leucodermis*

Illa de Conills / Cabrera VII



Chronology -100

Preserved – 3 x 2 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 9 cm

Frames molded dimension – 10 cm

Plank thickness – 3 – 5 cm

Framing pattern – Alternating floors and half-frames // 26 cm

Planking method – pM&T

M&T – T 6 x 0.8 x ? cm // 7 cm, conic pegs

Hull shape – ?

Fasteners – floors/planks: copper nails

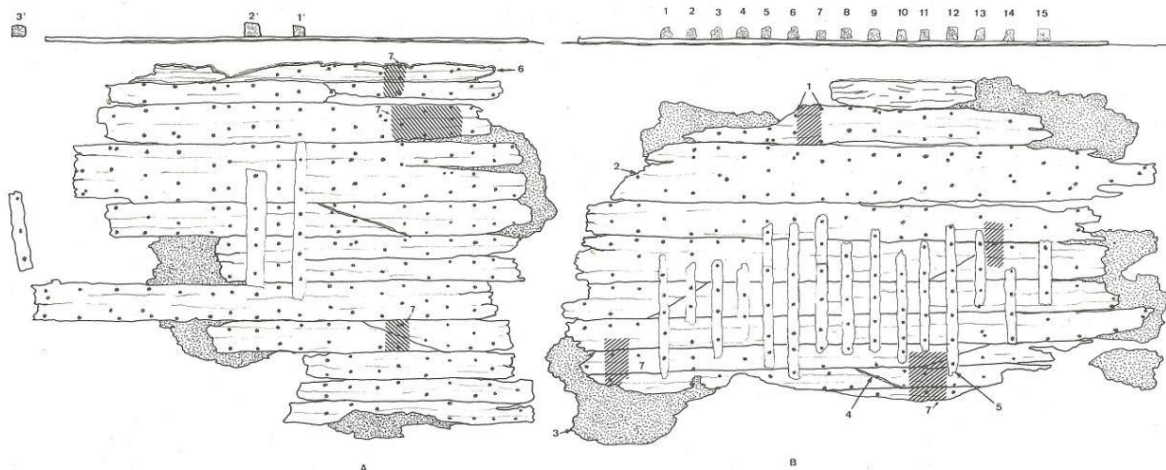
Keelson / Maststep – ?

Stringers – ?

Taxa – Hellenistic-Republican; A.S. - ?; Built - ?

Notes –

Colonia Sant Jordi



Chronology -100 / -80

Preserved – 11.3 x 3.6 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 12 cm

Frames molded dimension – 12cm

Plank thickness – 7-9 cm

Framing pattern – Alternating floors and half-frames // 24 cm

Planking method – Specific pM&T, diag. scarves

M&T – T 8 x 3 x 14 cm // 6 cm; double conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/planking clenched iron nails over treenails

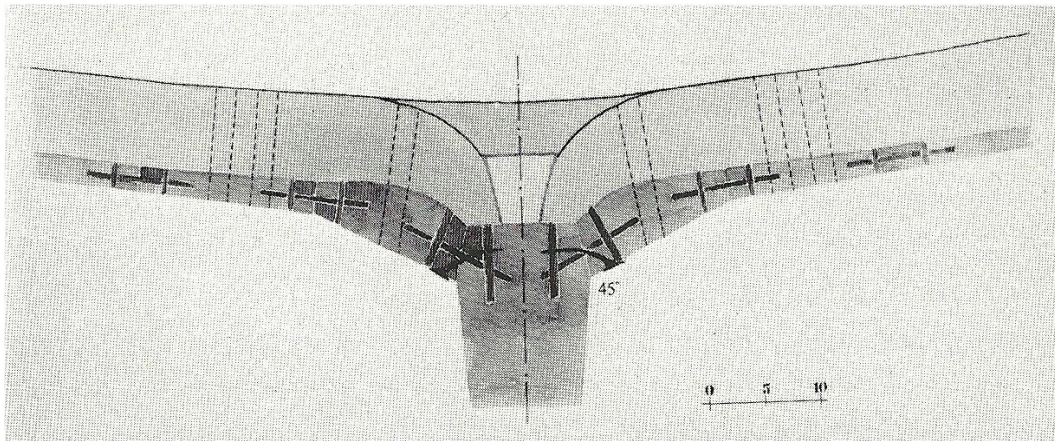
Keelson / Maststep – ?

Stringers – ?

Taxa – Hellenistic-Republican; A.S. - ?; Built - ?

Notes – pM&T particular technique; lead lining

Palamós / Formigues 1



Chronology -100 / -50

Preserved – ? x ? m

Length reconstructed – ? m

Beam reconstructed – 4.4 m

Keel length – 10.7 m

Keel sided dimension – 12 cm

Keel molded dimension – 16 cm

Frames sided dimension – 7 cm

Frames molded dimension – 7.5 cm

Plank thickness – 2 cm

Framing pattern – Alternating floors and half-frames // 25 cm

Planking method – pM&T, diag. scarves

M&T – T 6.5 x 0.6 x 12 cm // ? cm; conic pegs

Hull shape – ?

Fasteners – Floors/planks lashed 2

Keelson / Maststep – ?

Stringers – ?

Taxa – ?; A.S. – Magnogreek-Massaliot; Built proposal - Italy

Notes – Seems that only the sternpost was studied

Cap de l'Estérel



Chronology -100 / -50

Preserved – 12 x 5 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – A serie of floor timbers documented

Planking method – pM&T

M&T – M ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

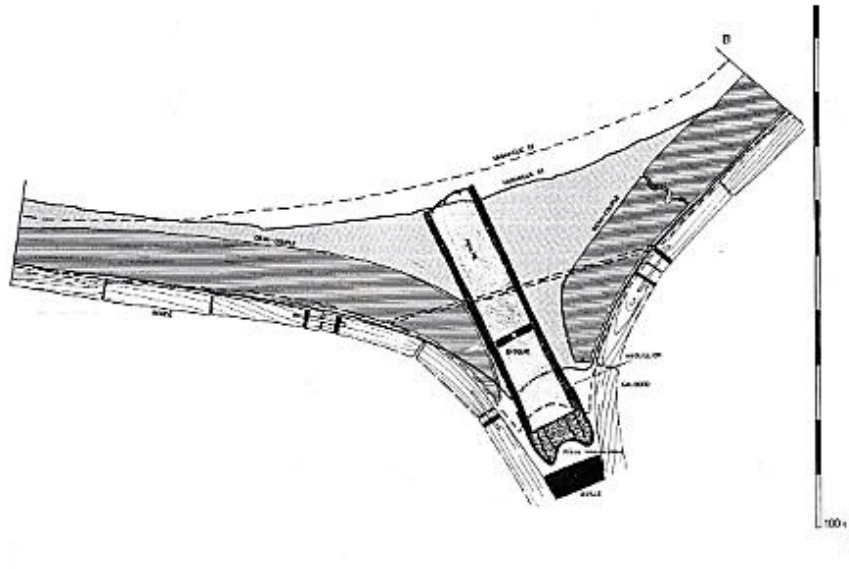
Keelson / Maststep – Preserved

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Cap Gros



Chronology -100 / -50

Preserved – 9 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 9.5 cm

Frames molded dimension – 9.5 cm

Plank thickness – 3.6 cm

Framing pattern – Alternating floors and half-frames // 11.4 cm

Planking method – pM&T, diag. scarves

M&T – T 6.5 x 0.6 x 16 cm // 6 cm; conic pegs

Hull shape – Wine – glassed

Fasteners – floors/planking: iron nails over treenails

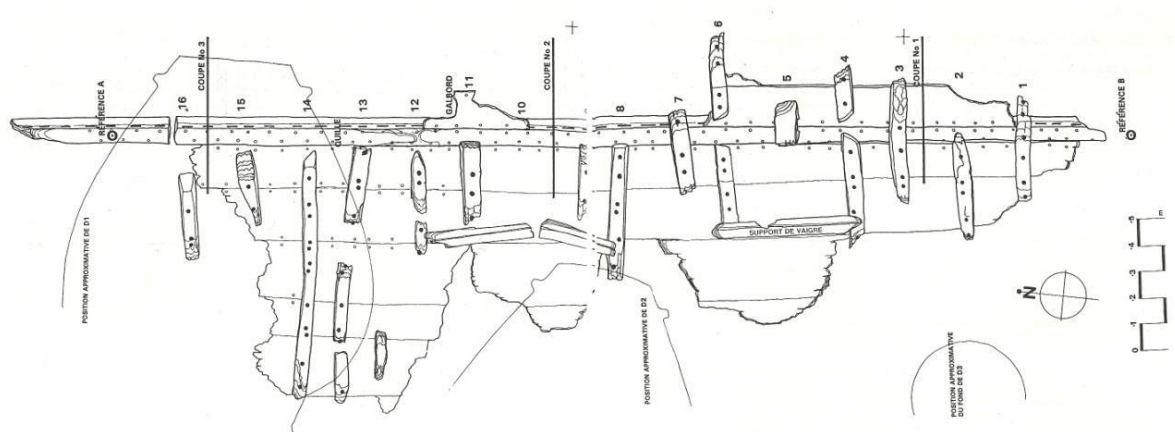
Keelson / Maststep – ?

Stringers – Yes

Taxa - ?; S.M. - ?; Built - ?

Notes – Ballast and bilge pumped

Cap Bénat



Chronology -100 / -75

Preserved – 4 x 1

Length reconstructed – 8 m

Beam reconstructed – ?

Keel length – 4 m

Keel sided dimension – 8.5 cm

Keel molded dimension – 10 cm

Frames sided dimension – 6.5 cm

Frames molded dimension – 6.5 cm

Plank thickness – 2.2 cm

Framing pattern – Alternating floors and half-frames // 21 cm

Planking method – pM&T

M&T – T 5 x 0.7 x 10 cm // 6 cm; Measurement at keel

Hull shape – Flat floor

Fasteners – floors/planking treenails (lashing?)

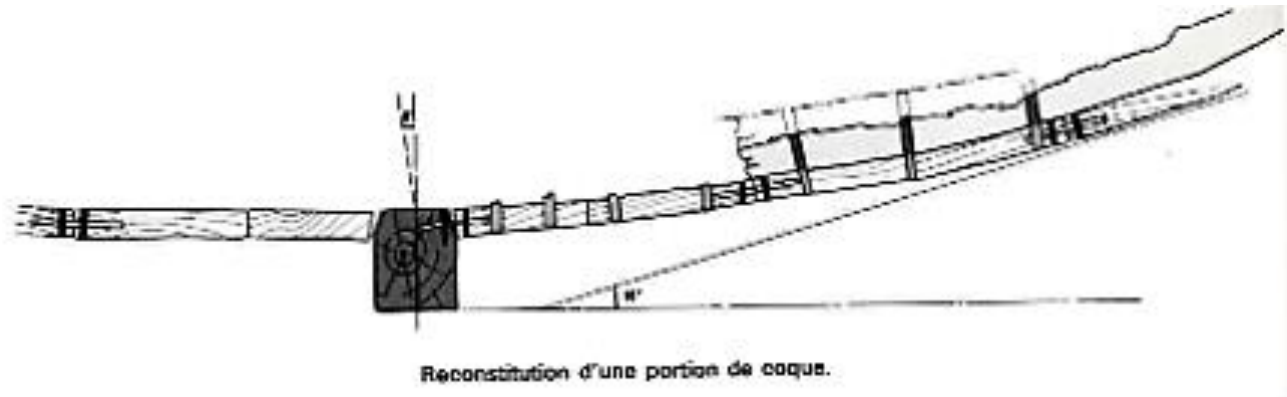
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Miladou



Chronology – -100 / -50

Preserved – 10 x 1.5 m

Length reconstructed – 15 m

Beam reconstructed – ? m

Keel length – 9.18 m

Keel sided dimension – 11 cm

Keel molded dimension – 9 cm

Frames sided dimension – 8.5 cm

Frames molded dimension – 7.6 cm

Plank thickness – 2.5 cm

Framing pattern – Alternating floors and half-frames // ? cm

Planking method – pM&T

M&T – T 6.5 x 0.6 x 14 cm // 13 cm; conic pegs

Hull shape – Flat floor

Fasteners – Floors/planks: vertical treenails

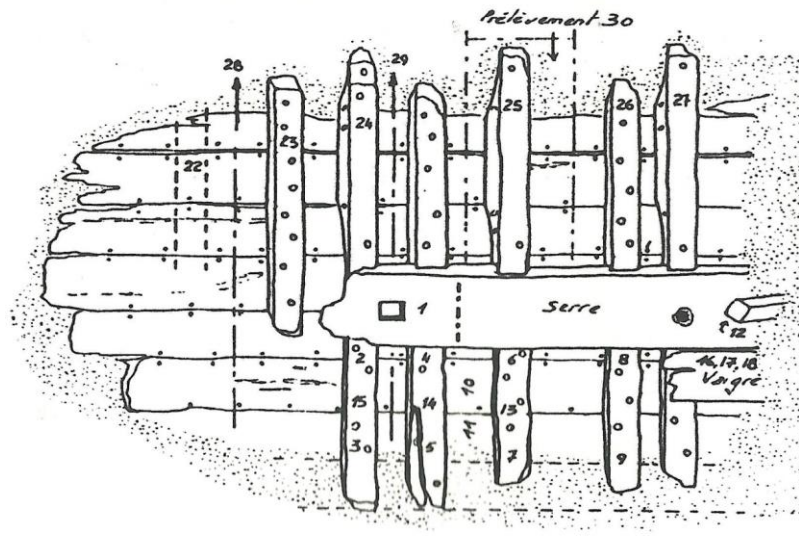
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Pointe Pomègues



Chronology -100 / 50

Preserved – ?

Length reconstructed – 20 m

Beam reconstructed – 7 m

Keel length – ?

Keel sided dimension – 15 cm

Keel molded dimension – 16 cm

Frames sided dimension – 9 cm

Frames molded dimension – 10 cm

Plank thickness – 3.5 - 2.5 cm

Framing pattern – Alternating floors and half-frames // ?cm

Planking method – pM&T

M&T – M ? X ? x ? cm // ? cm

Hull shape – Wine-glassed

Fasteners – Floors/planks: vertical treenails

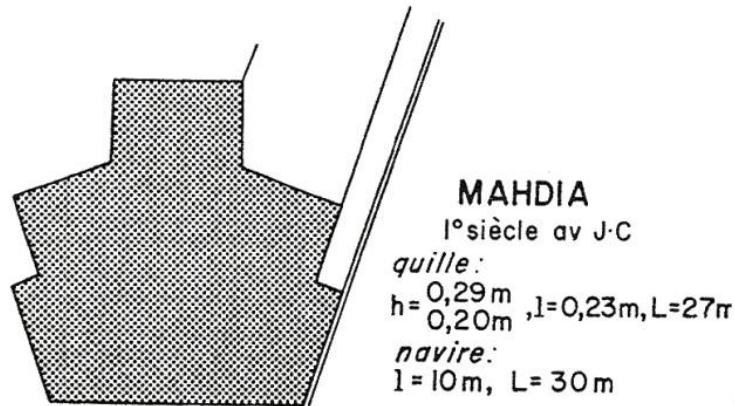
Keelson / Maststep – ?

Stringers – Yes

Taxa - ?; S.M. - ?; Built - ?

Notes – ?

Madhia



Chronology -90 / -80

Preserved – ? x ? m

Length reconstructed – 40.6 m

Beam reconstructed – 13.8 m

Keel length – 26 m

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 15 cm

Frames molded dimension – 15 cm

Plank thickness – ? cm

Framing pattern – ?// 25 cm

Planking method – pM&T

M&T – M ? X ? x ? cm // ? cm

Hull shape – Wine-glassed

Fasteners – ?

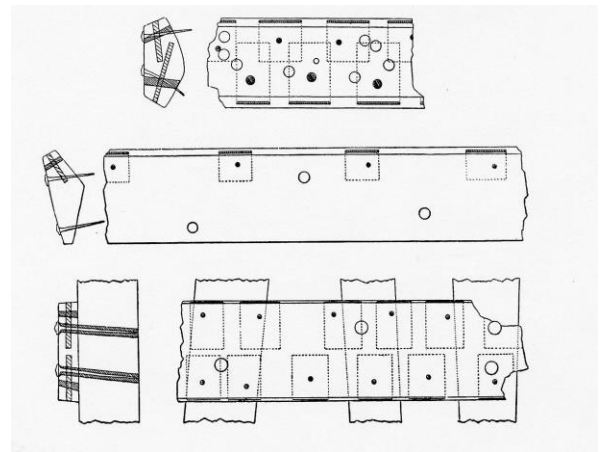
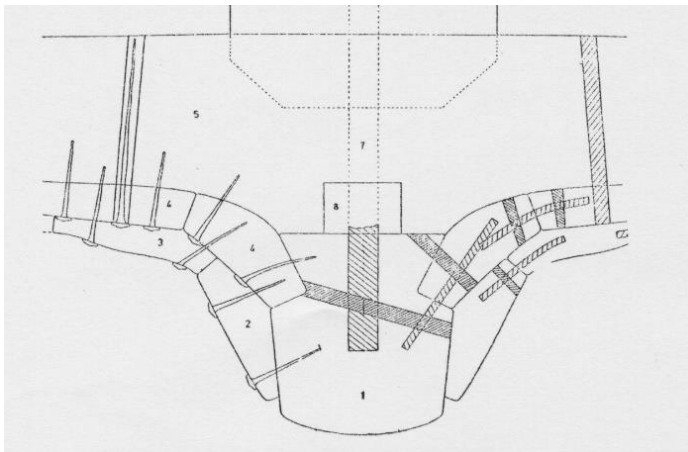
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – Lead lining

Titan



Chronology -89 / -50

Preserved – 20 x 4 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – 19.5 cm

Keel molded dimension – 22 cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – Alternating floors and half-frames // 15cm

Planking method – pM&T

M&T – M ? X ? x ? cm // ? cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – Frames/keel big treenail at maststep; frames/planks vertical iron nails over treenails and external iron lost point nails

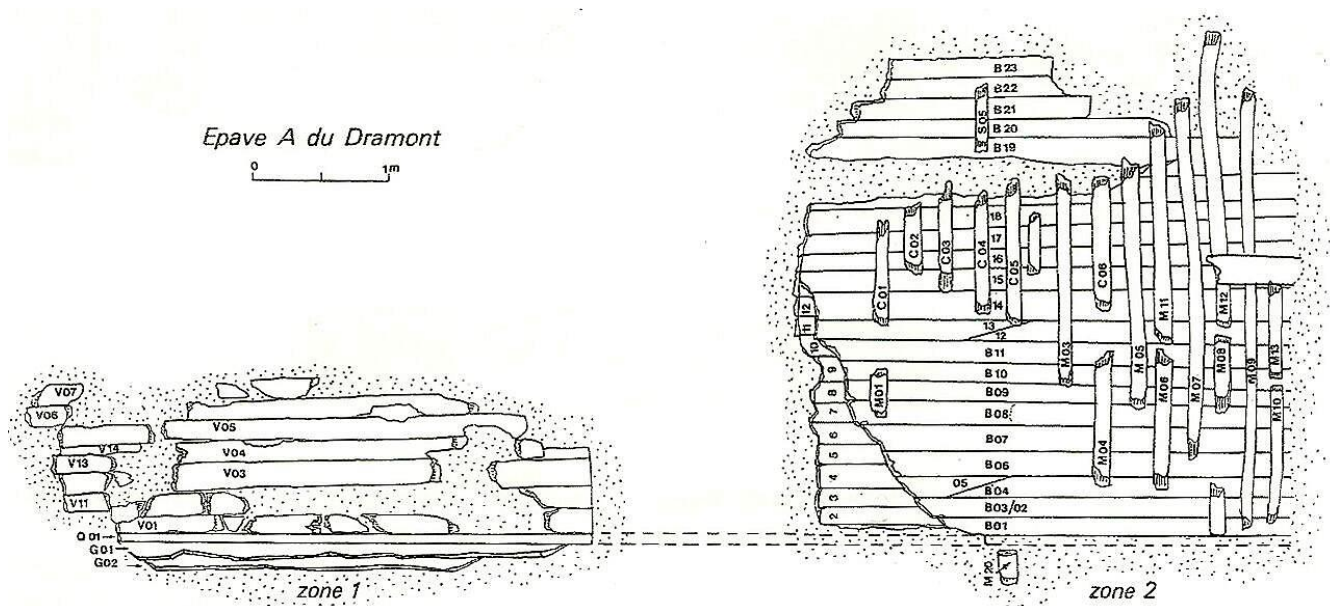
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – Earliest known “Baetican” cargo Dr. 12

Dramont A



Chronology -82 / -50

Preserved – 17 x 4 m

Length reconstructed – 25 m

Beam reconstructed – 7 m

Keel length – ?

Keel sided dimension – 17 cm

Keel molded dimension – 22 cm

Frames sided dimension – 10 cm

Frames molded dimension – 10 cm

Plank thickness – 7 cm

Framing pattern – Alternating floors and half-frames // ?cm

Planking method – pM&T

M&T – M ? X ? x ? cm // ? cm

Hull shape – Round turn of the bilge

Fasteners – Floors/planks: vertical treenails and external iron lost point nails

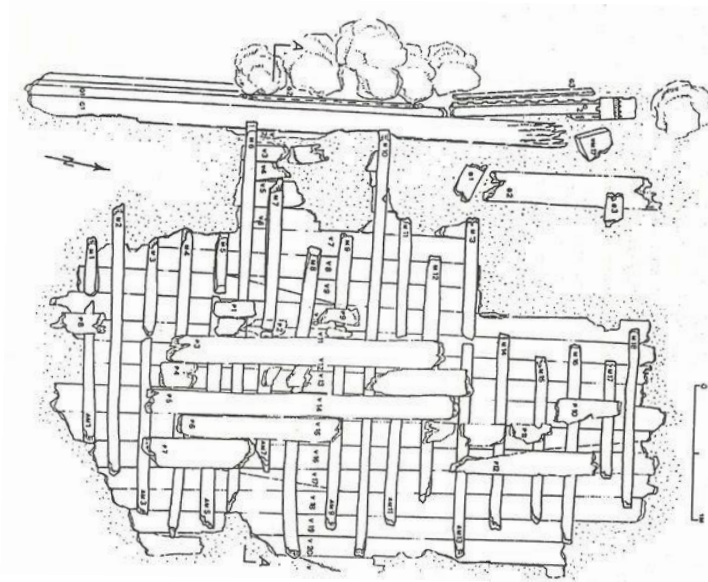
Keelson / Maststep – Not preserved

Stringers – Yes

Taxa - ?; S.M. - ?; Built - ?

Notes – Lead lining. Measurements taken from draws

Chrétienne A



Chronology -75

Preserved – 5 x 3.5 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – 4.5 m

Keel sided dimension – 13 cm

Keel molded dimension – 20 cm

Frames sided dimension – 10 cm

Frames molded dimension – 9 cm

Plank thickness – 3.5 cm

Framing pattern – Alternating floors and half-frames // ? cm

Planking method – pM&T

M&T – T 6.5 x 0.9 x 30 cm // 4 cm; measurement at keel

Hull shape – Wine-glassed

Fasteners – floors/planking clenched nails over treenails

Keelson / Maststep – Preserved

Stringers – Yes

Taxa - ?; S.M. - ?; Built - ?

Notes –

Madrague de Giens



Chronology -75 / -60

Preserved – 35.1 x 12 m

Length reconstructed – 40 m; Beam reconstructed – 9 m

Keel length – ?

Keel sided dimension – 35 cm

Keel molded dimension – 40 cm

Frames sided dimension – 15 cm

Frames molded dimension – 15 cm

Plank thickness – 6+4 cm

Framing pattern – Alternating floors and half-frames // 25 cm

Planking method – pM&T, diag. scarves

M&T – inner T 8 x 1.2 x 20 cm // 12 cm; outer T 5.5 x .7 x 12 cm // 15 cm; conic pegs

Hull shape – Wine glassed

Fasteners – floors/keel: every 4th frame bolted;

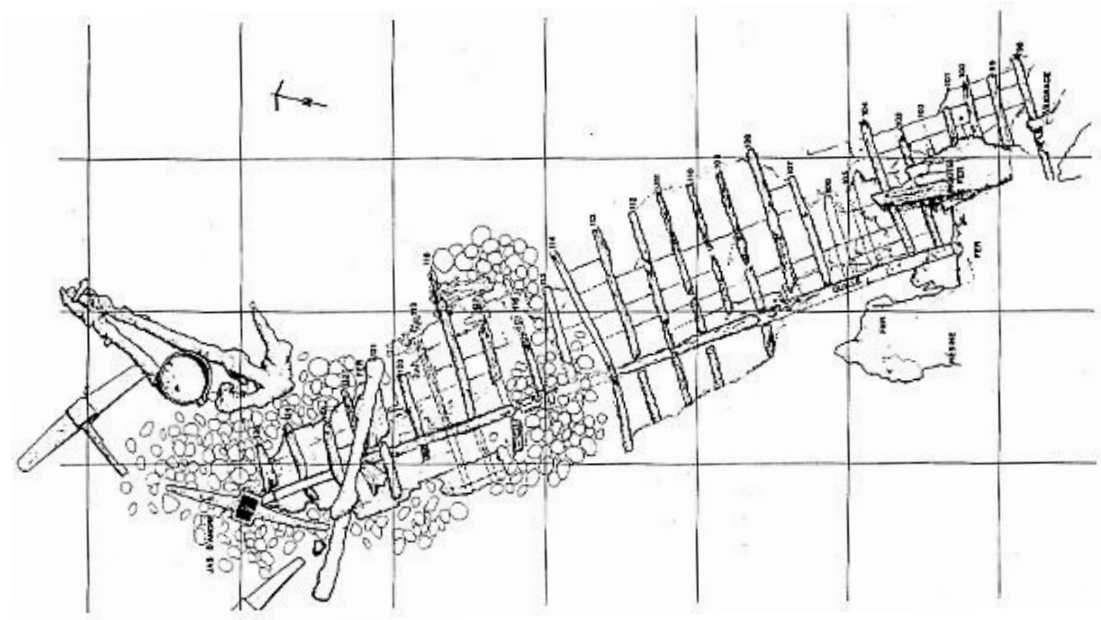
Keelson / Maststep – yes

Stringers – evenly spaced

Taxa - ?; S.M. - ?; Built - ?

Notes – P.K.&R.: Western Imperial

Dramont C



Chronology - 75 / -50

Preserved – 6 x 1.6 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – 11 cm

Keel molded dimension – 9 cm

Frames sided dimension – 6.6 cm

Frames molded dimension – 7.3 cm

Plank thickness – 2.4-3.3 cm

Framing pattern – floors and haf-frames // 21cm

Planking method – pM&T, diag. scarves

M&T – T 6.5 x 0.7 x ? cm // ? Cm; conic pegs

Hull shape – Flat floor

Fasteners – Floors/planks lashed 2

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Arles-Rhône 2



Chronology – -55 / 93

Preserved – 1.7 x 2.2 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – Transversal iron nails, no pM&T

Hull shape – Flat floor

Fasteners – Frames/planks: internal clenched nails

Keelson / Maststep – Yes

Stringers – Yes

Taxa - ?; S.M. - Gallo-roman; Built – Rhône

Notes – Light work

Arles-Rhône 5



Chronology – -51 / -47

Preserved – 30 x 3 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – No keel architecture

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – Transversal iron nails; no pM&T

Hull shape – Flat floor

Fasteners – Frames/planks: internal clenched nails

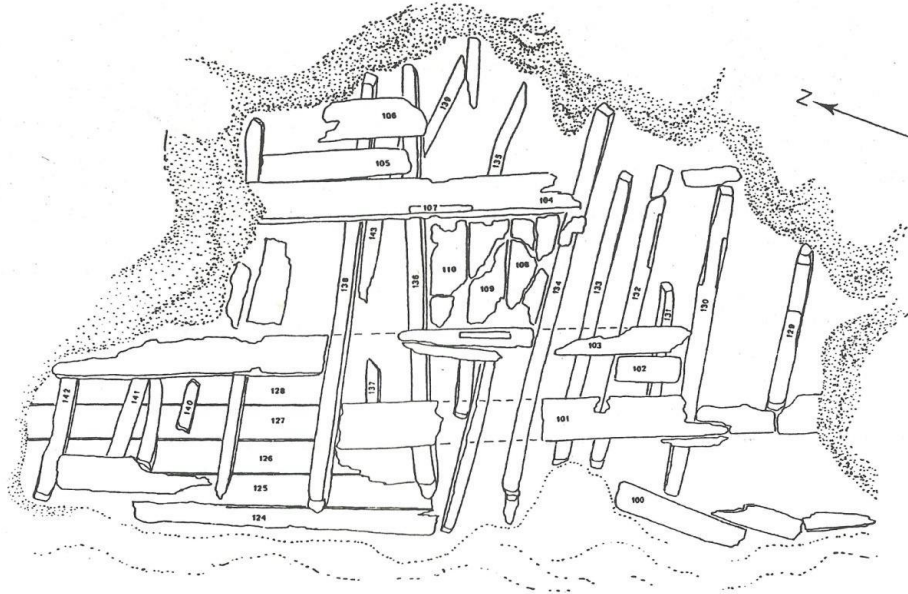
Keelson / Maststep – Yes

Stringers – Yes

Taxa – Joined monoxile; S.M. - Gallo-roman; Built – Rhône

Notes – No keel architecture; light work

Plane I



Chronology -50

Preserved – ? x ? m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 7.5 cm

Frames molded dimension – 8 cm

Plank thickness – 3 cm

Framing pattern – Alternating floors and half-frames // ?

Planking method – pM&T

M&T – M ? X ? x ? cm // ? Cm; conic pegs

Hull shape – Flat floor; round turn of the bilge

Fasteners – floors/planks lashed 2

Keelson / Maststep – Yes

Stringers – ?

Taxa - ?; S.M. - Magnogreek-Massaliot; Built – Catalan area

Notes –

Saintes Maries de la Mer 2



Chronology – 25 / 50

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ? S.M. - Magnogreek-Massaliot; Built - Italy

Notes –

Cala Cativa I



Chronology – -40/ -20

Preserved – 7.2 x 2.7 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – 6.4 m

Keel sided dimension – 13 cm

Keel molded dimension – 11 cm

Frames sided dimension – 12 cm

Frames molded dimension – 15 cm

Plank thickness – 3.5 cm

Framing pattern – Alternating floors and half-frames //14 cm

Planking method – pM&T, diag. scarves

M&T – T 5 x ? x 12 cm // ? Cm; conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – Floors/planks, lashed 2

Keelson / Maststep – Not preserved

Stringers – Not preserved

Taxa - ?; S.M. - Magnogreek-Massaliot; Built – Catalan area

Notes – Rounded keel. Hypothesis under study

Formigues 2



Chronology -30 / -20

Preserved – 8 x 6 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T; conic pegs

M&T – M ? X ? x ? cm // ? cm

Hull shape – Flat floor

Fasteners – Floors/planks, lashed 2?

Keelson / Maststep – Preserved

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – Seems in Cap del Vol group

Aquilea



Chronology – -30 / 100

Preserved – 10 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – Laced 2; S scarf; no pM&T

Hull shape – ?

Fasteners – ?

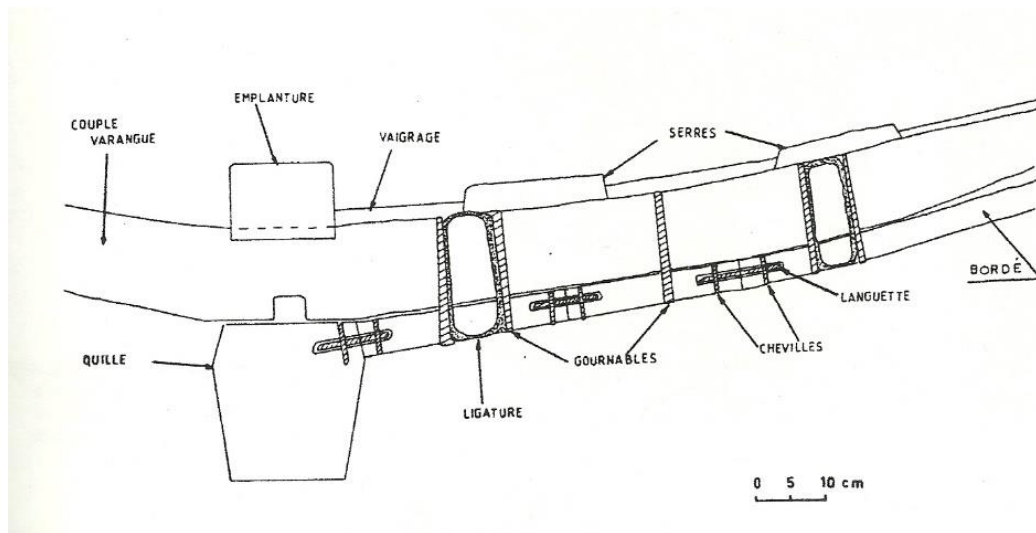
Keelson / Maststep – ?

Stringers – ?

Taxa - Adriatic; S.M. - ?; Built - ?

Notes –

Cap Béar 3



Chronology –25 / 0

Preserved – 8.2 x 8.7 m

Length reconstructed – 15 m

Beam reconstructed – ? m

Keel length – 1.5 m

Keel sided dimension – 20 cm

Keel molded dimension – 21 cm

Frames sided dimension – 8.5 cm

Frames molded dimension – 9.5 cm

Plank thickness – 2.5 - 4 cm

Framing pattern – Alternating floors and half-frames // 15cm

Planking method – pM&T

M&T – T 4.7 x 0.7 x ? cm // 9 cm; conic pegs

Hull shape – Flat floor

Fasteners – Floors/planks lashed 2

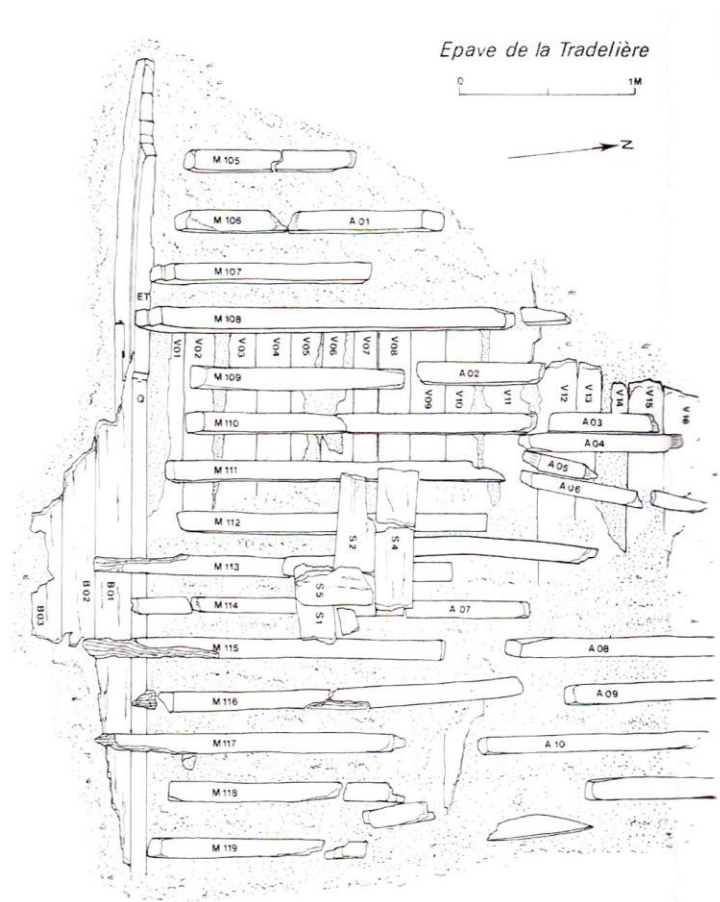
Keelson / Maststep – Keelson. No place for mast documented

Stringers – Yes

Taxa - ?; S.M. - ?; Built - ?

Notes –

Tradelière



Chronology -25 / 0

Preserved – 4.5 x 4 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – 18 cm

Keel molded dimension – 20 cm

Frames sided dimension – 12 cm

Frames molded dimension – 10 cm

Plank thickness – 3.8 cm

Framing pattern – Alternating floors and half-frames // 15 cm

Planking method – pM&T; diag. scarves

M&T – T ? X ? x ? cm // ? cm

Hull shape – Wine-glassed

Fasteners – Floors/planks: vertical treenails

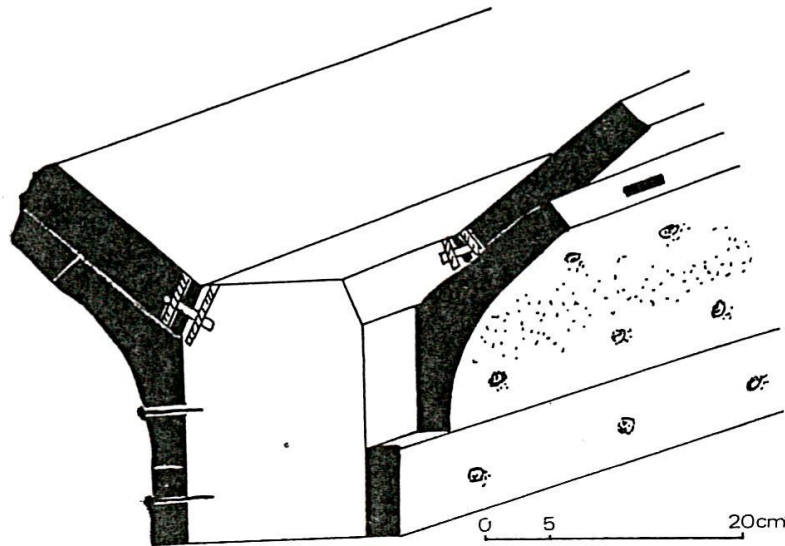
Keelson / Maststep – Not preserved

Stringers – Yes

Taxa - ?; S.M. - ?; Built - ?

Notes –

Fos 1



Chronology -25 / 0

Preserved – 15 x ? m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – 14 cm

Keel molded dimension – 20 cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – Alternating (irregular) floors and half-frames // ? cm

Planking method – pM&T

M&T – T ? X ? x ? cm // ? Cm; conic pegs

Hull shape – ?

Fasteners – ?

Keelson / Maststep – Preserved

Stringers – Yes

Taxa - ?; S.M. - ?; Built - ?

Notes –

Sud Perduto 2



Chronology – -25

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – Alternating floors and half-frames // ? cm

Planking method – pM&T

M&T – T ? X ? x ? cm // ? Cm

Hull shape – Flat floor

Fasteners – ?

Keelson / Maststep – Preserved

Stringers – Yes

Taxa - ?; S.M. - ?; Built – ?

Notes –

Arles-Rhône 6



Chronology – -17 / 222

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 13 cm

Frames molded dimension – 30 cm

Plank thickness – ? cm

Framing pattern – // 30 cm

Planking method – ?

PM&T - ? X ? X ? // ? cm

Hull shape – Flat floor

Fasteners – Frames/planks: treenails

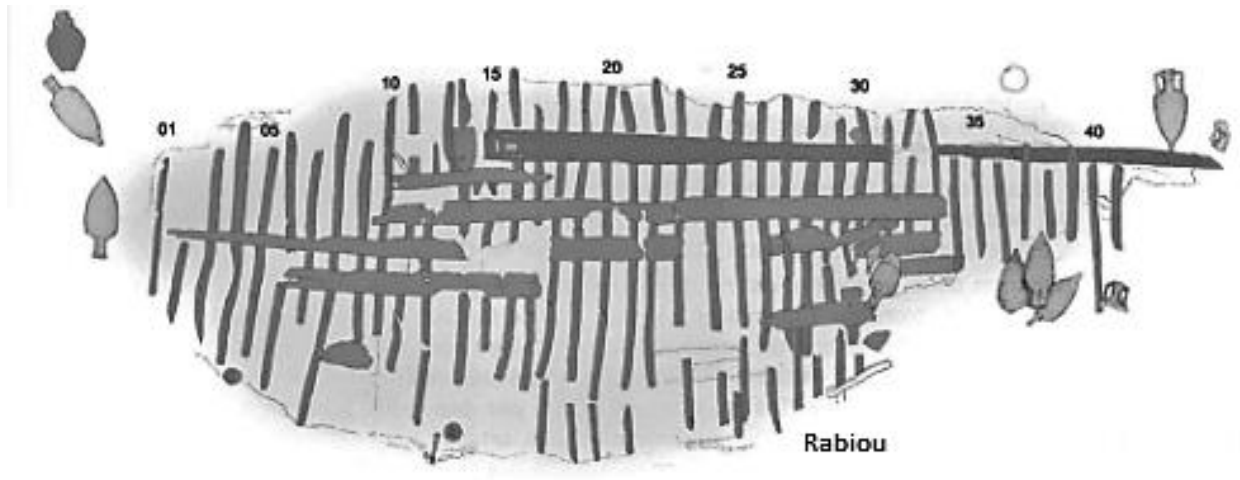
Keelson / Maststep – Yes

Stringers – Yes

Taxa – ?; S.M. - ?; Built – ?

Notes – Light work

Rabiou



Chronology - -15 / -10

Preserved – 9.9 x ? m

Length reconstructed – 15 m

Beam reconstructed – ? m

Keel length – 9.9 m

Keel sided dimension – 11.4 cm

Keel molded dimension – 18.6 cm

Frames sided dimension – 11.5 cm

Frames molded dimension – 12 cm

Plank thickness – 3.2 cm

Framing pattern – Alternating floors and half-frames // 28 cm

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – Floors/planks: vertical treenails

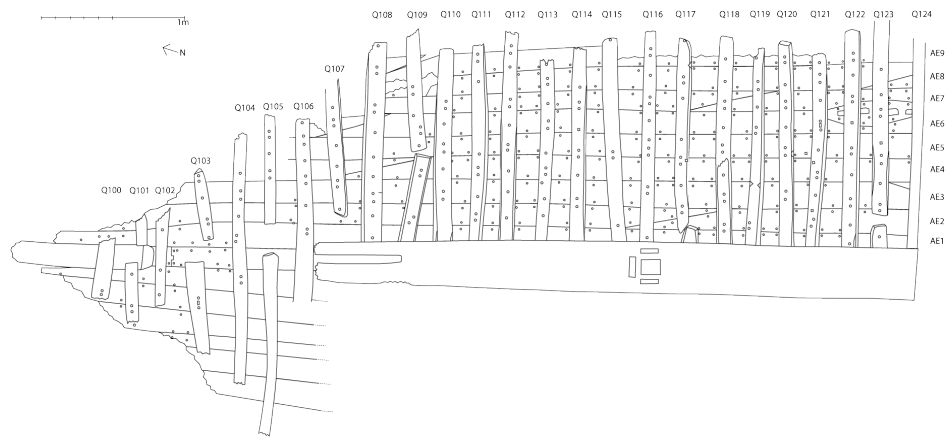
Keelson / Maststep – Preserved

Stringers – Yes

Taxa - ?; S.M. - ?; Built - Campanian-Calabrian area

Notes – *Pinus leucodermis*; imprecise coordinates

Cap del Vol



Chronology - -15 / -10

Preserved – 12 x 4 m

Length reconstructed – 15 m

Beam reconstructed – 4.68 m

Keel length – 12.43

Keel sided dimension – 12 cm

Keel molded dimension – 6 + 6 cm (false keel)

Frames sided dimension – 10 cm

Frames molded dimension – 16 cm

Plank thickness – 4 cm

Framing pattern – Alternating floors and half-frames // 25 cm

Planking method – pM&T; diag. scarves

M&T – T 5-5.5 x 0.6-0.7 x 13-18 cm // ? Cm; conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – Floors/planks lashed 2

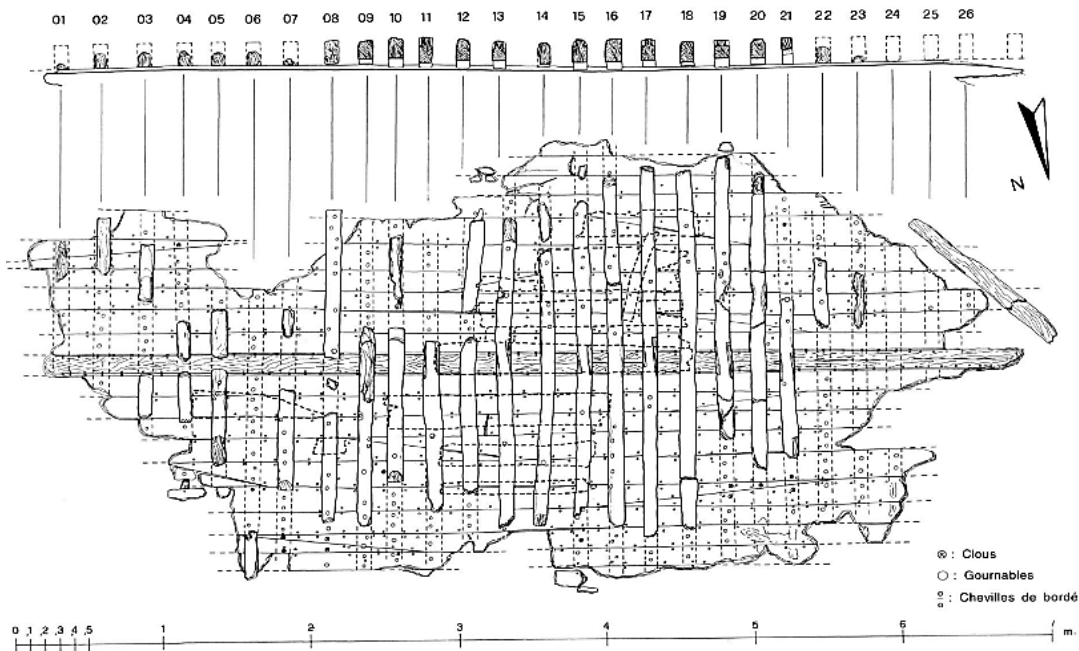
Keelson / Maststep – ?90% preserved. Keelson rol

Stringers – Yes

Taxa - ?; S.M. - Magnogreek-Massaliot; Built – Catalan area

Notes – Sternpost recovered and lost. Keel sabbot 2.5 cm

Ladispoli



Chronology -10 / 10

Preserved – 6.6 x 3.3 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – 6.3 m

Keel sided dimension – 14.5 cm

Keel molded dimension – 12 cm

Frames sided dimension – 10 cm

Frames molded dimension – 18 cm

Plank thickness – 4 cm

Framing pattern – Consecutive floor timbers

Planking method – pM&T, diag. scarves

M&T – T 5.5 x 1.5 x 15 cm // 5 cm; conic pegs (at garboard)

Hull shape – Flat floor

Fasteners – Floots/planks: oblique treenails

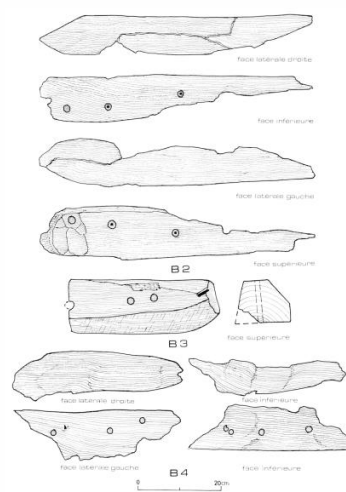
Keelson / Maststep – Not preserved

Stringers – Yes

Taxa – Transition to Imperial; S.M. - Latium/Campania; Built - Minturnae

Notes – Dolia ship type

Grand Ribaud D



Chronology – -9 / 0

Preserved – ? x ? m

Length reconstructed – 18 m; Beam reconstructed – 6 m

Keel length – 3

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 10-12 cm

Frames molded dimension – 9-10 cm

Plank thickness – 6 cm

Framing pattern – ?

Planking method – pM&T

M&T – M 6 x 1 x 4 cm // 8 cm

Hull shape – ?

Fasteners – Floors/planks: oblique treenails

Keelson / Maststep – ?

Stringers – Yes

Taxa – Transition to Imperial; S.M. - Latium/Campania; Built – Minturnae

Notes – Dolia ship type

Padua



Chronology – 0 / 100

Preserved – ? x ? m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – M ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

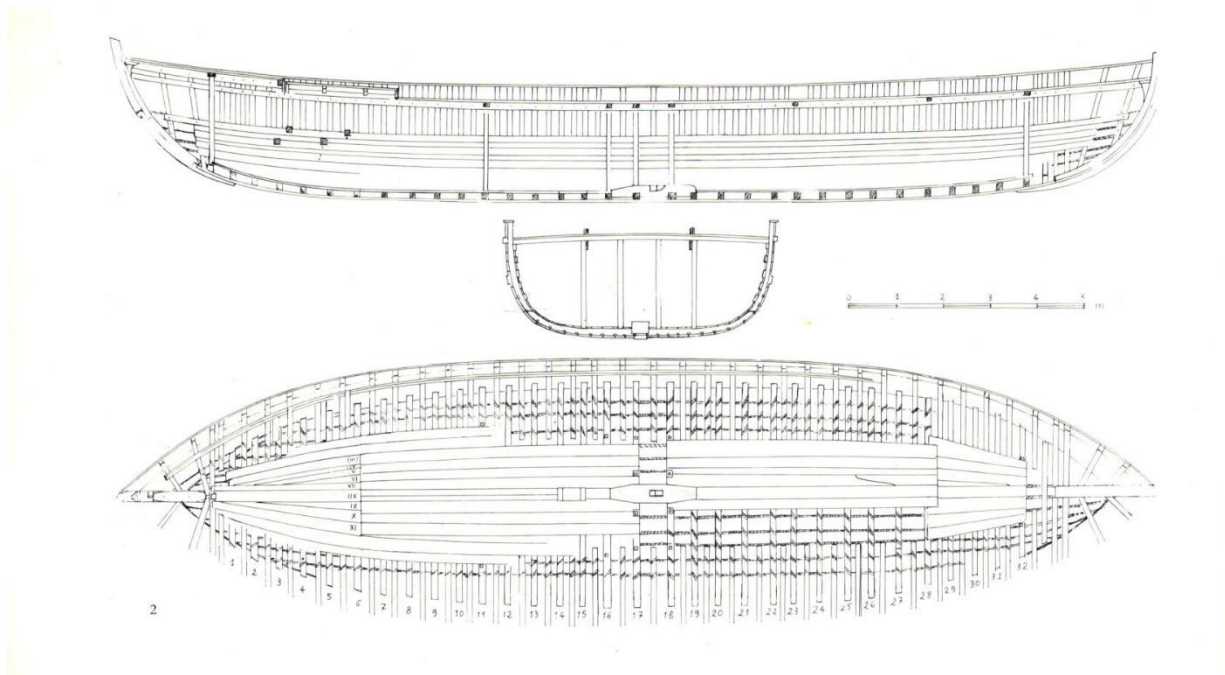
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Comacchio



Chronology 0 / 50

Preserved – 20 x ? m

Length reconstructed – 22.3 m; Beam reconstructed – 5.62 m

Keel length – 12.12 m

Keel sided dimension – 20 cm

Keel molded dimension – 5 cm

Frames sided dimension – 12 cm

Frames molded dimension – 16 cm

Plank thickness – 5 cm

Framing pattern – Floors and futtocks in line // 45 cm

Planking method – Laced 2

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/planking: lashed 1; floors/keel: not fastened.

Keelson / Maststep – no keelson; a small maststep

Stringers – Just ceiling planking

Taxa - Adriatic; S.M. - ?; Built - ?

Notes – Adriatic lacing tradition

Pula 1



Chronology – 0 / 200

Preserved – ? x ? m

Length reconstructed – 15 m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – Laced 2; no pM&T

Hull shape – Flat floor

Fasteners – Floors/planks: vertical treenails and nailed

Keelson / Maststep – ?

Stringers – ?

Taxa - Adriatic; S.M. - ?; Built - ?

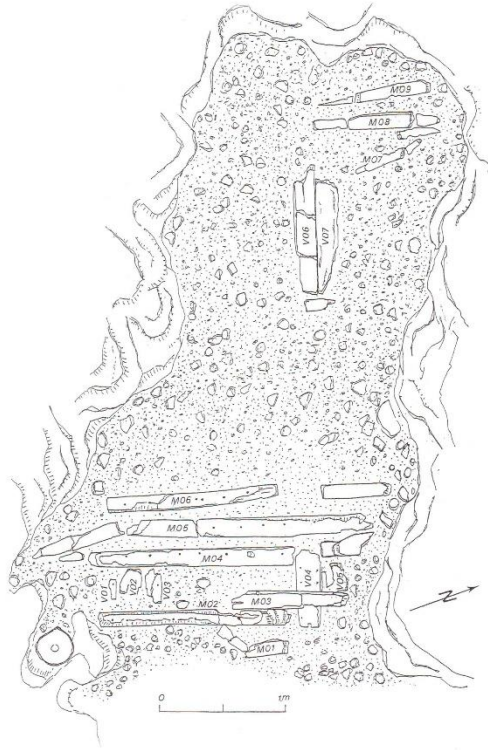
Notes – Adriatic lacing tradition

Pula 2



Chronology – 0 / 200
Preserved – ? x ? m
Length reconstructed – 10 m
Beam reconstructed – ? m
Keel length – ?
Keel sided dimension – ? cm
Keel molded dimension – ? cm
Frames sided dimension – ? cm
Frames molded dimension – ? cm
Plank thickness – ? cm
Framing pattern – ?
Planking method – Laced 2
Hull shape – Flat floor
Fasteners – ?
Keelson / Maststep – ?
Stringers – ?
Taxa - Adriatic; S.M. - ?; Built - Istria
Notes – Adriatic lacing tradition

Sud Lavezzi 3



Chronology – 0 / 25

Preserved – 4.5 x 3 m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – 20-16 cm (trapezoidal)

Keel molded dimension – ? cm

Frames sided dimension – 10-15 cm

Frames molded dimension – 25-12 cm

Plank thickness – 4 cm

Framing pattern – Alternating floors and half-frames / 7 cm

Planking method – pM&T

M&T – T 5.5 x 0.7 x ? cm // 5 cm; conic pegs

Hull shape – Flat floor ?

Fasteners – Floors/planks: vertical treenails

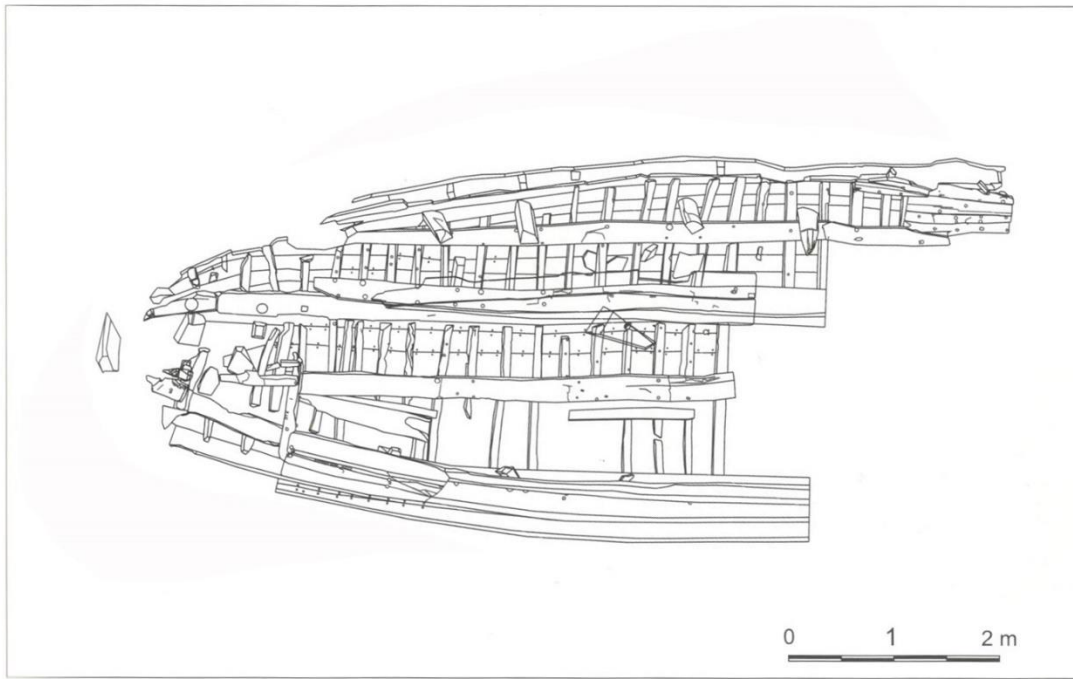
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Pisa B



Chronology 0 / 50

Preserved – 9.5 x 4.3 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Ouest Giraglia 2



Chronology – 0 / 25

Preserved – 7.1 x 3 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – 7.1 m

Keel sided dimension – 20.5 cm

Keel molded dimension - 15 cm

Frames sided dimension – 9 cm

Frames molded dimension – 21 cm

Plank thickness – 3.5 cm

Framing pattern – Consecutive asymmetric floor timbers and half-frames

Planking method – pM&T; diag. scarves

M&T – T 7.5 x 0.9 x 12 cm // 9.5 cm; conic pegs

Hull shape – Flat floor

Fasteners – Frames/keel: one frame bolted (keelframe-maststep); floors/planks: oblique treenails;

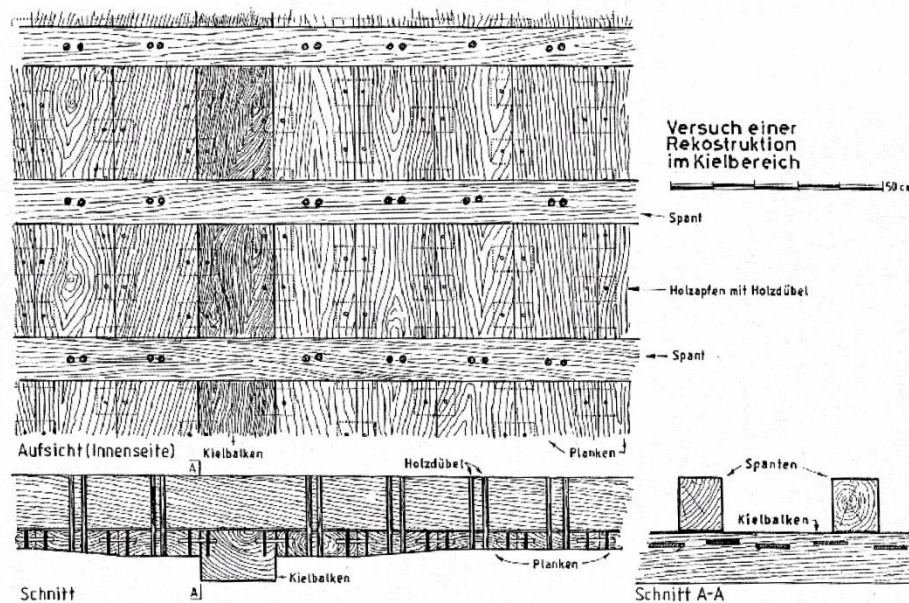
Keelson / Maststep – Not p+reserved

Stringers – Yes (not preserved)

Taxa – Transition to Imperial; S.M. - Latium/Campania; Built - Minturnae

Notes – Dolia ship type

Perduto 1



Chronology – 0 / 100

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – 19 cm

Keel molded dimension – 8-12 cm

Frames sided dimension – 10 cm

Frames molded dimension – 13 cm

Plank thickness – 3 cm

Framing pattern – Consecutive floor timbers

Planking method – pM&T

M&T – T 7 x 0.8 x ? cm // 6 cm at garboard

Hull shape – Flat floor

Fasteners – Floors/planks: lashed 2

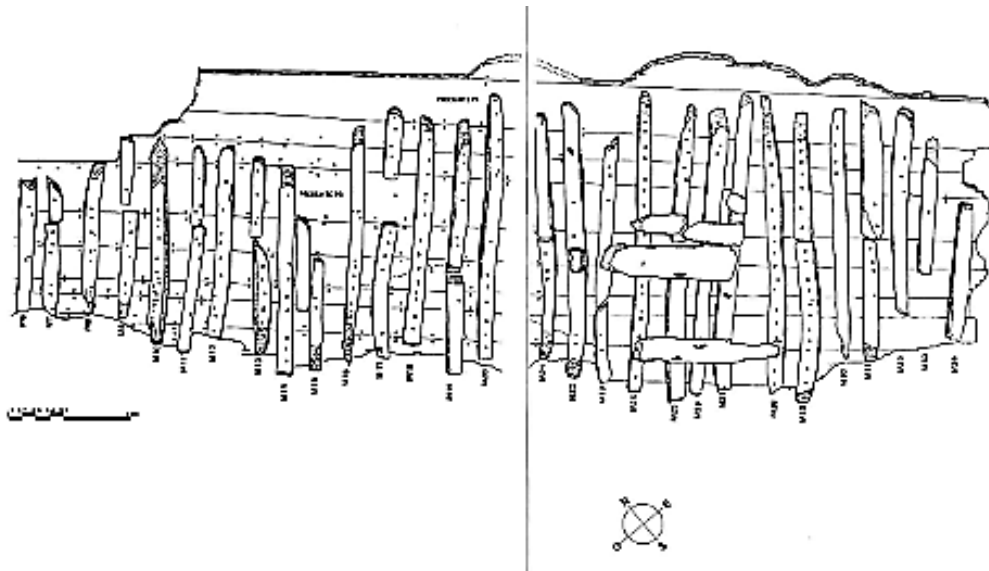
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Dramont I



Chronology - 0 / 100

Preserved – 8.5 x 3 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – 0.23

Keel sided dimension – 21 cm

Keel molded dimension – 26 cm

Frames sided dimension – 10 cm

Frames molded dimension – 17 cm

Plank thickness – 5 cm

Framing pattern – Alternating floors and half-frames // 15 cm

Planking method – pM&T; diag. scarves

pM&T – T 9 x 0.6 x 14 cm // 9 cm; conic pegs

Hull shape – ?

Fasteners – Floors/planks: vertical treenails and eventually external iron lost point

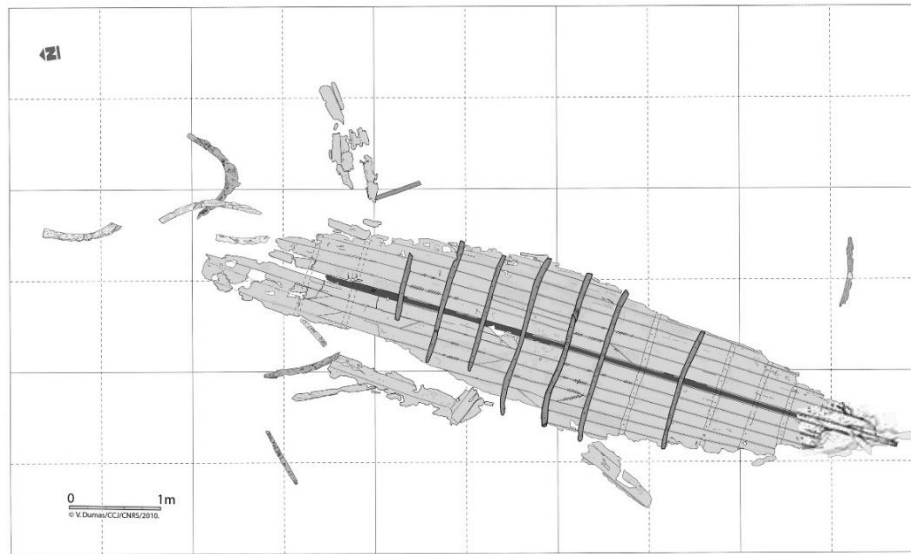
Keelson / Maststep – ?

Stringers – Yes

Taxa - ?; S.M. - ?; Built - ?

Notes –

Caska 1



Chronology – 0 / 100

Preserved – 8 x 1.7 m

Length reconstructed – 10 m

Beam reconstructed – 15 m?????

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – Consecutive floor timbers

Planking method – Laced 2

Hull shape – Flat bottom, round turn of the bilge

Fasteners – Lashed

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – Scuttled under a stone structure



Caska 2



Chronology – 0 / 100

Preserved – 14 x 5 m

Length reconstructed – 15 m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T; conic pegs

M&T – M ? X ? x ? cm // ? Cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – Special carpentry, not comon

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – Scuttled under a stone structure

Caska 3



Chronology – 0 / 100

Preserved – ? x ? m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – ?

M&T – M ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Caska 4



Chronology – 0 / 100

Preserved – ? x ? m

Length reconstructed – ? m

Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – Laced 2

M&T – M ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

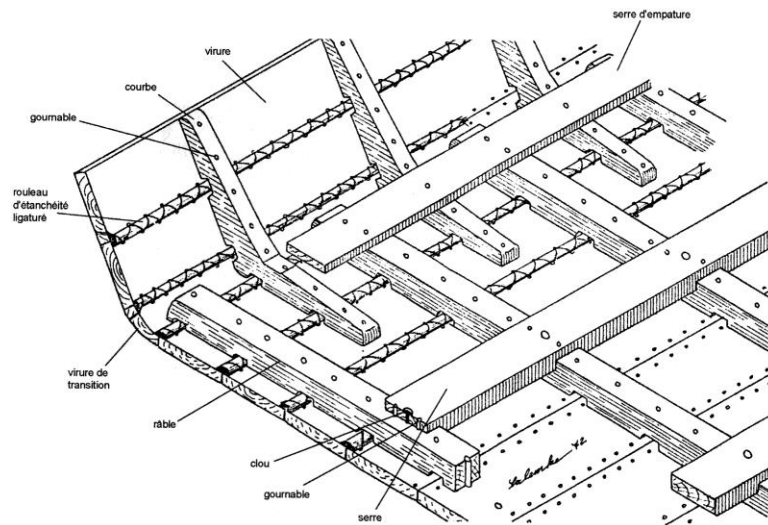
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Lipe/Ljubljana



Chronology – 0 / 50

Preserved – 30 x 4.8 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 12 cm

Frames molded dimension – 10 cm

Plank thickness – 3.5 cm

Framing pattern – Floor timbers // 60 cm overlapping chine knees

Planking method – Laced 2

Hull shape – Flat bottom

Fasteners – Floors/planks: vertical treenails

Keelson / Maststep – One stringer

Stringers – Yes

Taxa - ?; S.M. - ?; Built - ?

Notes –

Jules Verne 5



Chronology – 0 / 100

Preserved – 8 x 3.5 m

Length reconstructed – 16 m; Beam reconstructed – 5 m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – Alternating floors and half-frames (overlapping)

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – Flat floor

Fasteners – ?

Keelson / Maststep – No keelson

Stringers – ?

Taxa – Western Imperial; S.M. - ?; Built – Marseille

Notes – Dredge ship

Jules Verne 6



Chronology – 0 / 199

Preserved – ? x ? m

Length reconstructed – 16 m; Beam reconstructed – 5000 m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

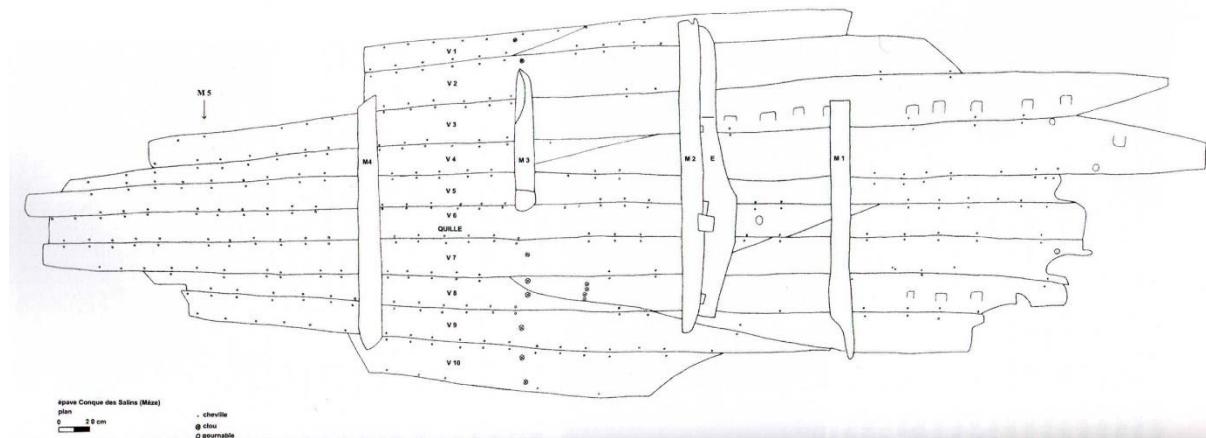
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – Marseille

Notes – Oared?

Conque des Salins



Chronology - 15 / 236

Preserved – 7.7 x 2.2 m

Length reconstructed – 15 m; Beam reconstructed – ? m

Keel length – 7

Keel sided dimension – 19 cm

Keel molded dimension – 5-9 cm

Frames sided dimension – 10-14 cm

Frames molded dimension – 9-11.5 cm

Plank thickness – 3.4 - 4.6 cm

Framing pattern – Floors. One monoxile, other composed // 80-96 cm

Planking method – pM&T; diag. scarves

M&T – T 5.5-10 x 0.5-0.9 x 10-18 cm // 10 cm; conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – Frames/keel: iron nail; Floors/planks: vertical treenails

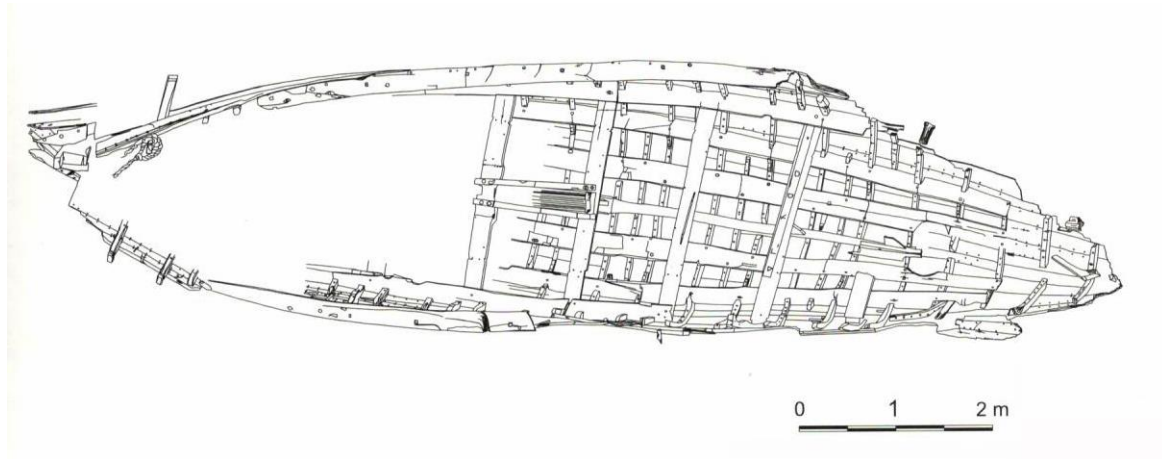
Keelson / Maststep – Preserved but no keelson-. Two frames hold the mast

Stringers – ?

Taxa - ?; S.M. ?; Built – Gallia Narbonensis

Notes – Lagoon sea boat

Pisa C



Chronology - 15 / 35

Preserved – 11.7 x 2.8 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

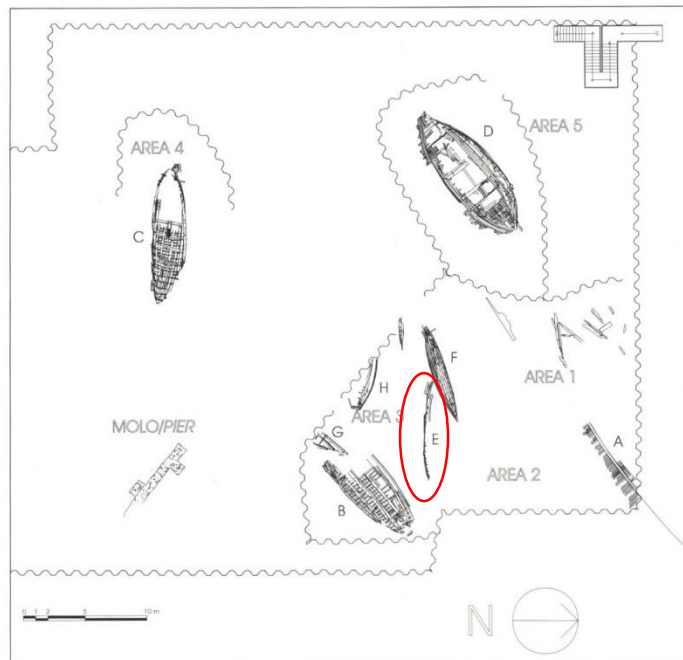
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – Galley, six benches

Pisa E



Chronology 15 / 35

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

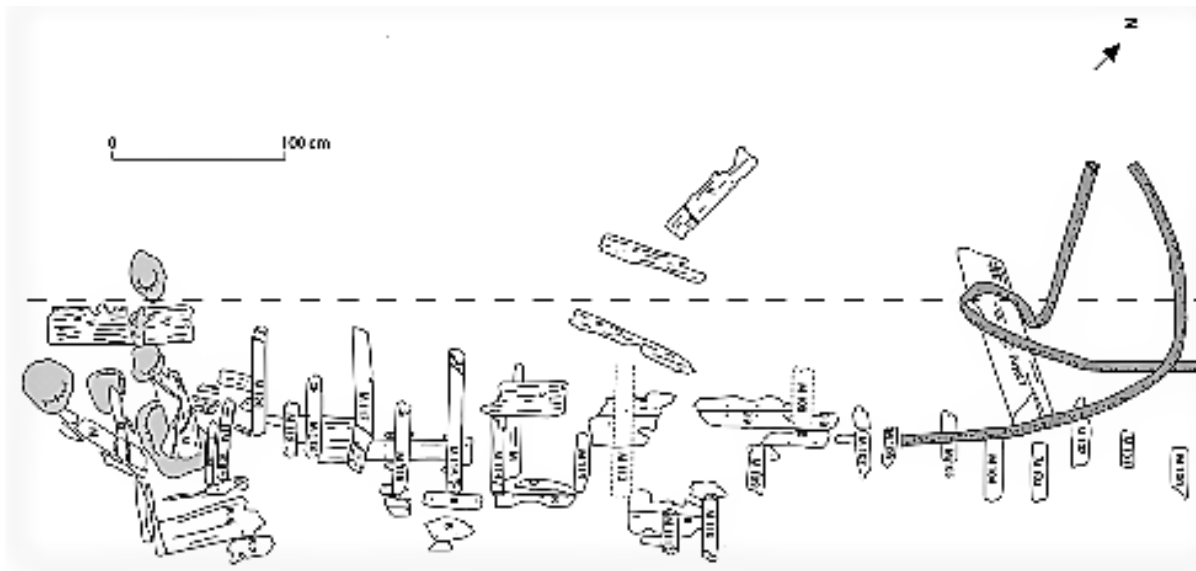
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Giraglia 1



Chronology - 20 / 30

Preserved – 7 x 2 m

Length reconstructed – 20 m; Beam reconstructed – 7 m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 8-10 cm

Frames molded dimension – 10-15.5 cm

Plank thickness – 2.9-4 cm

Framing pattern – Undetermined // 13-22

Planking method – pM&T

M&T – T 4.8 x 0.9 x >10.7 cm // 6-8 cm, conic pegs

Hull shape – ?

Fasteners – Floors/planks: oblique treenails and iron lost point nails

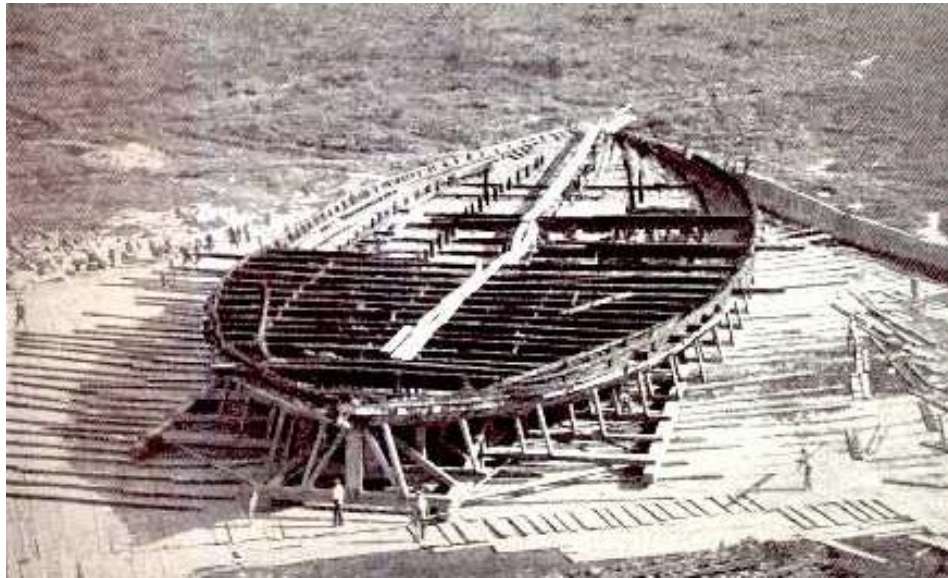
Keelson / Maststep – ?

Stringers – Yes

Taxa – Transition to Imperial; S.M. - Latium/Campania; Built - Minturnae

Notes – Dolia ship type

Nemi 1



Chronology 25 / 45

Preserved – 70 x 20 m

Length reconstructed – 72 m; Beam reconstructed – 21 m

Keel length – ?

Keel sided dimension – 26 cm

Keel molded dimension – 40 cm

Frames sided dimension – 20 cm

Frames molded dimension – 30 cm

Plank thickness – 10 cm

Framing pattern – Long and short floors scarved to futtocks

Planking method – pM&T, diag. scarves

M&T – T 10 x 3 x 20 cm // 20 cm;

Hull shape – Flat floor

Fasteners – floors/planks: clenched iron nails over treenails

Keelson – 40 x 10 cm

Maststep – N/A

Stringers – Yes

Taxa – Transition to Imperial; S.M. - Latium; Built - Nemi

Notes – P.K.&R.: Latium Western Imperial

Nemi 2



Chronology 25 / 45

Preserved – 70 x 20 m

Length reconstructed – 72 m; Beam reconstructed – 24 m

Keel length – ?

Keel sided dimension – 26 cm

Keel molded dimension – 40 cm

Frames sided dimension – 20 cm

Frames molded dimension – 30 cm

Plank thickness – 10 cm

Framing pattern – Long and short floors scarved to futtocks

Planking method – pM&T, diag. scarves

M&T – T 10 x 3 x 20 cm // 20 cm;

Hull shape – Flat floor

Fasteners – floors/planking: clenched iron nails over treenails

Keelson – 40 x 10 cm

Maststep – N/A

Stringers – Yes

Taxa – Transition to Imperial; S.M. - Latium; Built - Nemi

Notes – P.K.&R.: Latium Western Imperial

Kinneret

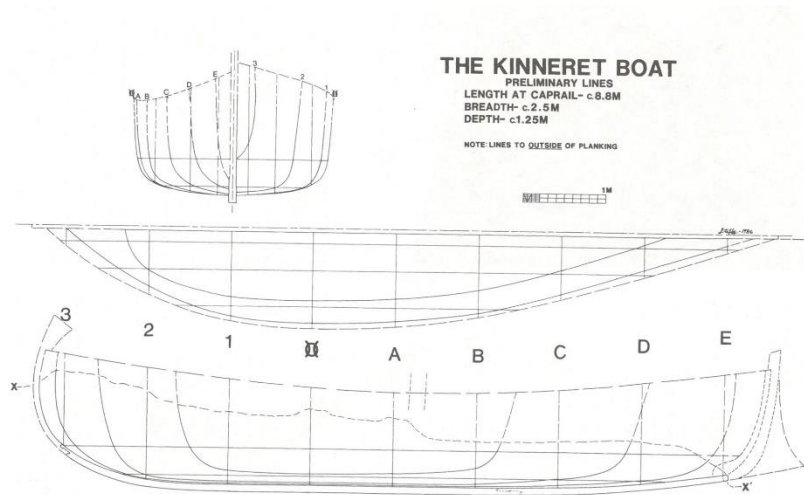


FIG. 3-52. The lines of the Kinneret boat, showing two possible stem configurations.

Chronology 25 / 75

Preserved – 8.2 x 2.3 m

Length reconstructed – 8.8 m; Beam reconstructed – 2.5 m

Keel length – 8.27 m

Keel sided dimension – 9.5 cm

Keel molded dimension – 11.5 cm

Frames sided dimension – 6 cm

Frames molded dimension – 7 cm

Plank thickness – 3.1 cm

Framing pattern – Alternating floor timbers and futtocks and half-frames; cant frames in stern //25 cm

Planking method – pM&T, diag. scarves

M&T – T 5.5 x .7 x 6 cm // 12 cm; conic pegs

Hull shape – Flat floor, tight turn of the bilge

Fasteners – Frames/planks: lost point iron nails; some repairs with clenched nails

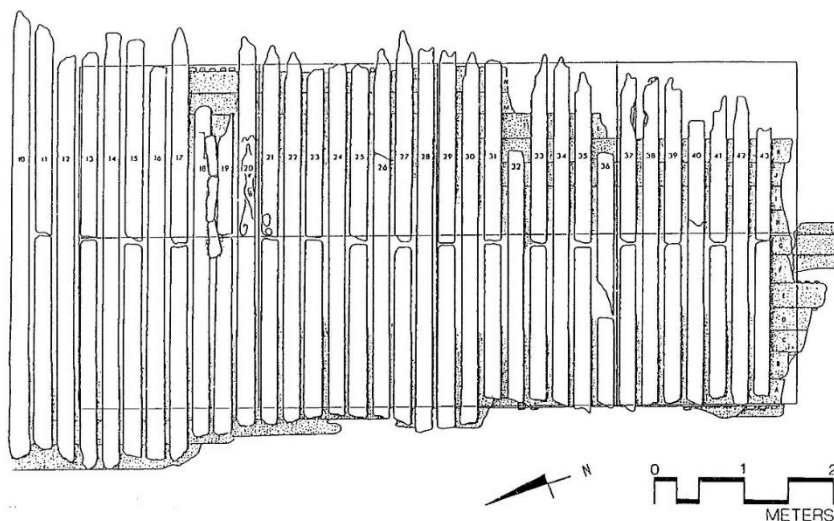
Keelson / Maststep – No keelson, maststep not preserved

Stringers – Undetermined

Taxa - ?; S.M. - ?; Built – Sea of Galilee

Notes – P.K.&R.: Western Imperial

Cesarea



Chronology 25 / 75

Preserved – 14 x 3.5 m

Length reconstructed – 40 m; Beam reconstructed – 10 m

Keel length – Not preserved

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 16.3 cm; half frames 19.2 cm

Frames molded dimension – 18.4 cm; half frames 17.2 cm

Plank thickness – 9.2 cm

Framing pattern – Floors and half frames // 25 cm

Planking method – pM&T

M&T – T 9 X 1.1 x 9.5 cm // 13.5 cm

Hull shape – Flat bottom?

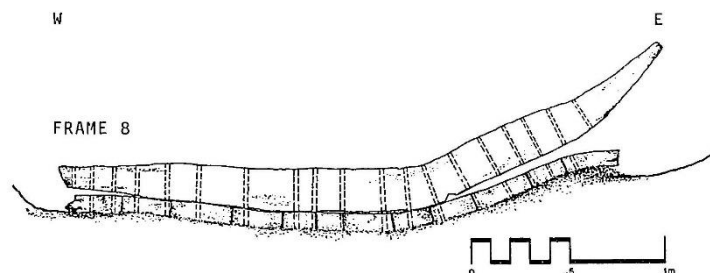
Fasteners – Frames/Planks: copper alloy nails and treenails;

Keelson / Maststep – ?

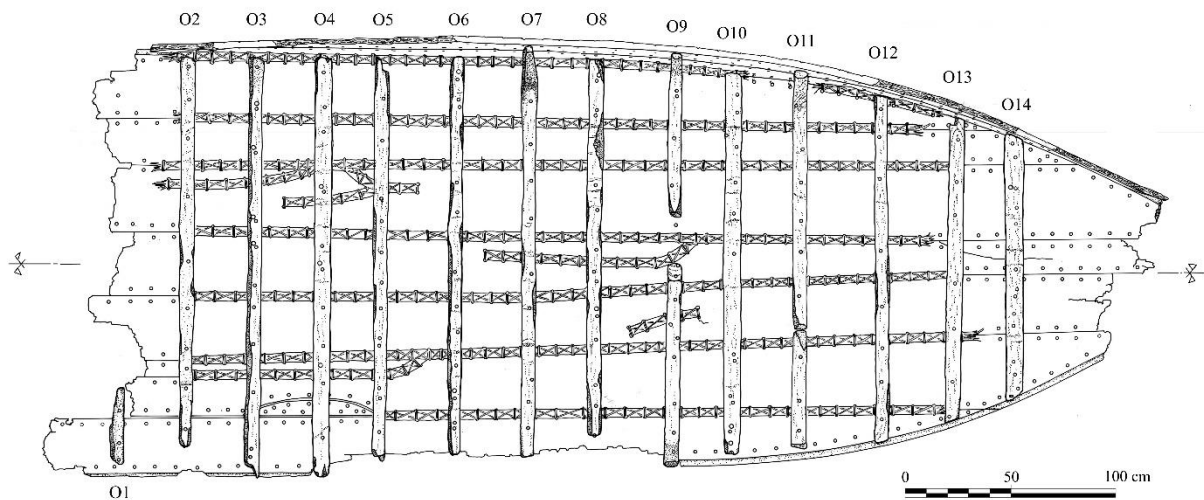
Stringers – Yes (not preserved but iron nails concretions)

Taxa - ?; S.M. - ?; Built - ?

Notes –



Stella 1



Chronology - 25

Preserved – 7 x 2 m

Length reconstructed – ? m; Beam reconstructed – 2 m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 5.5-9 cm

Frames molded dimension – 7-10 cm

Plank thickness – 2.4-3.6 cm

Framing pattern – Consecutive floors timbers and futtocks // 30-40 cm

Planking method – Laced 2

Hull shape – Flat floor

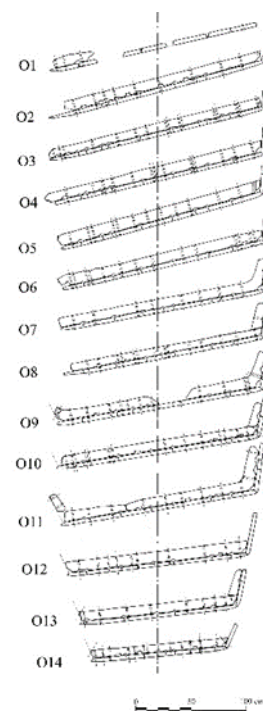
Fasteners – Vertical treenails

Keelson / Maststep – ?

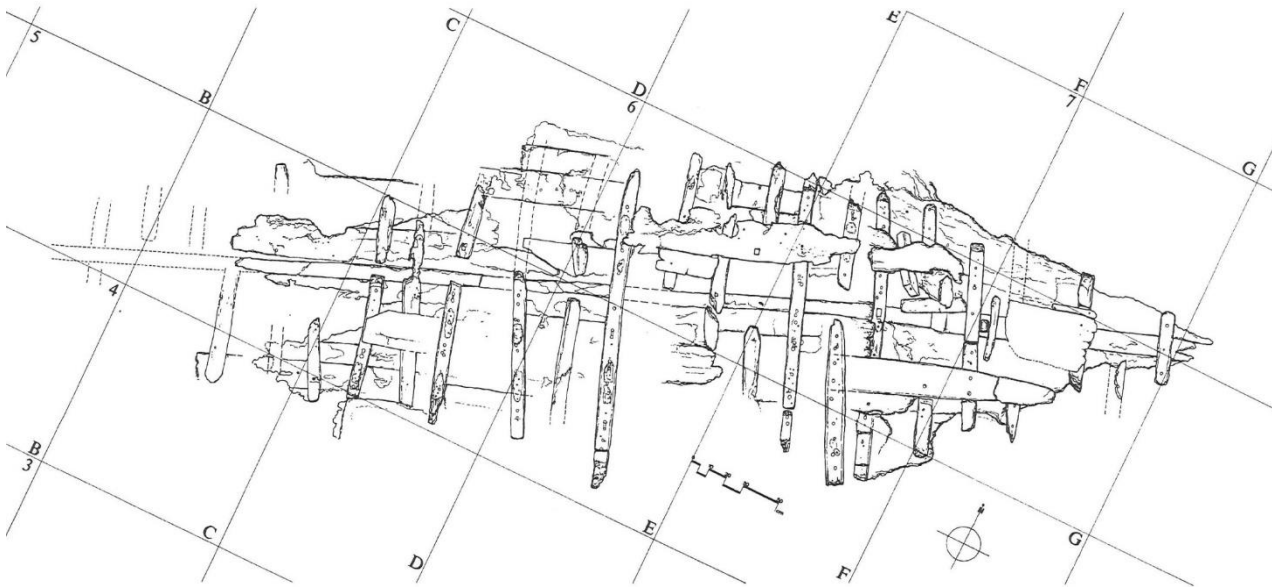
Stringers – Yes

Taxa - Adriatic; S.M. - ?; Built – North Italy

Notes –



Ilot Barthélémy B



Chronology 25 / 50

Preserved – 5 x 2 m

Length reconstructed – 8 m; Beam reconstructed – ? m

Keel length – 4.95

Keel sided dimension – 7.5 cm

Keel molded dimension – 4.5 cm

Frames sided dimension – 6.5-8 cm

Frames molded dimension – 6-10 cm

Plank thickness – 2.5-2.9 cm

Framing pattern – Alternating floors and half-frames // 20 cm

Planking method – pM&T; diag. scarves

M&T – T 5.9 x 0.4 x ? Cm at keel // 5.5 cm; conic pegs

Hull shape – Flat floor

Fasteners – Floors/planks lashed 2

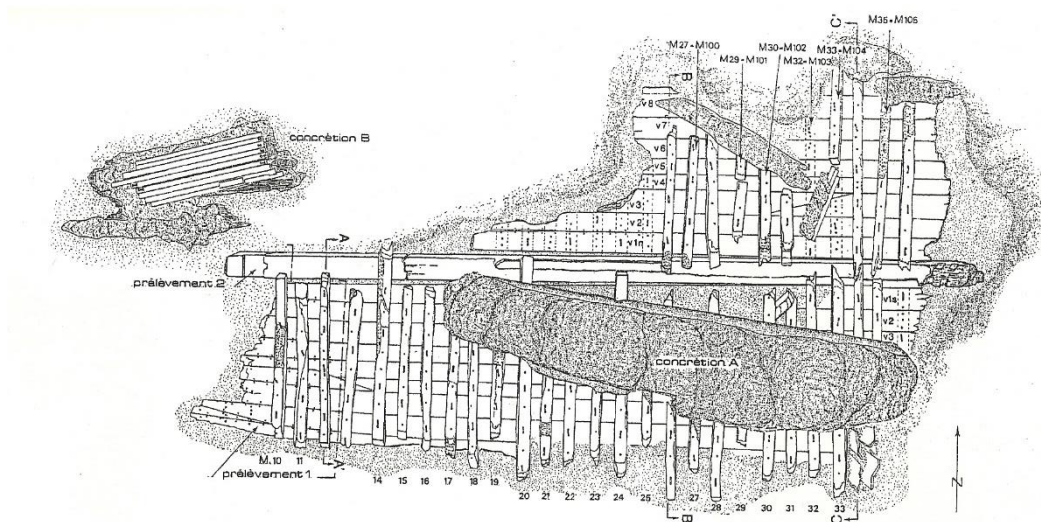
Keelson / Maststep – Not preserved

Stringers – ?

Taxa - ?; S.M. - Magnogreek-Massaliot; Built - ?

Notes – False keel 2.5 cm at sternpost. Similarity Cap del Vol

Saintes Maries de la Mer 24



Chronology 40 / 75

Preserved – 10 x 5 m (more)

Length reconstructed – 20 m; Beam reconstructed – ? m

Keel length – 8.6 m

Keel sided dimension – 26 cm

Keel molded dimension – 22 cm

Frames sided dimension – 9-16 cm

Frames molded dimension – 14-18cm

Plank thickness – 5 cm

Framing pattern – Alternating floors and half-frames // 15.5 cm

Planking method – pM&T; diag. scarves

M&T – T 6-7 x 0.7-0.8 x 16-19 cm // 9.85 cm; conic pegs

Hull shape – Flat floor

Fasteners – Floors/planks lashed 2

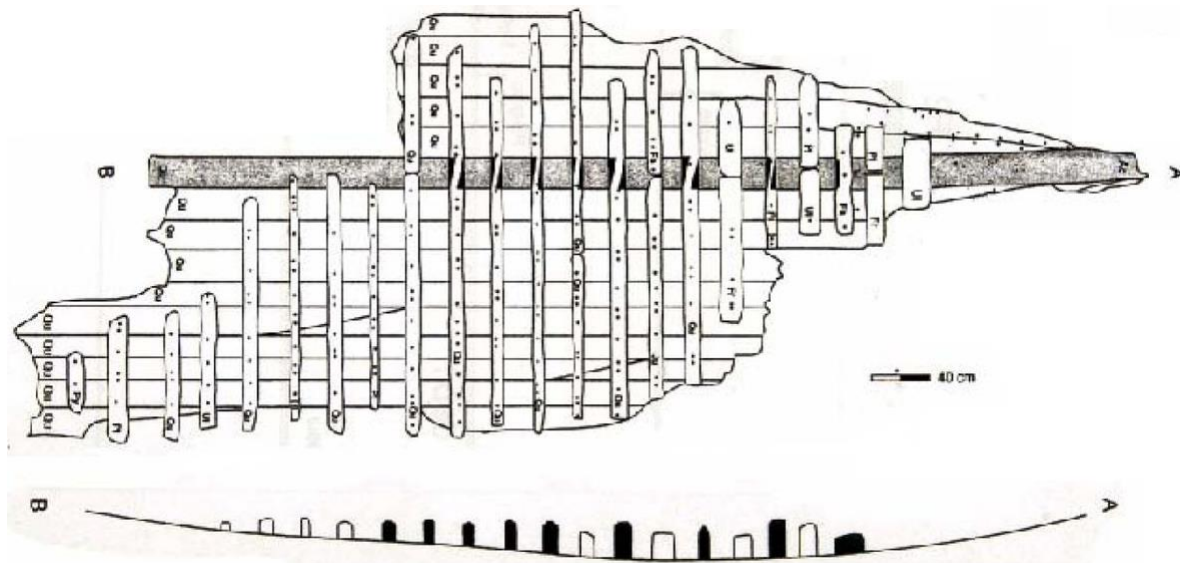
Keelson / Maststep – Not preserved

Stringers – ?

Taxa - ?; S.M. Magnogreek-Massaliot; Built – Calabrian area

Notes – *Pinus leucodermis*. Only central part excavated

Baie de l'Amitié/Battus



Chronology: 50 /100

Preserved – 7.75 x 3.2 m

Length reconstructed – 20 m; Beam reconstructed – ? m

Keel length – 4.8 m

Keel sided dimension – 20 cm

Keel molded dimension – 6 cm

Frames sided dimension – 10 cm

Frames molded dimension – 17-23 cm

Plank thickness – 4.5 cm

Framing pattern – Consecutive FT and alternating floors and hal-frames
// 17-23 cm

Planking method – pM&T; diag. scarves

M&T – T 5.4 x 0.7 x 8-10 cm // ? Cm; conic pegs

Hull shape – Flat bottom

Fasteners – Frames/keel: yes, bolted twice; Frames/planks: lashed 2

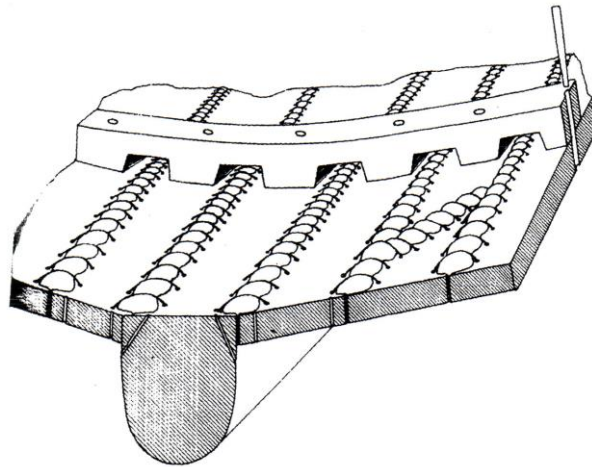
Keelson / Maststep – Not preserved

Stringers – ?

Taxa - ?; S.M. - Magnogreek-Massaliot; Built – Catalan area

Notes – Short molded keel like Cap del Vol. Pottery and lead ingots weight, suggest 0-50 dating.

Nin Zaton 1-3



Chronology 50

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Sud Lavezzi 5



Chronology - 50 / 150

Preserved – 20 x ? m

Length reconstructed – 30 m; Beam reconstructed – 6 m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – Consecutive asymmetric floor timbers and not centered half-frames

Planking method – pM&T

M&T – T ? X ? x ? cm // ? Cm; conic pegs

Hull shape – Flat bottom ?

Fasteners – Floors/planks: clenched iron nails (over treenails?)

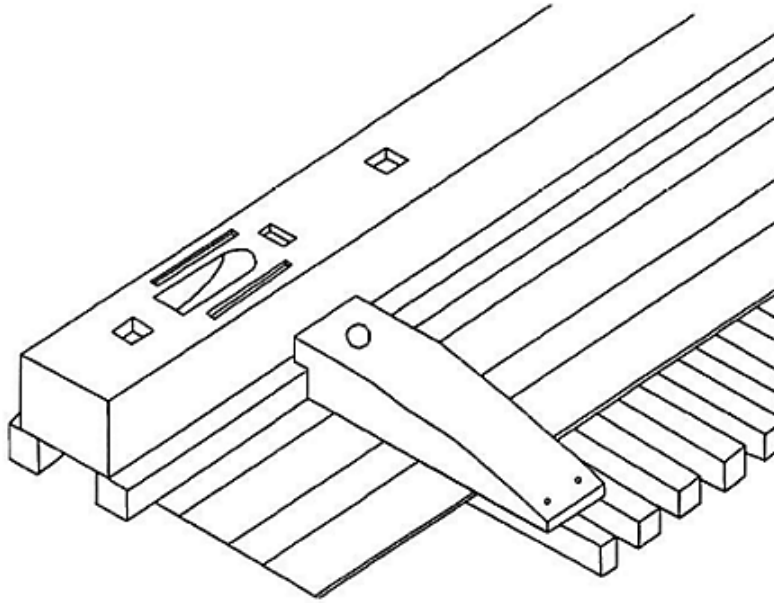
Keelson / Maststep – Not preserved

Stringers – ?

Taxa – Transition to Imperial; S.M. - Latium; Built - ?

Notes – Only cleaned by a Comex Blaster. Beam reconstructed is outside standart

Calanque de l'Âne



Chronology - 50 / 100

Preserved – 13.4 x 6 m

Length reconstructed – 25 m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 10-12 cm

Frames molded dimension – 7 cm

Plank thickness – ? cm

Framing pattern – Alternating floors and half-frames // 12 cm

Planking method – pM&T

M&T – T ? X ? x ? cm // ? Cm; conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – ?

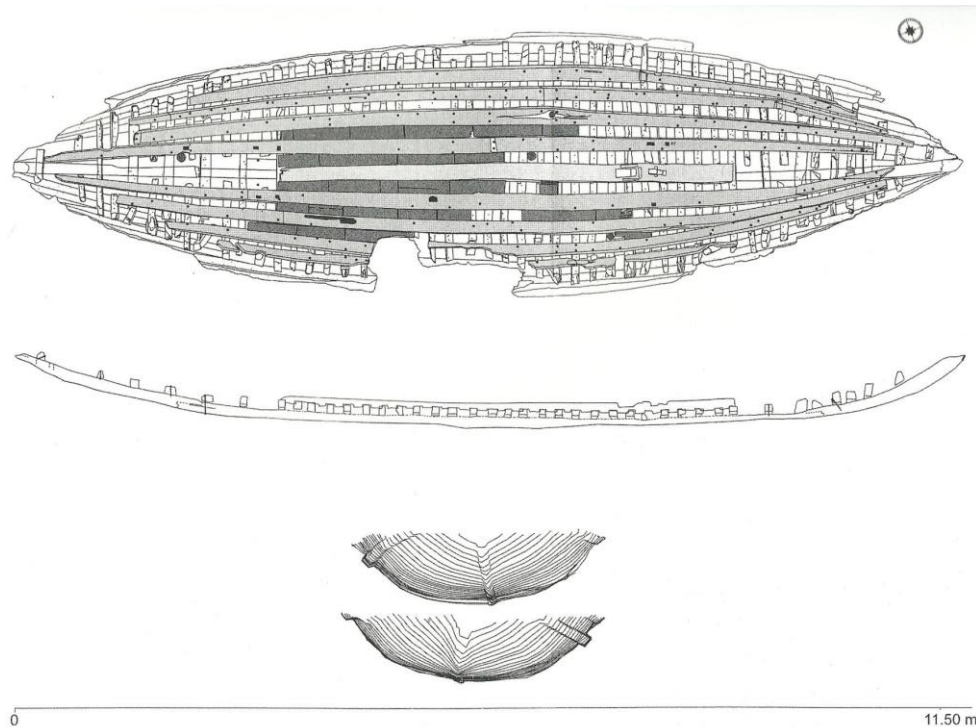
Keelson / Maststep – Yes

Stringers – Yes

Taxa – Transition to Imperial; S.M. - ?; Built - ?

Notes –

Napoli A



Chronology - 50 / 100

Preserved – 11.77 x 3.32 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – 8 m

Keel sided dimension – 9.6 cm

Keel molded dimension – 6.8 cm

Frames sided dimension – 9.1 cm

Frames molded dimension – 9.5 cm

Plank thickness – 3.2 cm

Framing pattern – Alternating floors and half-frames // 12 cm; overlapped half-frames

Planking method – pM&T

M&T – T ? X ? x ? cm // ? Cm; conic pegs

Hull shape – Flat floor

Fasteners – Floors/planks: vertical treenails and ecternal iron lost point

Keelson / Maststep – Yes

Stringers – Yes

Taxa – Transition to Imperial; S.M. - Latium - Campanian; Built - Napoli

Notes – Reference architecture

Arles-Rhône 3



Chronology - 50

Preserved – 29 x 2.9 m

Length reconstructed – 31.12 m; Beam reconstructed – 2.9 m

Keel length – No keel architecture

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 22-27 cm

Frames molded dimension – 8.2 cm

Plank thickness – 5.7-6.8 cm

Framing pattern – Floor timbers and knees

Planking method – Transversal iron nails

Hull shape – Flat floor

Fasteners – Frames/planks: internal clenched nails

Keelson / Maststep – Yes

Stringers – Yes

Taxa – Joined monoxile; S.M. - Gallo-roman; Built – Rhône

Notes – Most to carry on from riverside

Diano Marina



Chronology – 50

Preserved – 4.5 m

Length reconstructed – 20-22 m; Beam reconstructed – 6 m

Keel length – ?

Keel sided dimension – 28 cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – 6 cm

Framing pattern – Alternating floors and half-frames /// 12-17 cm

Planking method – pM&T; diag. scarves

M&T – T ? X ? x 8 cm // 3-4 cm

Hull shape – Flat floor

Fasteners – Frames/planks: treenails and copper nails

Keelson / Maststep – Preserved

Stringers – Yes

Taxa – Transition to Imperial; S.M. - Latium- Campanian-; Built – Minturnae

Notes – Dolia ship type

Porto Cristo



Chronology - 60 / 80

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – 6 cm

Framing pattern – Consecutive asymmetric floor timbers and not centered half frames

Planking method – pM&T; diag. scarves

M&T – T ? X ? x ? cm // ? Cm; conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – Floors/planks: certical treenails and external iron lost point

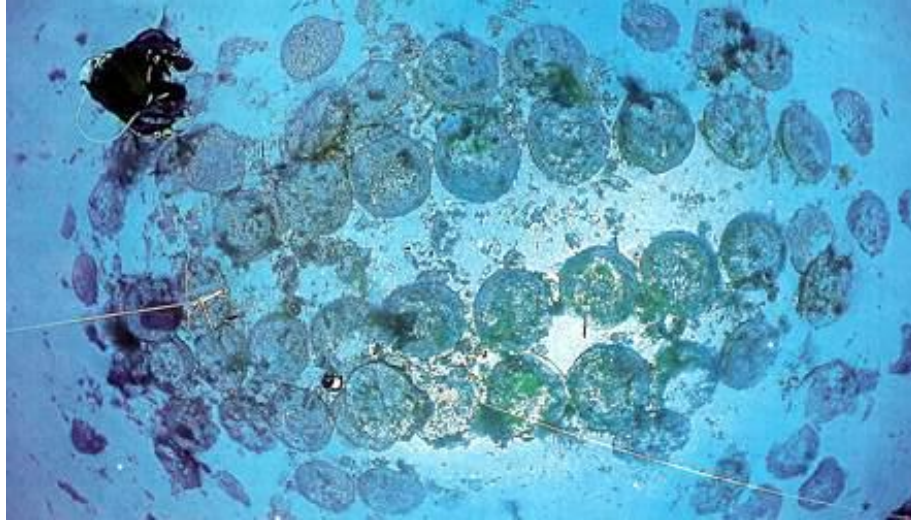
Keelson / Maststep – Not preserved

Stringers – Yes

Taxa – Transition to Imperial; S.M. - Latium-Campanian; Built – Napoli

Notes – Under excavation;

Punta Nati



Chronology – 60 / 100

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ;Built – ?

Notes – Only pictures available

Olbia 1



Chronology – ?
Preserved – ? x ? m
Length reconstructed – ? m; Beam reconstructed – ? m
Keel length – ?
Keel sided dimension – ? cm
Keel molded dimension – ? cm
Frames sided dimension – ? cm
Frames molded dimension – ? cm
Plank thickness – ? cm
Framing pattern – ?
Planking method – pM&T
M&T – T ? X ? x ? cm // ? cm
Hull shape – ?
Fasteners – ?
Keelson / Maststep – ?
Stringers – ?
Taxa - ?; S.M. - ?; Built – ?
Notes –

Olbia 2



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

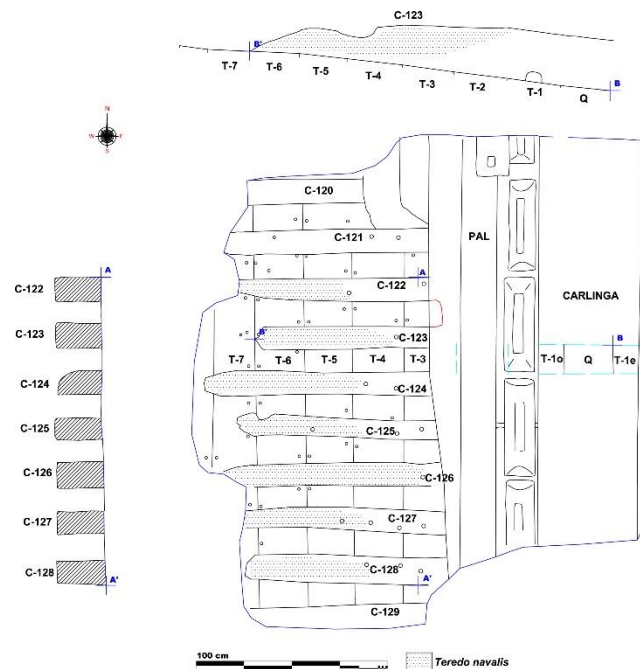
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Bou Ferrer



Chronology 66 / 68

Preserved – ? x ? m

Length reconstructed – 30 m; Beam reconstructed – 12 m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 12 cm

Frames molded dimension – 25 cm

Plank thickness – 6 cm

Framing pattern – Consecutive floor timbers // 12 cm

Planking method – pM&T; diag. scarves

M&T – T ? X ? x ? cm // ? Cm; conic pegs

Hull shape – Flat bottom

Fasteners – Floors/planks: vertical treenails and external iron lost point

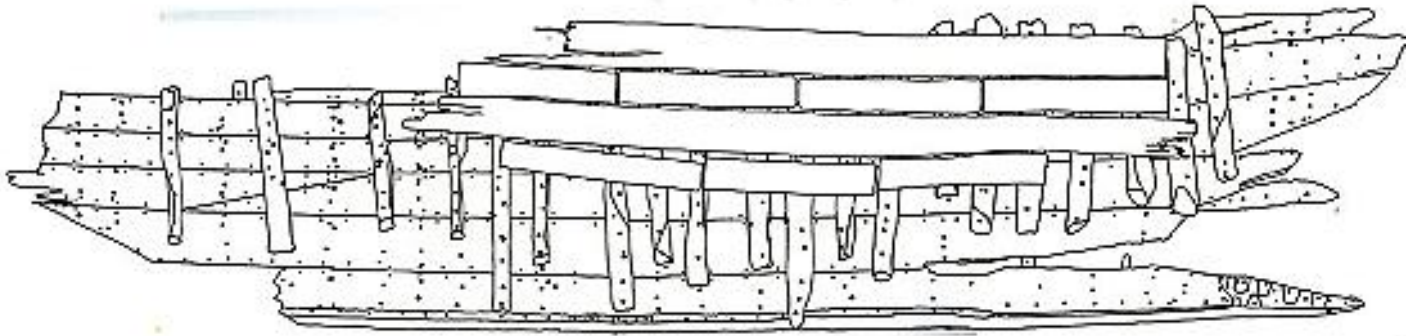
Keelson / Maststep – Preserved

Stringers – Yes

Taxa – Transition to Imperial; S.M. - Latium-Campanian; Built – Napoli

Notes – Western transition Imperial

Albufereta 1



Chronology 66

reserved – 8 x 1.8 m

Length reconstructed – 13 m; Beam reconstructed – 5 m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 9 cm

Frames molded dimension – 18 cm

Plank thickness – 5.9 cm

Framing pattern – Alternating floors and half-frames // 14.38 cm

Planking method – pM&T, diag. scarves

M&T – T 9 X 1.2 x 22.8 cm // 6 cm

Hull shape – ?

Fasteners – Floors/planks: vertical treenails and external iron lost point nails

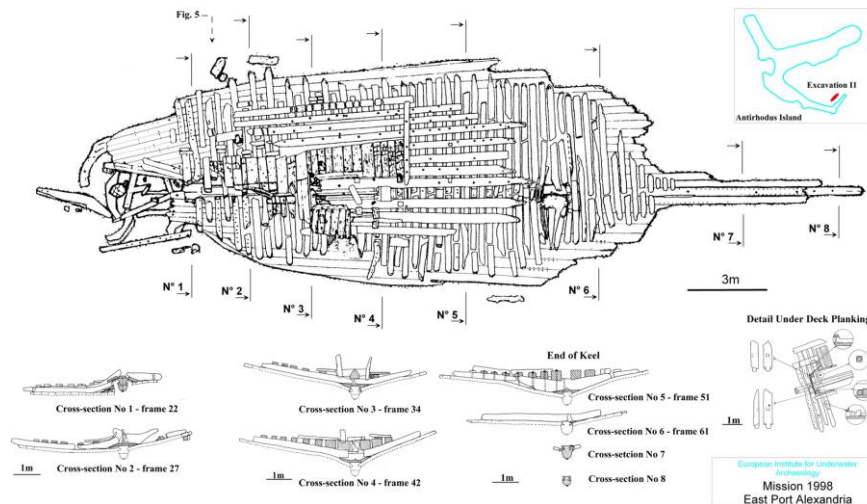
Keelson / Maststep – ?

Stringers – Yes

Taxa – Transition to Imperial; S.M. - Latium-Campanian; Built - Napoli

Notes –

Alexandria Antirrhodos Island



Chronology: 75 / 211

Preserved – 24.6 x 9 m

Length reconstructed – 30 m; Beam reconstructed – 11 m

Keel length – 16.5 m

Keel sided dimension – 46.2-29.9 cm

Keel molded dimension – 46-39 cm

Frames sided dimension – 23.5 cm; half-frames 21 cm

Frames molded dimension – 37 cm; half-frames 28 cm

Plank thickness – 10.8 cm

Framing pattern – Alternating floors and half-frames. Bolts at Z scarves // 9.7 cm

Planking method – pM&T; diag. scarves

M&T – 11.8 x 0.9 x 20-22 cm // 3.4 cm

Hull shape – Rather flat. Slightly win-glassed

Fasteners – Frames/keel: yes, majority of FT bolted; Frames/planks: vertical treenails.

Ocasionalu oblique treenails. HF and futtoks nailed

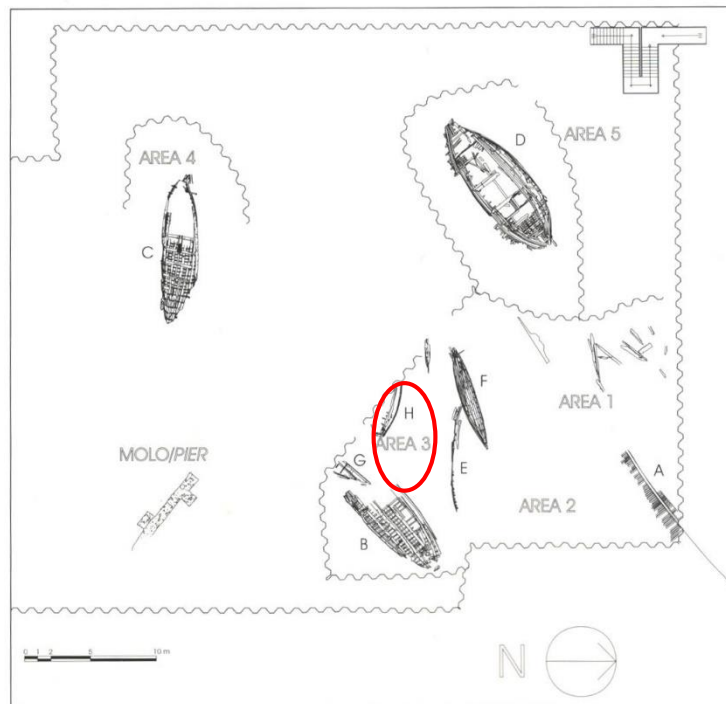
Keelson / Maststep – Maststep ancien recover; to the stern continued a triangular cross section keelson

Stringers – Permanent ceiling 8.5 cm thick

Taxa – Eastern Imperial; S.M. - ?; Built - ?

Notes – N/A. Angular bilge made flat with internal strakes. FT without chokes. *Ficus sycomorus*

Pisa H



Chronology 75 / 125

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – Flat bottom

Fasteners – ?

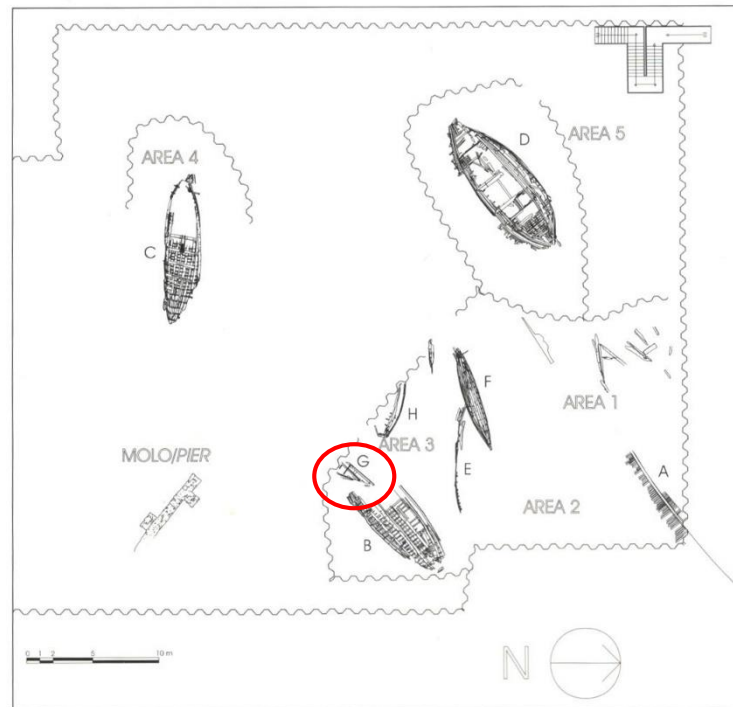
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Pisa G



Chronology 75 / 125

Preserved – 8 x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – Flat bottom

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Herculaneum I



Chronology :79

Preserved – 8 x ? m

Length reconstructed – 8.6 m; Beam reconstructed – 2.2 m

Keel length – 3.5 m

Keel sided dimension – 7.2 cm

Keel molded dimension – 6 cm + false keel 2.1 cm

Frames sided dimension – 5 cm

Frames molded dimension – 8 cm

Plank thickness – 2.4 cm

Framing pattern – Alternating floors and half-frames

Planking method – pM&T, but scarves

M&T – 5.6 x .5 x 9.8 cm // 13.3 cm

Hull shape – ?

Fasteners – Frames / planking: treenails and copper alloy nails

Keelson / Maststep – ?

Stringers – ?

Taxa – Transition to Imperial; S.M. - Campanian; Built – Napoli area

Notes –

Herculaneum II



Chronology :79

Preserved – 3 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ? m

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – ? x ? x ? cm // ? cm

Hull shape – ?

Fasteners – Frames / planking: treenails and bronze nails

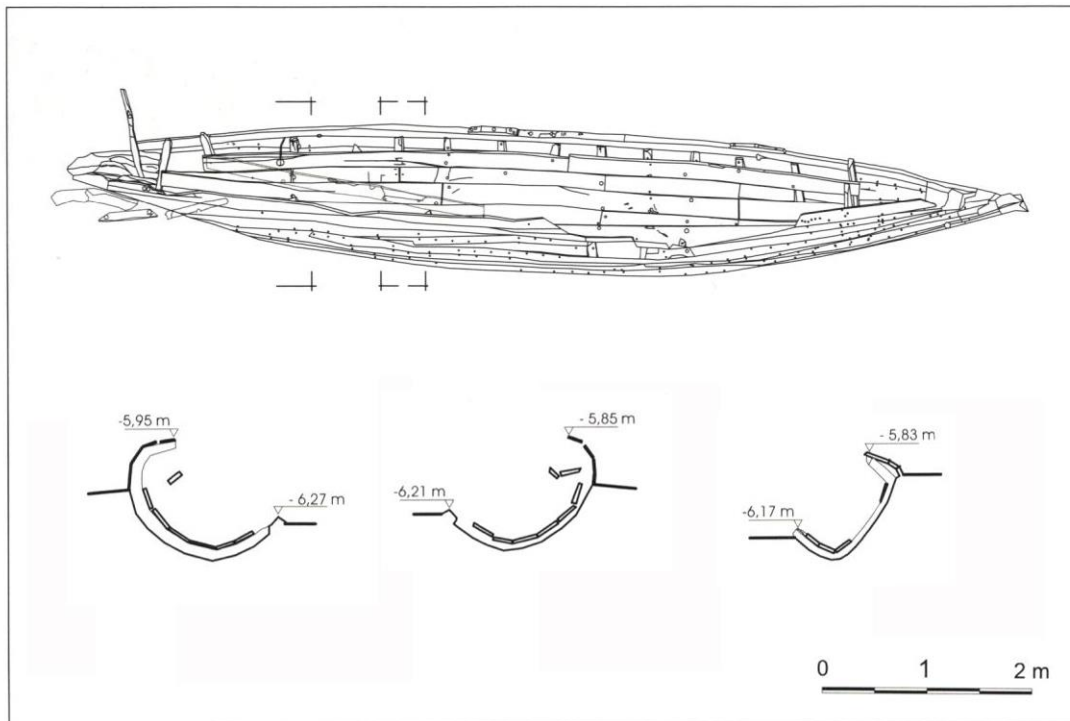
Keelson / Maststep – ?

Stringers – ?

Taxa – ?; S.M. - ?; Built - Herculaneum

Notes – Discovered in the 90's. Recovered in block.

Pisa F



3

Chronology 100 / 125

Preserved – 8.2 x 1 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

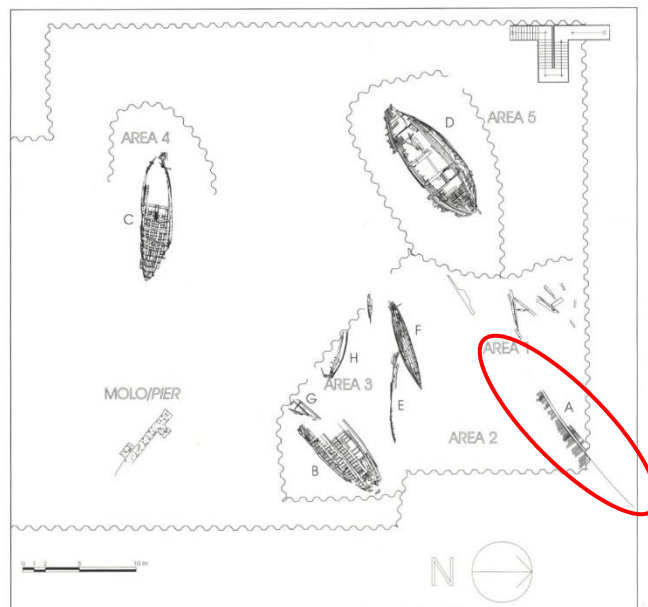
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Pisa A



Chronology 100 / 150

Preserved – 15 x ? m

Length reconstructed – 25-30 m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

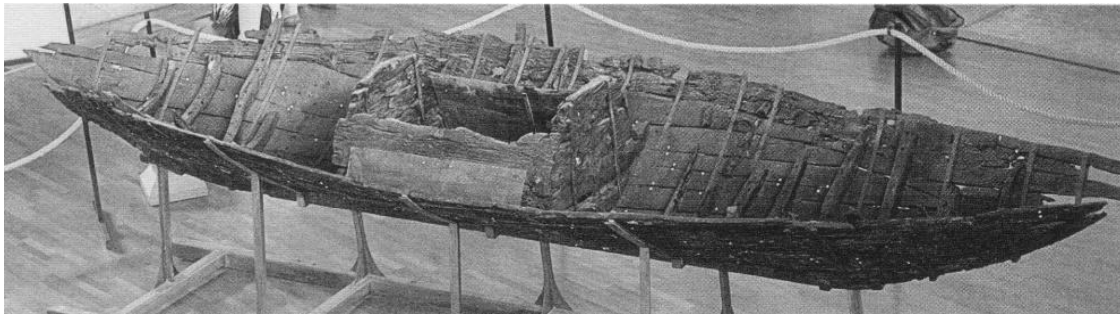
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Fiumicino 5



Chronology 100 / 200

Preserved – 5.2 x 1.5 m

Length reconstructed – 5.61 m; Beam reconstructed – 1.50 m

Keel length –

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 4.5-6.5 cm

Frames molded dimension – 2.5-10 cm

Plank thickness – 2 cm

Framing pattern – Alternating (irregular) floors and half-frames (overlapping); three floors fastened to the keel with copper bolts (over scarfs) // 14 cm

Planking method – pM&T, diag. scarves

M&T – T 6 x 0.5-0.6 x ? cm // 21.7cm; conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – Frames/planks: treenails and few copper and iron lost point nails

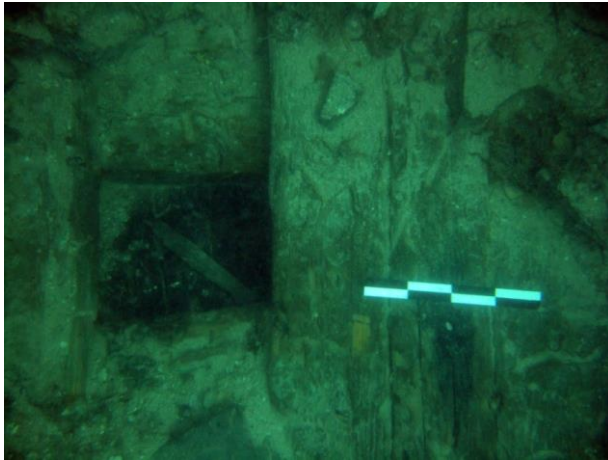
Keelson / maststep – No. Oared boat

Stringers – ?

Taxa – Western Imperial; S.M. - Latium; Built – Ostia-Claudius-Portus

Notes – P.K.&R.: Western Imperial; Replaced keel

Cala en Busquets 1



Chronology - 100 / 200

reserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – 6 cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – Floors/planks vertical treenails and external iron lost point nails

Keelson / Maststep – ?

Stringers – ?

Taxa – ?; S.M. - Campanian; Built – ?

Notes – Not excavated

Jules Verne 3



Chronology: 100/150

Preserved – 12 x 4 m

Length reconstructed – 16 m; Beam reconstructed – 5 m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 12 cm

Frames molded dimension – 16 cm

Plank thickness – 3 cm

Framing pattern – Alternating floors and half-frames (overlapping); two floors bolted to keel delimited dredged well

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – Flat floor, angular turn of the bilge

Fasteners – ?

Keelson / Maststep – No keelson

Stringers – Yes

Taxa – Western Imperial; S.M. - ?; Built – Marseille

Notes – Dredge ship. 35 cm of pitch

Jules Verne 4



Chronology - 100/150

Preserved – 5 x 3 m

Length reconstructed – 16 m; Beam reconstructed – 5 m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – Alternating floors and half-frames (overlapping)

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – Flat floor

Fasteners – ?

Keelson / Maststep – No keelson

Stringers – ?

Taxa – Western Imperial; S.M. - ?; Built – Marseille

Notes – Dredge ship

Arles-Rhône 7



Chronology – 100/199

Preserved – 4.1 m

Length reconstructed – 15 m; Beam reconstructed – ? m

Keel length – No keel structure

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – 3-5 cm

Framing pattern – Knees nailed to futtocks // 40-60

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – Flat floor

Fasteners – Frames/planks: iron nails

Keelson / Maststep – Yes

Stringers – Yes

Taxa - ?; S.M. - ?; Built – Rhône

Notes – Light work. Hybrid tradition between Mediterranean and Celtic roman

Arles-Rhône 8



Chronology – 100/199

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – No keel architecture

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – Flat floor

Fasteners – ?

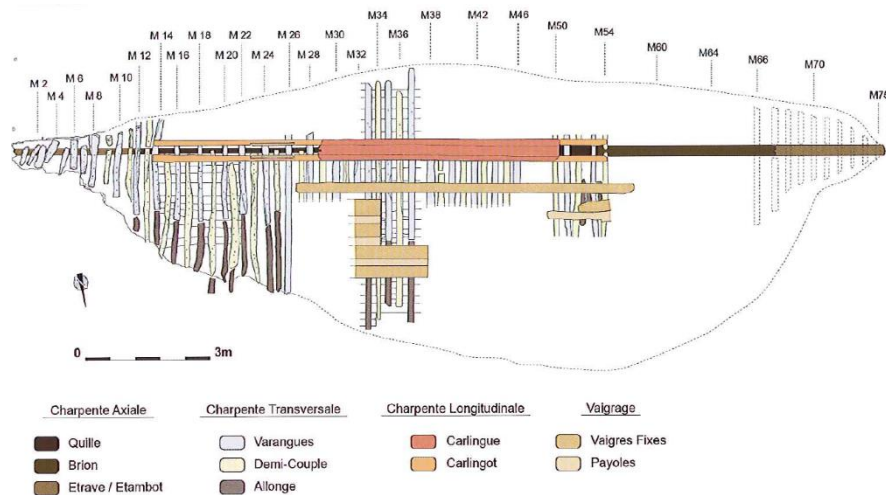
Keelson / Maststep – Yes

Stringers – Yes

Taxa - ?; S.M. - ?; Built – ?

Notes – Light work

Tiboulén de Maire



Chronology - 130 / 150

Preserved – 23 x 10 m

Length reconstructed – 27 m; Beam reconstructed – 10.8 m

Keel length – 11.52

Keel sided dimension – 19.5 cm

Keel molded dimension – ? cm

Frames sided dimension – floors 14.7 cm; half-frames 15.2 cm

Frames molded dimension – floors 32.2 cm; half-frames 20.4 cm

Plank thickness – 5.5 cm

Framing pattern – Alternating floors and not centered half-frames (overlapping) // 11 cm

Planking method – pM&T; diag. scarves

M&T – T 9.6 x 1.3 x 16.8 cm // 7 cm; conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – Frames/keel: 4 floors fastened to the keel with bolts (some over scarves); floors/planks: vertical treenails and some external iron lost point nails

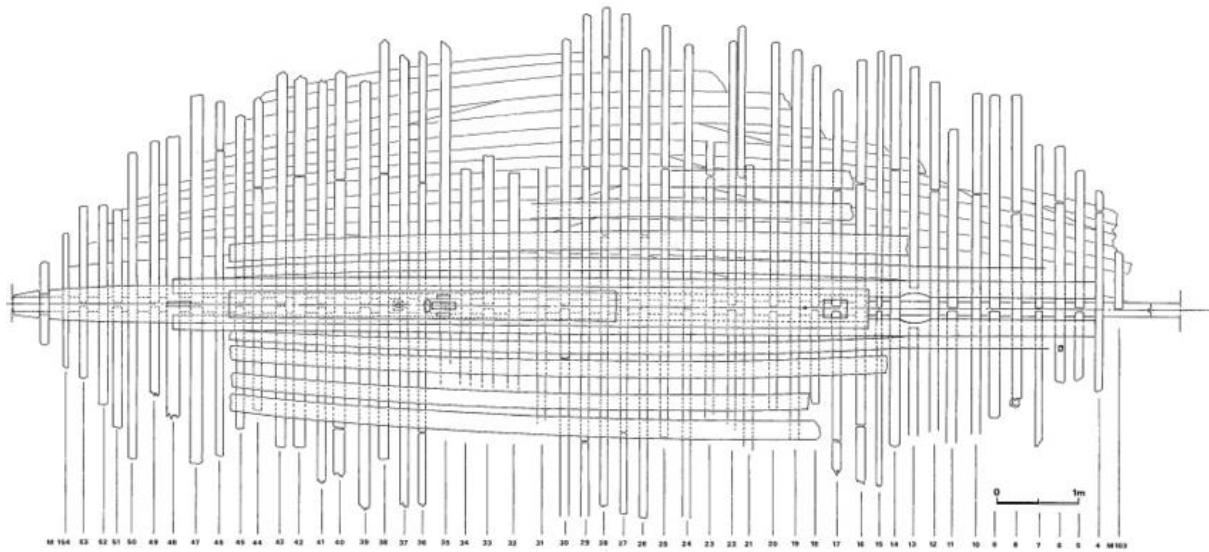
Keelson / Maststep – Yes

Stringers – Yes

Taxa – Western Imperial; S.M. - Campanian; Built – ?

Notes –

St. Gervais 3



Chronology – 148 / 150

Preserved – 14.7 x 6.8 m

Length reconstructed – 16.87 m; Beam reconstructed – 7.38 m

Keel length – 8 m

Keel sided dimension – 17 cm

Keel molded dimension – 18 cm

Frames sided dimension – 14-16 cm

Frames molded dimension – 13 cm

Plank thickness – 3.5-4.5 cm

Framing pattern – Alternating floors and half-frames (overlapping); 28-30 cm

Planking method – pM&T, diag. scarves; pitched inside

M&T – T 7 x 0.7 x 13 cm // 12 cm; conic pegs inserted from inside

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/planks: pairs of treenails and copper nails @ extremities; frames/keel: 3 floors fastened to the keel w/ copper bolts (over scarves)

Keelson – large timber over sister timbers; notches for stanchions

Maststep – independent from keelson

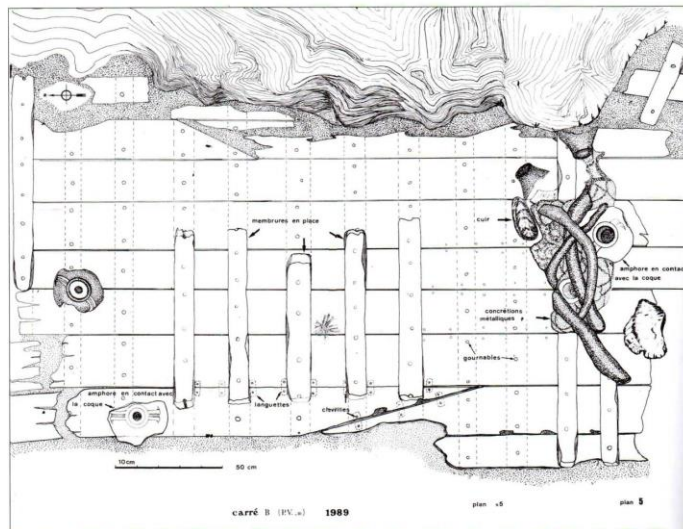
Stringers – closely spaced

Wales – connected to the planks

Taxa – Western Imperial; S.M. - ?; Built – ?

Notes – P.K.&R.: Western Imperial

Port-Vendres 3



Chronology: 150

reserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 7.5-11 cm

Frames molded dimension – 8-13 cm

Plank thickness – 3-4 cm

Framing pattern – ? // 15-19 cm

Planking method – pM&T

M&T – T 5.8-7.4 x 1-1.3 x 13-15 cm // 8-15 cm; conic pegs

Hull shape – ?

Fasteners – Floors/planks: lashed 2 external iron lost point nails

Keelson / Maststep – ?

Stringers – ?

Taxa – ?; S.M. - Magnogreek-Massaliot; Built - ?

Notes –

Monfalcone



Chronology 150 / 200

Preserved – 10.75 m x 3.8 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – 10.75 m

Keel sided dimension – 15 cm

Keel molded dimension – 14 cm

Frames sided dimension – 8-11 cm

Frames molded dimension – 12-13 cm

Plank thickness – 4.5-5.5 cm

Framing pattern – Consecutive floor timbers // 16.5 cm

Planking method – pM&T

M&T – T ? x ? x ? cm // 12 cm; conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – floor/planks: vertical treenails

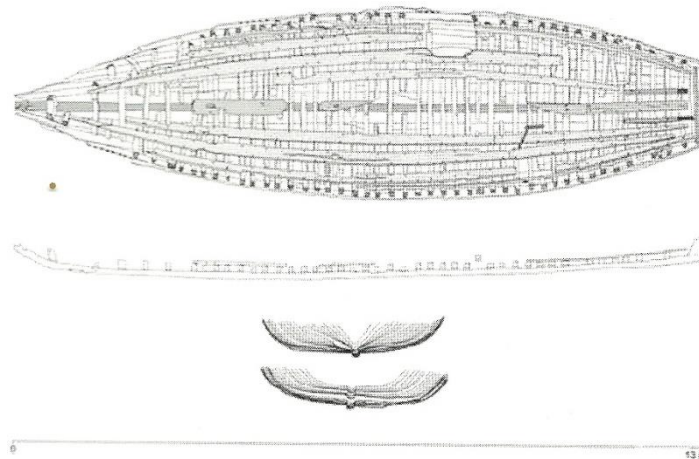
Keelson – 8.7 m notched over frames

Stringers - ?

Taxa - ?; S.M. - ?; Built - ?

Notes – P.K.&R.: Western Imperial

Napoli C



Chronology - 150 / 250

Preserved – 13.2 x 3.7 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – 12.15 m

Keel sided dimension – 12-14 cm

Keel molded dimension – 10-14.5 cm

Frames sided dimension – 6.9 cm

Frames molded dimension – 11 cm

Plank thickness – 3.6 cm

Framing pattern – Irregular alternating floors and half-frames (overlapping) // 14 cm

Planking method – pM&T; diag. scarves

M&T – T 6.2 x 0.6 x ? cm // 6.5 cm; conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – Floors/planks: vertical treenails and external iron lost point nails

Keelson / Maststep – Not preserved

Stringers – Yes

Taxa – Western Imperial; S.M. - Campanian; Built – Napoli

Notes –

Grado



Chronology – 150 / 200

Preserved – 13.1 x 6.1 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – 9.5 m

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – 2.5 - 4.5 cm

Framing pattern – Alternating asymmetric floors and half-frames (overlapping) // 14-17 cm

Planking method – pM&T; diag. scarves

M&T – T ? X ? x ? cm // 7-8 cm; conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – Frames/keel: two floor timbers were connected to the keel by big nails; floors/planks: vertical treenails and external iron and bronze lost point nails

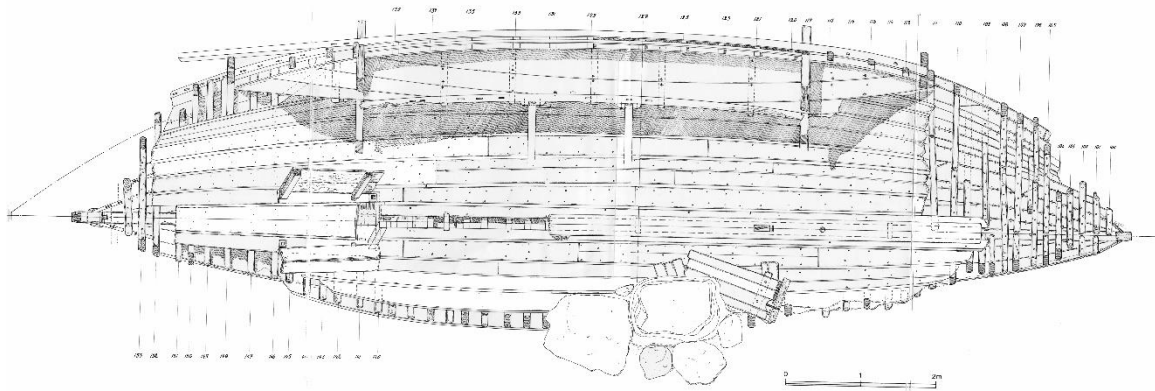
Keelson / Maststep – Yes

Stringers – Yes

Taxa – Western Imperial; S.M. - ?; Built – ?

Notes –

Anse des Laurons 2



Chronology 175 / 200

Preserved – 13.3 x 6 m

Length reconstructed – 15.11 m; Beam reconstructed – 4.96 m

Keel length – 8.6 m

Keel sided dimension – 12 cm

Keel molded dimension – 16 cm

Frames sided dimension – 7 cm

Frames molded dimension – 10 cm (floors) and 9 cm (half-frames)

Plank thickness – 2.5 cm (garboard 4.5 cm)

Framing pattern – Alternating floors and half-frames (overlapping);

Planking method – pM&T, diag. scarves; pitched inside

M&T – T 6 x 1 x 12-13 cm // 12 cm; conic pegs inserted from inside

Hull shape – Flat floor, round turn of the bilge

Fasteners – frames/planks: pairs of treenails and copper nails @ garboards

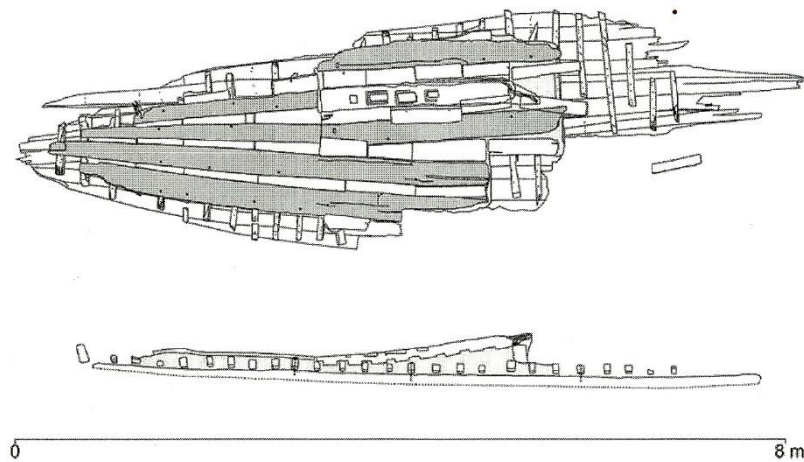
Keelson/Maststep – Yes

Stringers – closely spaced

Taxa – Western Imperial; S.M. - ?; Built – ?

Notes – P.K.&R.: Western Imperial.

Napoli B



Chronology - 175 / 225

Preserved – 8 x 2 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – 7

Keel sided dimension – 8-10 cm

Keel molded dimension – 7-11.3 cm

Frames sided dimension – 8 cm

Frames molded dimension – 8.7 cm

Plank thickness – 2.5 cm

Framing pattern – Alternating floors and half-frames (overlapping) // 18.3

Planking method – pM&T

M&T – T 6.6 x 0.5 x 10 cm // ? Cm; conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – frames/keel: 3 floors fastened to the keel with iron nails; floors/planks: vertical treenails

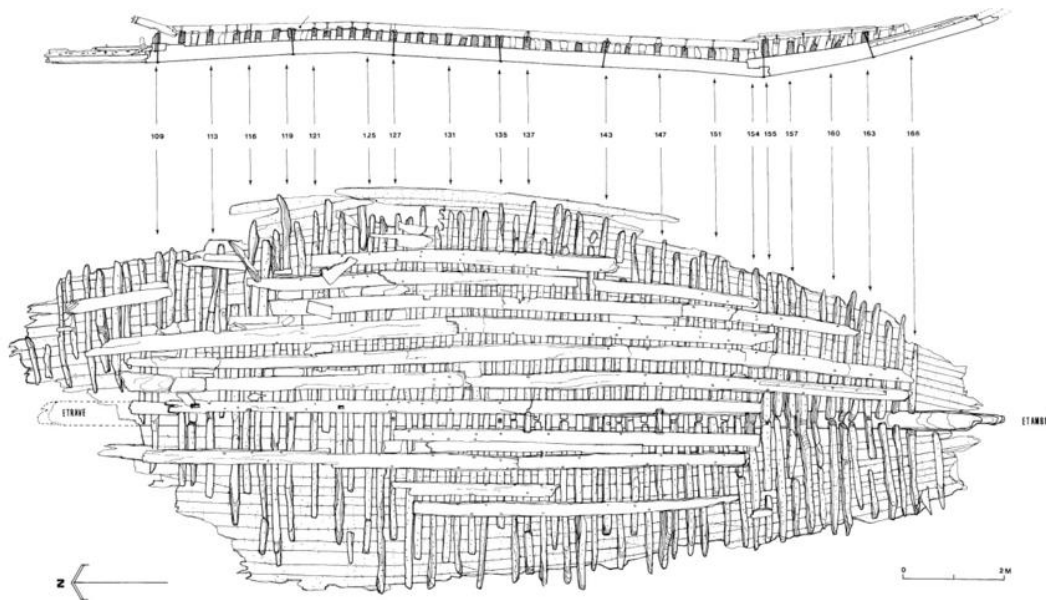
Keelson / Maststep – Preserved

Stringers – Yes, 6

Taxa – Western Imperial; S.M. - Campanian; Built – Napoli

Notes –

Bourse



Chronology 180 / 220

Preserved – 20 x 7 m

Length reconstructed – 23 m; Beam reconstructed – 9 m

Keel length – 12.2 m

Keel sided dimension – 17-28 cm

Keel molded dimension – 29 cm

Frames sided dimension – 8 cm

Frames molded dimension – 15 cm

Plank thickness – 6 cm

Framing pattern – Alternating floors and half-frames (overlapping) // 25 cm;

Planking method – pM&T, diag. scarves; pitched inside

pM&T – T 6 x 1 x 10 cm (T 12-13 cm long) // 20 cm; conic pegs inserted from inside and cylindrical pegs from the outside

Hull shape – Flat floor, round turn of the bilge

Fasteners – frames/keel: 8 floors fastened to the keel w/ copper bolts; floors/planks: treenails; Keelson – sister timbers

Keelson – sister timbers / Maststep – not preserved

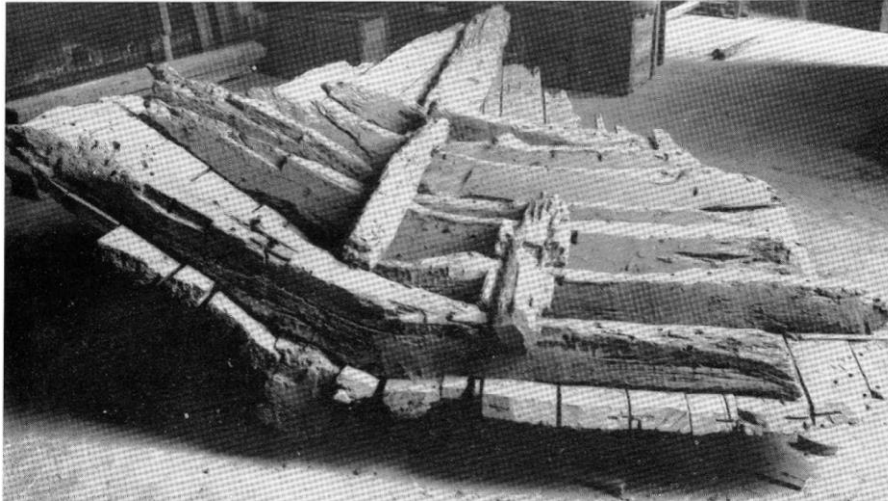
Stringers – closely spaced

Wales – connected to the planks

Taxa – Western Imperial; S.M. - ?; Built - ?

Notes – P.K.&R.: Shell-based, mixed construction.

Musée des Docks



Chronology - 199 / 220

Preserved – 3.6 x 2.7 m

Length reconstructed – 17 m; Beam reconstructed – 7 m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – Alternating floors and half-frames (overlapping)

Planking method – pM&T; diag. scarves

M&T – T ? X ? x ? cm // ? Cm; conic pegs

Hull shape – Flat floor

Fasteners – floors/planks: treenails

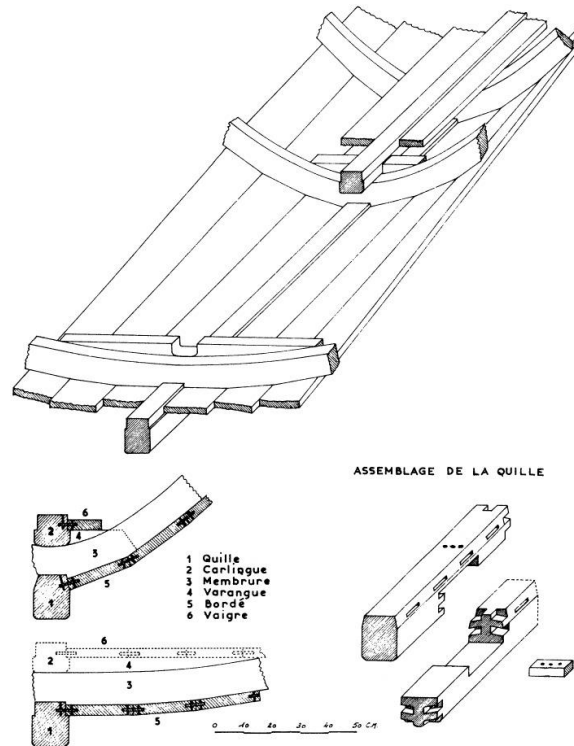
Keelson / Maststep – Not preserved

Stringers – Yes

Taxa – Western Imperial; S.M. - ?; Built - ?

Notes –

Monaco



Chronology 175 / 250

Preserved – 8.4 x 1.2 m

Length reconstructed – 15 m

Beam reconstructed – ?

Keel length – ?

Keel sided dimension – 11-14 cm

Keel molded dimension – 16 cm

Frames sided dimension – 6.5 cm

Frames molded dimension – 11.5 cm

Plank thickness – 3-4 cm

Framing pattern – Possible alternating floors and half-frames (overlapping)

Planking method – pM&T, pitched inside

M&T – T 4-6 x 0.6 x ? (T 7-8 cm long) // 12.5 cm; conic pegs inserted from inside

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/planks: treenails; 1 frame bolted to the keel

Keelson – 15 x 8 cm

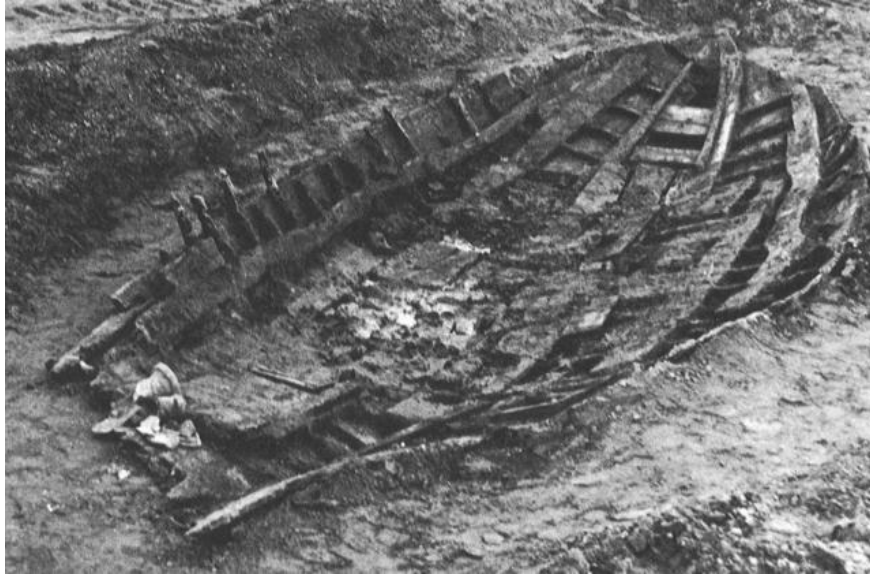
Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – P.K.&R.: Shell-based, shell-first

Fiumicino 4



Chronology 200 / 300

Preserved – 8 x 2.8 m

Length reconstructed – 10 m; Beam reconstructed – m

Keel length –

Keel sided dimension – cm

Keel molded dimension – cm

Frames sided dimension – cm

Frames molded dimension – cm

Plank thickness – 2.5 cm

Framing pattern – Alternating floors and half-frames (overlapping); three floors fastened to the keel w/ copper bolts (over scarves

Planking method – pM&T, diag. scarves

M&T – T x. x cm // ? cm; conic pegs// 27.5 cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – Floors/planks: vertical treenails

Keelson / maststep - Yes

Stringers – Yes

Taxa – Western Imperial; S.M. - Latium; Built – Ostia-Claudius-Portus

Notes – P.K.&R.: Western Imperial

Isola Sacra I



Chronology – 200 / 299

Preserved – 12 x 4.88 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – 11.5

Keel sided dimension – 6-8 cm

Keel molded dimension – 11-12 cm

Frames sided dimension – 6.4 cm

Frames molded dimension – 9.2 cm

Plank thickness – 2.75 cm

Framing pattern – Alternating floors and half-frames (overlapping); also off center HF // 17.7 cm

Planking method – pM&T; diag. scarves

M&T – T 3.8-4.5 x 0.3-0.5 x 8 cm // 9.3 cm; conic pegs

Hull shape – Flat floor, sharp turn of the bilge

Fasteners – Floors/planks: vertical treenails and copper nails

Keelson / Maststep – No

Stringers – Yes

Taxa – Western Imperial; S.M. - Latium; Built – Ostia-Claudius-Portus

Notes – *Horeia* type

Isola Sacra II



Chronology – 200 / 299

Preserved – 14 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 7.4 cm

Frames molded dimension – 10.3 cm

Plank thickness – 30 cm

Framing pattern – Alternating floors and half-frames (overlapping) // 17.2 cm

Planking method – pM&T; diag. scarves

M&T – M 6.6 x 0.5-0.9 x ? cm // 9.2 cm

Hull shape – Undetermined

Fasteners – Floors/planks: vertical treenails and copper nails

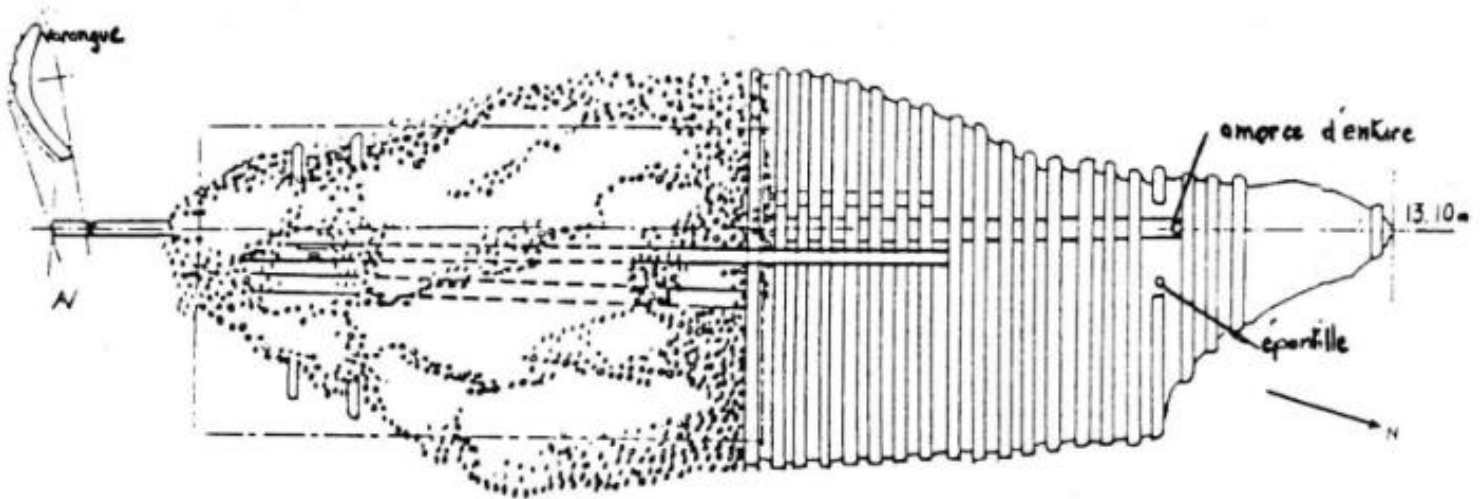
Keelson / Maststep – ?

Stringers – Yes

Taxa – Western Imperial; S.M. - Latium; Built – Ostia-Claudius-Portus

Notes – *Horeia* type

Anse des Laurons 1



Chronology - 200 / 300

Preserved – 13.1 x 4 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 10-18 cm

Frames molded dimension – 12-20 cm

Plank thickness – 4.7 cm (garboard)

Framing pattern – ? // 10-17 cm

Planking method – pM&T

M&T – T 7 x 0.6-0.8 x 13 cm // ? Cm; conic pegs

Hull shape – Flat floor

Fasteners – ?

Keelson / Maststep – Yes

Stringers – ?

Taxa – Western Imperial; S.M. - ?; Built – ?

Notes – Ballast at stern

Jules Verne 8



Chronology – 200/299

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

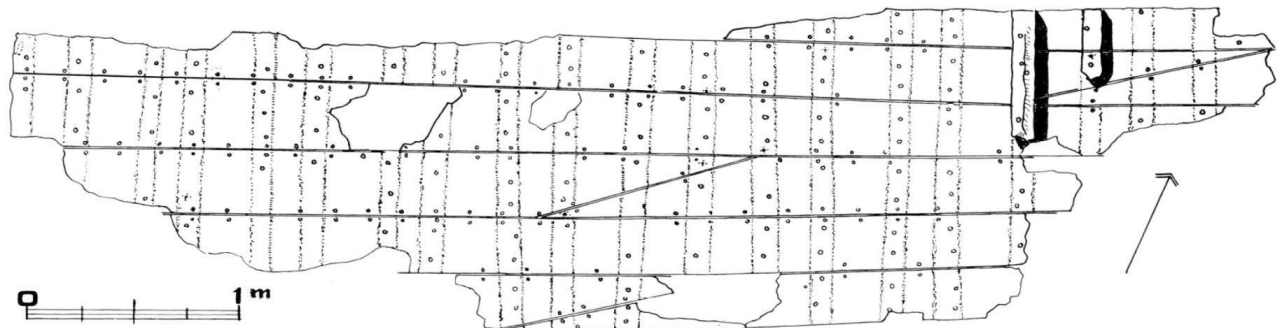
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – Marseille

Notes – Work ship; fishing

Pomègues



Chronology - 250 / 300

Preserved – 6 x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 8 cm

Frames molded dimension – 15 cm

Plank thickness – 3-4 cm

Framing pattern – Alternating floors and half-frames (overlapping) // 12-15

Planking method – pM&T; diag. scarves

M&T – T 5-7 x 0.7 x 10 cm // 10-12 cm; conic pegs

Hull shape – ?

Fasteners – Floors/planks: vertical treenails

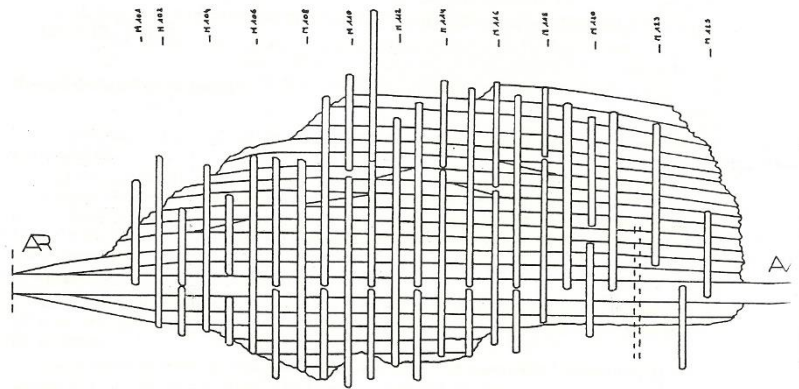
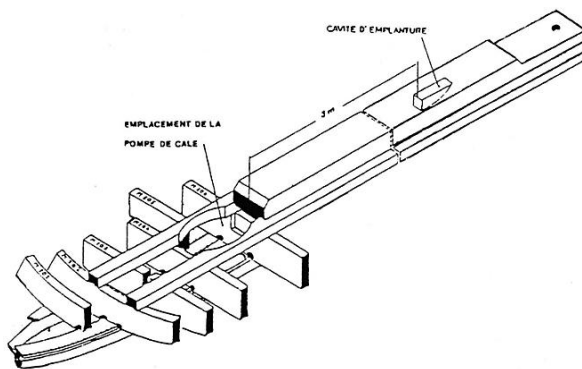
Keelson / Maststep – ?

Stringers – ?

Taxa – Western Imperial; S.M. - ?; Built – ?

Notes –

Anse des Laurons 3



Chronology - 275 / 300

Preserved – 9.67 x 4.5 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – 17 cm

Keel molded dimension – ? cm

Frames sided dimension – 8 cm

Frames molded dimension – 25 cm at keel

Plank thickness – 3 cm

Framing pattern – Alternating floors and half-frames (overlapping)

Planking method – pM&T; diag. scarves

M&T – T 7 x 0.7-0.8 x 13 cm // ? Cm; conic pegs

Hull shape – Flat bottom

Fasteners – Frames/keel: 3 floors fastened to the keel w/ copper/bronze (?) bolts;
floors/planks: vertical treenails and external iron lost point nails

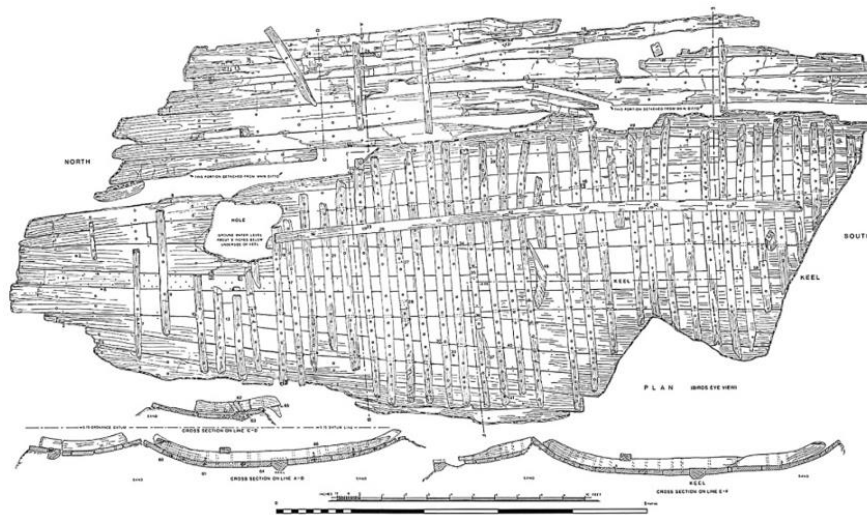
Keelson / Maststep – Yes

Stringers – Yes

Taxa – Western Imperial; S.M. - ?; Built – ?

Notes –

County Hall



Chronology 275 / 325

Preserved – 13x5.5 m

Length reconstructed – 19 m; Beam reconstructed – 5 m

Keel length – ?

Keel sided dimension – 21.5 cm

Keel molded dimension – 16.5 cm

Frames sided dimension – 11.4 cm

Frames molded dimension – 16.5 cm

Plank thickness – 5-7.5 cm

Framing pattern – Unclear: short and long floors? Or flat frames curving upwards on alternated sides // 25-53 cm;

Planking method – pM&T, diag. scarves w/ iron nails

M&T – T 6.4 x .7 x 6.5 cm (T 12.7 cm long) // 12-18 cm; conic pegs inserted from inside

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/keel: none fastened; floor/planks: treenails

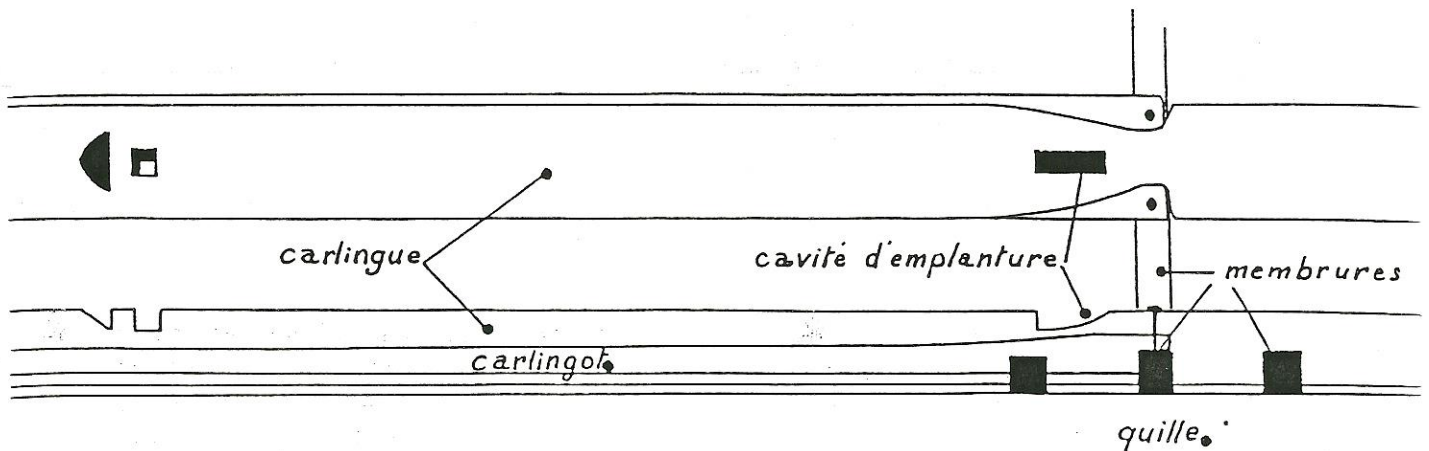
Keelson / Maststep – ?

Stringers – at least 2: 14 x 8.9 cm, fastened w/ iron nails

Taxa - ?; S.M. - ?; Built - ?

Notes – P.K.&R.: if the frames alternate curving upwards: romano-celtic tradition.

Anse des Laurons 4



Chronology - 275 / 325

Preserved – 9.3 x 2.55 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – 8.5 cm

Keel molded dimension – 8.5 cm

Frames sided dimension – 8 cm

Frames molded dimension – 11-15 cm

Plank thickness – 3 cm

Framing pattern – Alternating floors and half-frames (overlapping)

Planking method – pM&T

M&T – T 6.5 x 0.6 x 9 cm // ? Cm; conic pegs

Hull shape – Flat bottom

Fasteners – Floors/planks: vertical treenails and copper nails

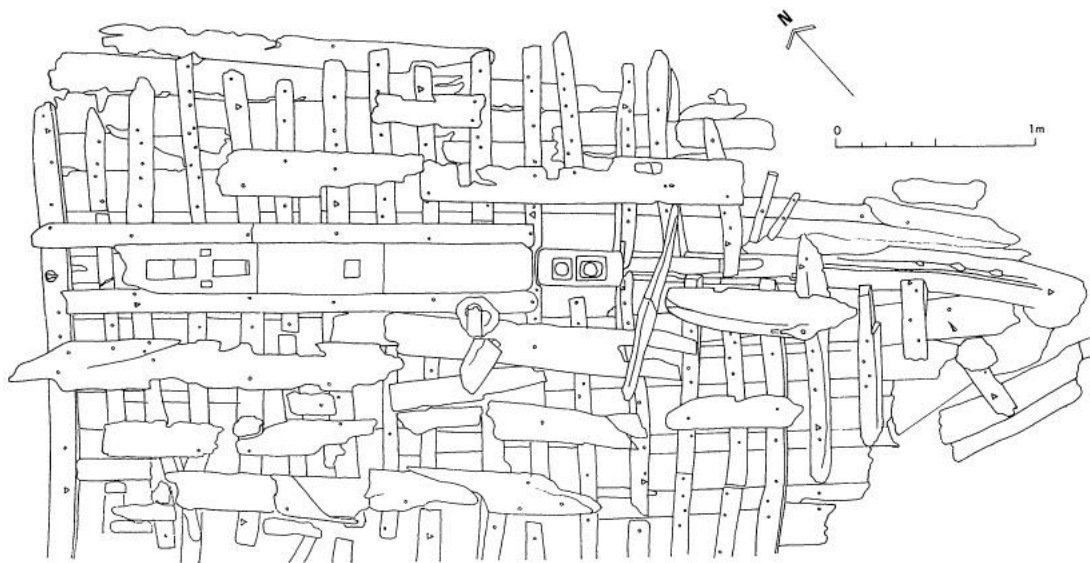
Keelson / Maststep – Yes

Stringers – Yes

Taxa – Western Imperial; S.M. - ?; Built - ?

Notes – No notes

Pointe de la Luque B



Chronology 300 / 400

Preserved – 8 x 5 m

Length reconstructed – 20 m; Beam reconstructed – 6 m

Keel length – ?

Keel sided dimension – 13 cm

Keel molded dimension – 17 cm

Frames sided dimension – 13 cm

Frames molded dimension – 13 cm

Plank thickness – 3 cm (garboard 5.5 cm)

Framing pattern – Alternating floors and half-frames (overlapping) // 12-33 cm; 4 floors fastened to the keel w/ iron bolts

Planking method – pM&T, diag. scarves

M&T – T 6 x 0.7 x 4 cm // 10-12 cm; conic pegs inserted from inside

Hull shape – Round floor, round turn of the bilge

Fasteners – frames/keel: yes, four iron bolts; frames/planks: vertical treenails

Keelson / Maststep – Yes

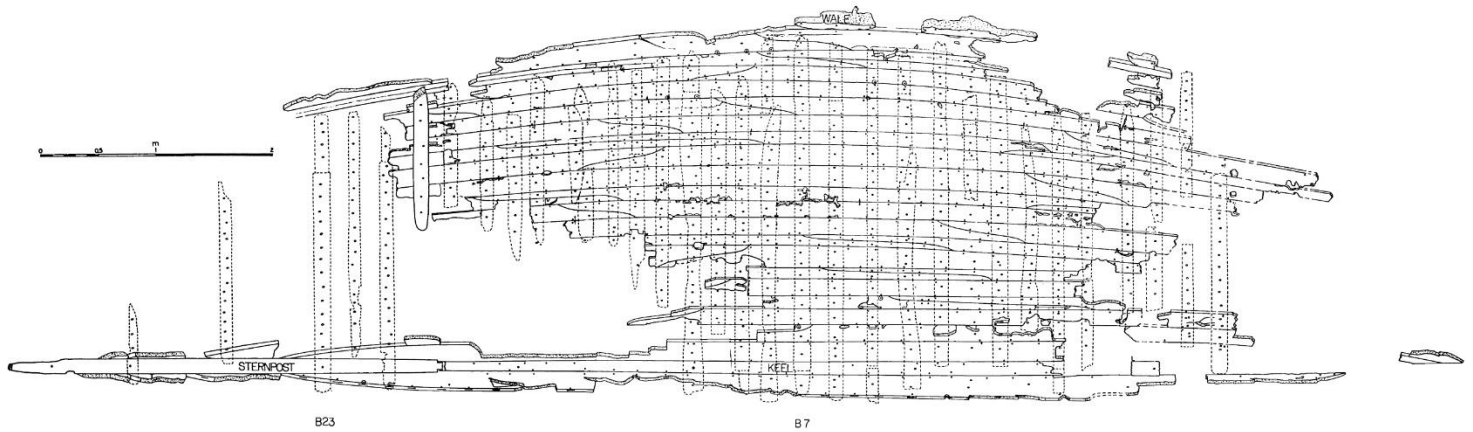
Stringers – Yes

Wales – connected to the planks

Taxa – Western Imperial; S.M. - ?; Built - ?

Notes – P.K.&R.: Western Imperial

Yassiada 2



Chronology 300 / 350

Preserved – 16 x 5.2 m

Length reconstructed – 20 m; Beam reconstructed – 8 m

Keel length –

Keel sided dimension – 12.5 cm

Keel molded dimension – 22 cm

Frames sided dimension – 12-19 cm (half-frames 8-15 cm)

Frames molded dimension – 12.5 cm

Plank thickness – 4.2 cm (garboards 5.3 cm)

Framing pattern – Alternating floors and half-frames // 23-30 cm

Planking method – loose pM&T, “S-scarves”

M&T – T 7-9 x 0.7 x 5-5.5 cm (T 4.5 x ? X 8.5 cm) // 15-32 cm; conic pegs inserted from inside

Hull shape – Wine-glassed

Fasteners – floors/planks: treenails and iron nails in sensitive places; frames/keel: 4 floors fastened to the keel w/ iron bolts

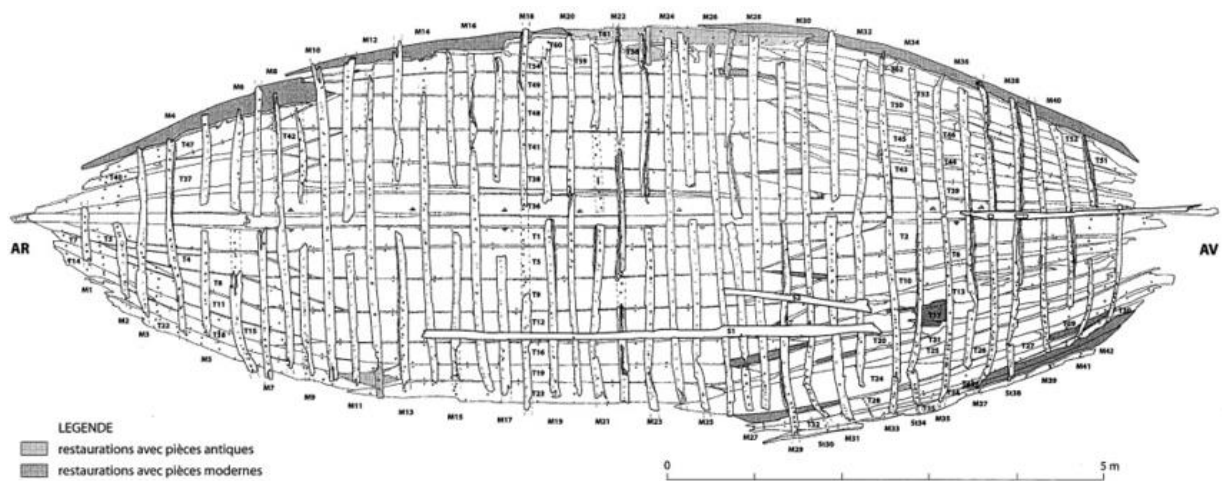
Keelson / Maststep – not preserved

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – P.K.&R.: Shell-based, shell-first

Fiumicino 1



Chronology 350 / 450

Preserved – 13.8 x 4.6 m

Length reconstructed – 17.18 m; Beam reconstructed – 5.6 m

Keel length – 11.11 m

Keel sided dimension – 13 cm

Keel molded dimension – 17 cm

Frames sided dimension – 6-12 cm

Frames molded dimension – 8-18 cm

Plank thickness – 4.4 cm

Framing pattern – Alternating floors and half-frames // 12-30 cm

Planking method – loose pM&T, diag. scarves

M&T – T 7.4 x 0.7-1 x 4.5 cm (T 4.3 x .3-0.6 x 8-9 cm) // 17.5-76 cm; conic pegs inserted from inside

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/planks: iron nails through treenails; frames/keel: 6 floors fastened to the keel w/ iron bolts

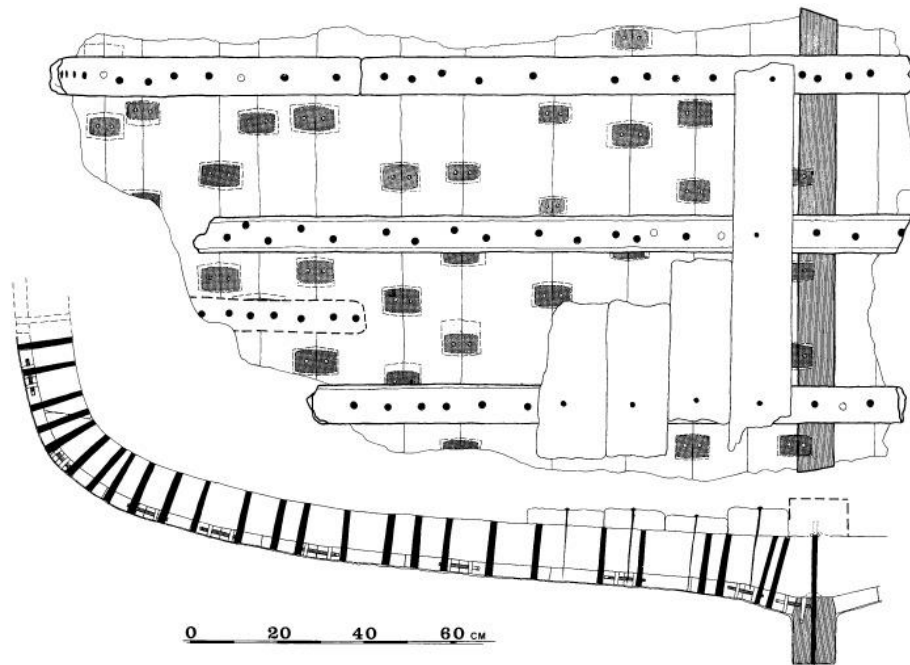
Keelson / Maststep – Yes

Stringers – not preserved

Taxa – Western Imperial; S.M. - Latium; Built – Ostia-Claudius-Portus

Notes – P.K.&R.: Shell-based, shell-first

Dramont F



Chronology 350 / 400

Preserved – 12 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – 10.5-9.5 cm

Keel molded dimension – 14.5 cm

Frames sided dimension – 5.5-10.5 cm

Frames molded dimension – 8.5-11 cm

Plank thickness – ? cm

Framing pattern – Alternating floors and half-frames // 37 cm

Planking method – loose pM&T

M&T – T 5-7 x .07 x 4 cm (T 3.5-5.5 x .5-0.6 x 6-7 cm) // 19.5-25 cm; conic pegs inserted from inside

Hull shape – Slightly wine-glassed, hard turn of the bilge

Fasteners – floors/planks: treenails; frames/keel: 1 floor fastened to the keel w/ iron bolt

Keelson / Maststep – not preserved

Stringers – ceiling

Taxa - ?; S.M. - ?; Built - ?

Notes – P.K.&R.: Western Imperial variation: shell-based, mixed construction, only studied 1.1x2.1 m

Fiumicino 3



Chronology 350 / 450

Preserved – 5.5 x 2.3 m

Length reconstructed – 14,18 m; Beam reconstructed – ? m

Keel length –

Keel sided dimension – cm

Keel molded dimension – cm

Frames sided dimension – cm

Frames molded dimension – cm

Plank thickness – cm

Framing pattern – Alternating floors and half-frames (overlapping); three floors and half-frames fastened to the keel w/ copper bolts (over scarves)

Planking method – pM&T, diag. scarves

M&T – T x. x cm // 29 cm; conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/planks: treenails

Keelson / maststep – preserved keelson

Stringers – Yes

Taxa – Western Imperial; S.M. - Latium; Built – Ostia-Claudius-Portus

Notes – P.K.&R.: Western Imperial. River boat

Fiumicino 2



Chronology 350 / 450

Preserved – 14 x 4.5 m

Length reconstructed – 19,18 m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – 5 – 5.5 cm

Framing pattern – Alternating floors and half-frames (overlapping)

Planking method – pM&T, diag. scarves

M&T – T x. x cm // 42.3 cm; conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – frames/keel: some floors nailed to the keel; floors/planks: iron nails over treenails

Keelson –

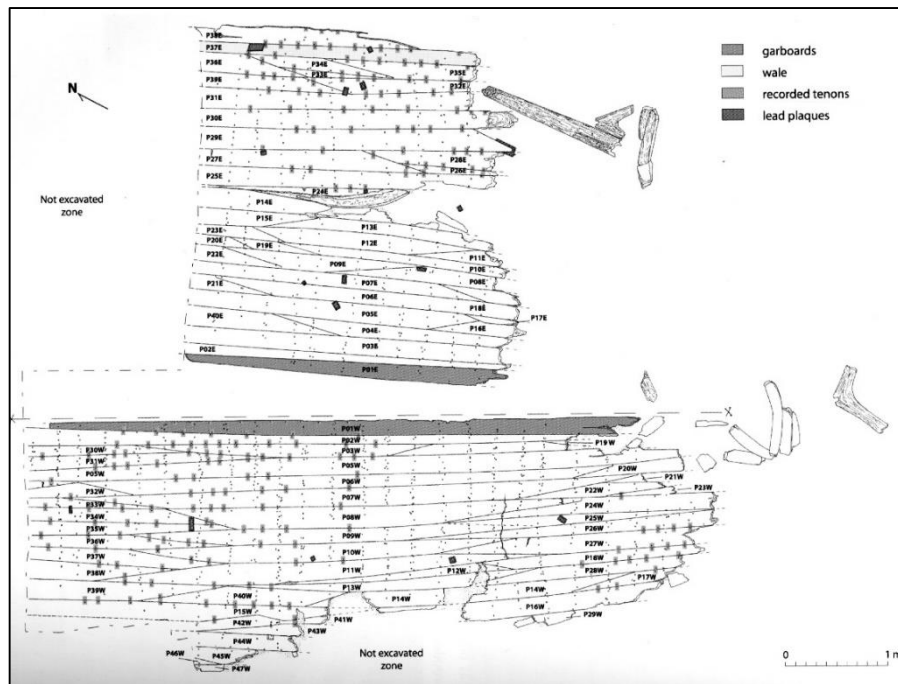
Maststep –

Stringers –

Taxa – Western Imperial; S.M. - Latium; Built – Ostia-Claudius-Portus

Notes – P.K.&R.: Western Imperial; Fiumicino 1 sistership

Pakostane



Chronology 375 / 425

Preserved – 11 x 7 m

Length reconstructed – 15-20 m; Beam reconstructed – m

Keel length – Keel not preserved

Keel sided dimension – 13 cm

Keel molded dimension – ? cm

Frames sided dimension – 10.3 cm

Frames molded dimension – 9.8 cm

Plank thickness – 2.6 cm

Framing pattern – Alternating floors and half-frames

Planking method – pM&T, diag. scarves

M&T – T 4.7 x 0.5 x 10 cm // 8.7 cm; conic pegs

Hull shape – Round floor and round turn of the bilge

Fasteners – floors/planks: trenails and some nails, both iron and copper alloy;
frames/keel: one floor timber bolted to the keel

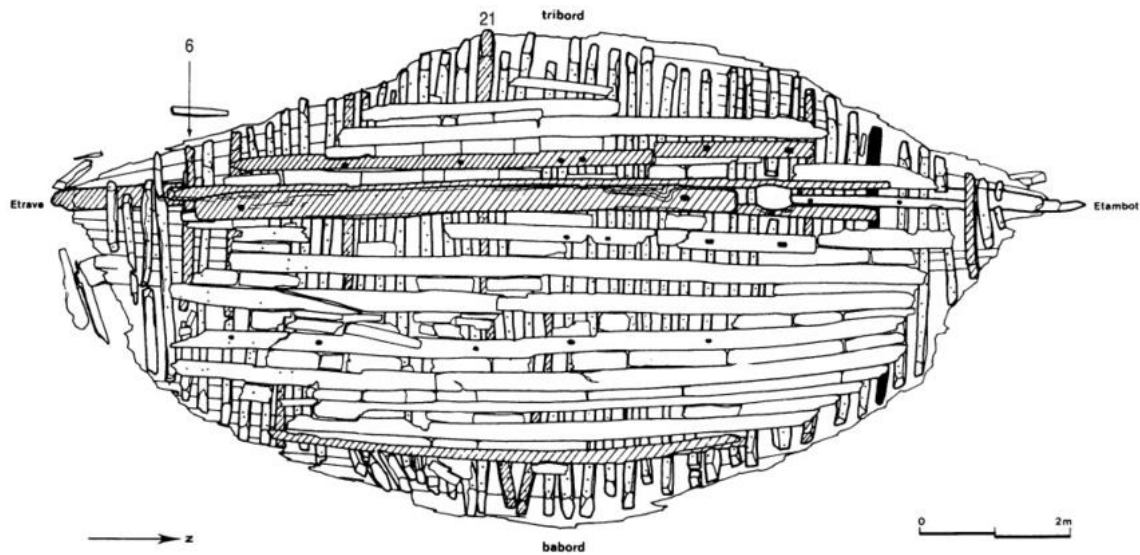
Keelson / Maststep – Not preserved

Stringers – Yes

Taxa – Western Imperial; S.M. - ?; Built - ?

Notes – Notes – P.K.&R.: Western Imperial

Port Vendres 1



Chronology 383 / 425

Preserved – 13.9 x 7.5 m

Length reconstructed – 16.41 m; Beam reconstructed – 8 m

Keel length – 13.9 m

Keel sided dimension – 28 cm

Keel molded dimension – 35 cm

Frames sided dimension – 13 cm

Frames molded dimension – 23 cm

Plank thickness – 4 cm (garboards 6 cm)

Framing pattern – Alternating floors and half-frames // 25 cm

Planking method – pM&T, diag. scarves

M&T – T 7 x ? x ? cm // 6-15 cm; conic pegs

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/planks: treenails; frames/keel: 8 floors fastened to the keel w/ iron bolts

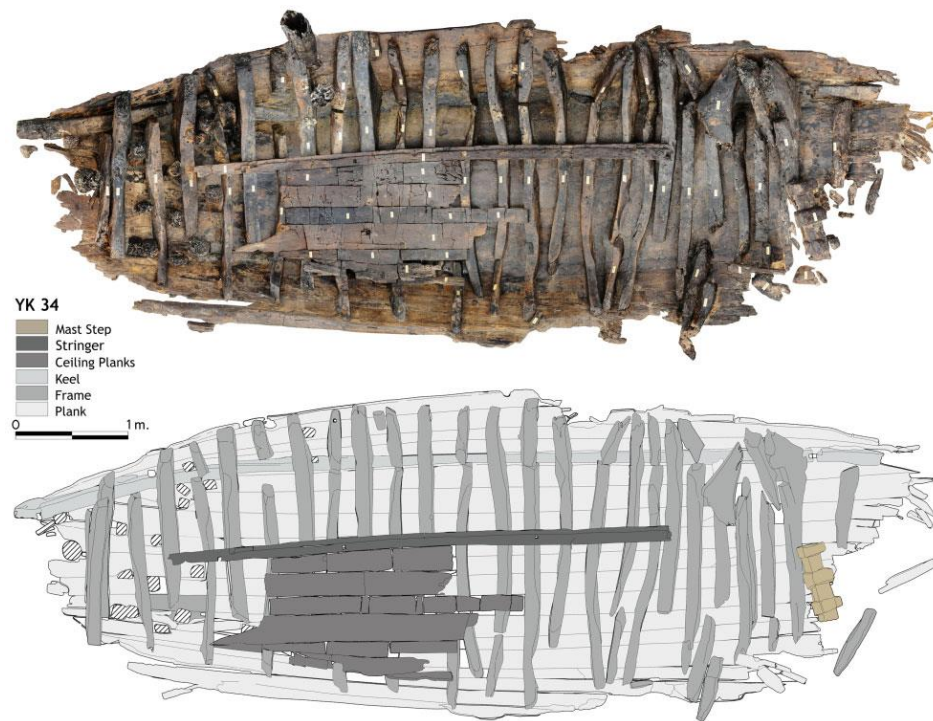
Keelson / Maststep – preserved

Stringers – closely spaced, plus ceiling

Taxa – Western Imperial; S.M. - ?; Built - ?

Notes – P.K.&R.: Western Imperial

Yenikapi 34



Chronology 400 / 500

Preserved – 7.6 x 2.9 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – p and unpM&T

Hull shape – wine-glass

Fasteners – floors/keel: iron nails; frames/planks: treenails

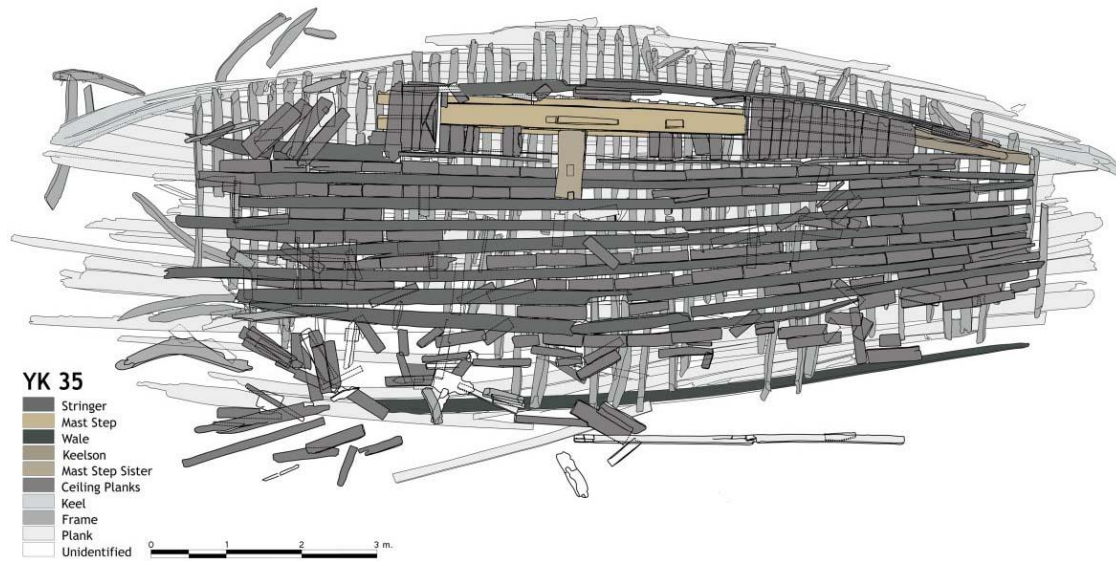
Keelson / Maststep – stemson

Stringers – ceiling

Taxa - ?; S.M. - ?; Built - ?

Notes – merchantman

Yenikapi 35



Chronology 400 / 500

Preserved – 15 x 5.2 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – unpM&T

Hull shape – wine-glassed

Fasteners – floors/keel: ?; frames/planks: treenails, copper nails and iron nails

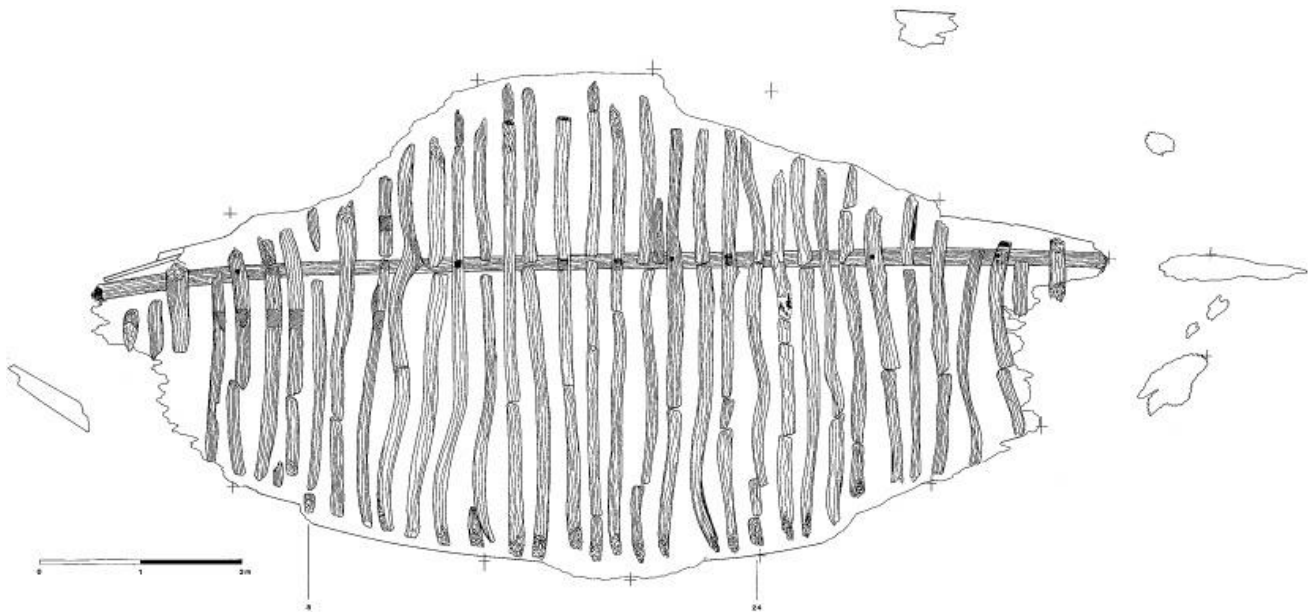
Keelson / Maststep – Maststep

Stringers – evenly spaced

Taxa - ?; S.M. - ?; Built - ?

Notes – merchantman

Dramont E



Chronology 425 / 455

Preserved – 12.5 x 5.5 m

Length reconstructed – 13.8 m; Beam reconstructed – 5.8 m

Keel length – 7.62 m

Keel sided dimension – 22 cm

Keel molded dimension – 30 cm

Frames sided dimension – 10-15 cm

Frames molded dimension – 10-18 cm

Plank thickness – 3-4 cm

Framing pattern – Alternating floors and half-frames (some overlap) // 27 cm

Planking method – pM&T, diag. scarves; pitched inside

M&T – T 6.5-7 x ? x ? cm (T 6 x 0.8-0.9 x 10 cm // 13-17 cm; conic pegs all inserted from the inside; some upper tenons were unpegged

Hull shape – Gently wine-glassed

Fasteners – floors/planks: treenails, occasionally iron lost point nails; frames/keel: 5 floors fastened to the keel w/ iron bolts

Keelson / Maststep – not preserved

Stringers – Yes

Taxa – Western Imperial; S.M. - ?; Built - ?

Notes – P.K.&R.: Shell-based; shell-first

Yenikapi 22



Chronology 430 / 606 (C14)

Preserved – 20 x 40 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 6 cm

Frames molded dimension – 8 cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – unpM&T // 60-160 cm

Hull shape – ?

Fasteners – floors/keel: ?; frames/planks: treenails and iron nails

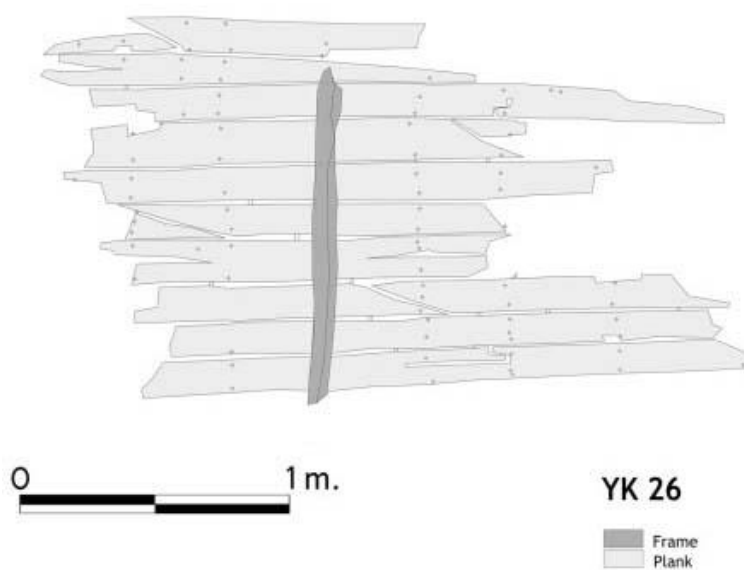
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – merchantman

Yenikapi 26



Chronology 450 / 550

Preserved – x m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length –

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – unpM&T joints // 30 cm

Hull shape – ?

Fasteners – floors/planks: treenails and iron nails

Keelson –

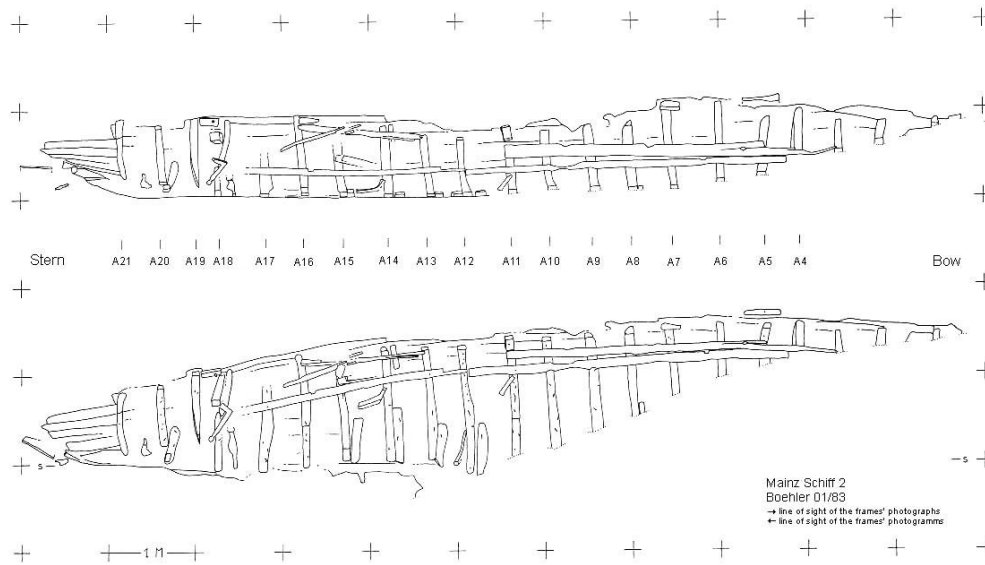
Maststep –

Stringers –

Taxa - ?; S.M. - ?; Built - ?

Notes – Possibly a small merchantman

Mainz 2



Chronology - 287

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – Flat bottom, round turn of the bilge

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

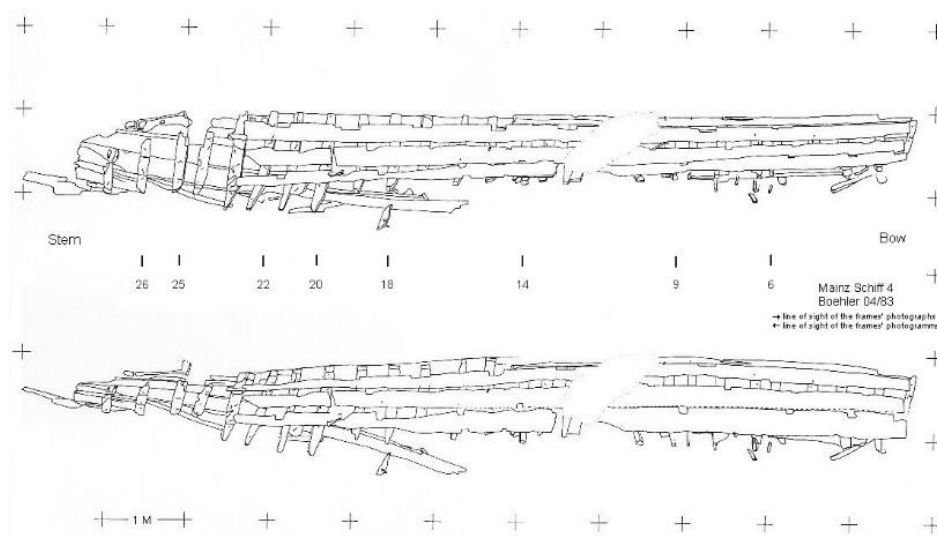
Taxa - ?; S.M. - ?; Built – ?

Notes –



Mainz Schiff 2

Mainz 4



Chronology 350

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – Flat bottom, round turn of the Bilge

Fasteners – ?

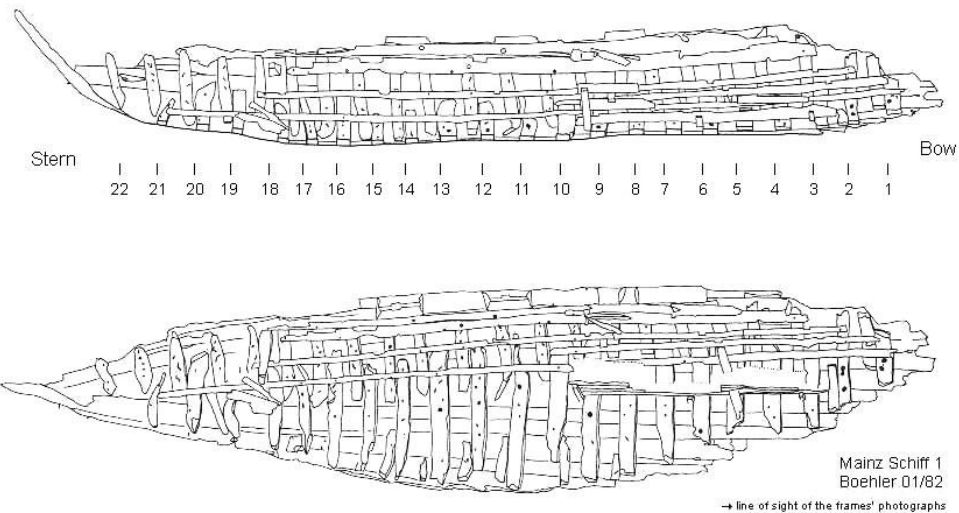
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Mainz 1



Chronology 394

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – Round

Fasteners – ?

Keelson / Maststep – ?

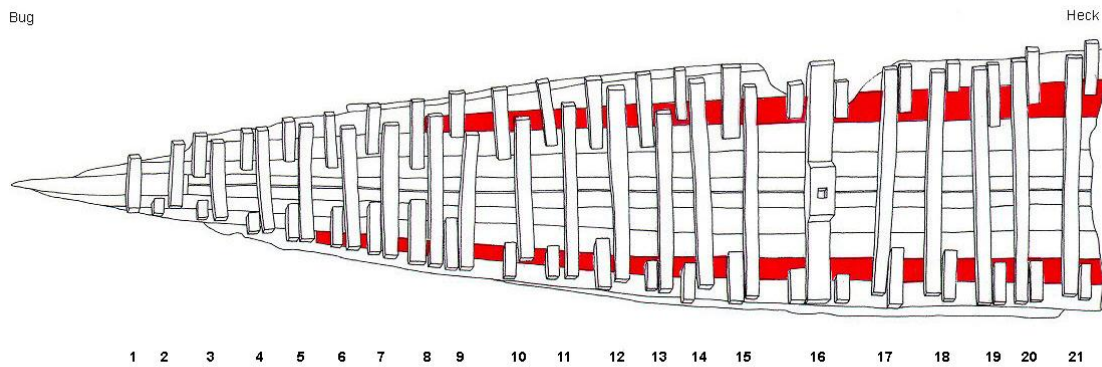
Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –



Mainz 5



Mainz Schiff 5

Chronology 395

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

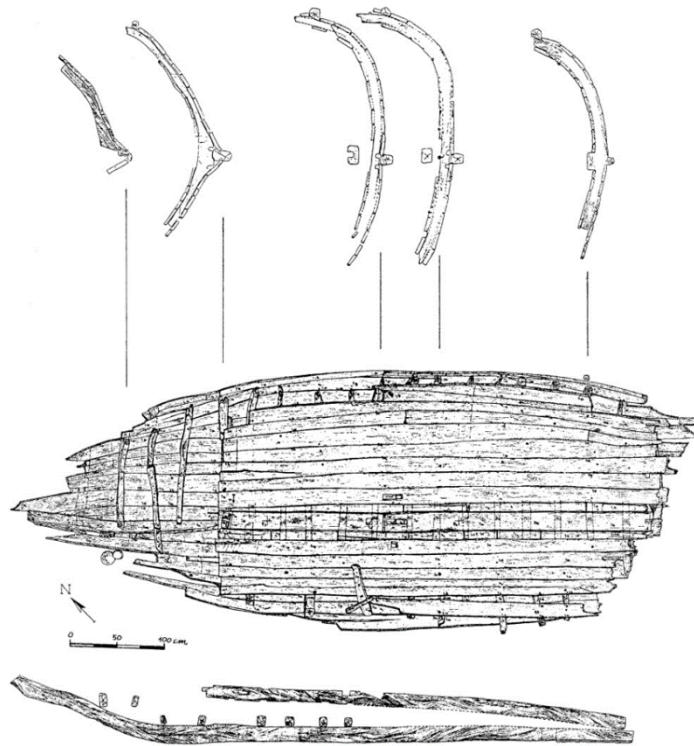
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Parco di Teodorico



Chronology 475 / 525

Preserved – 7.2 x 2.75 m

Length reconstructed – 9 m; Beam reconstructed – 3.1 m

Keel length – 3.5 m

Keel sided dimension – 11 cm

Keel molded dimension – 13-15 cm

Frames sided dimension – 7-9 cm

Frames molded dimension – 8-9 cm

Plank thickness – 2.5-3 cm

Framing pattern – floors // 20-30 cm and high framing timbers

Planking method – unpegged M&T widely spaced, garboard nailed to the keel;

M&T – T 4.5 x ? x ? cm // 84 cm

Hull shape – Gently round floor, round turn of the bilge

Fasteners – floors/planks: iron nails and treenails; frames/keel: some floors nailed to the keel

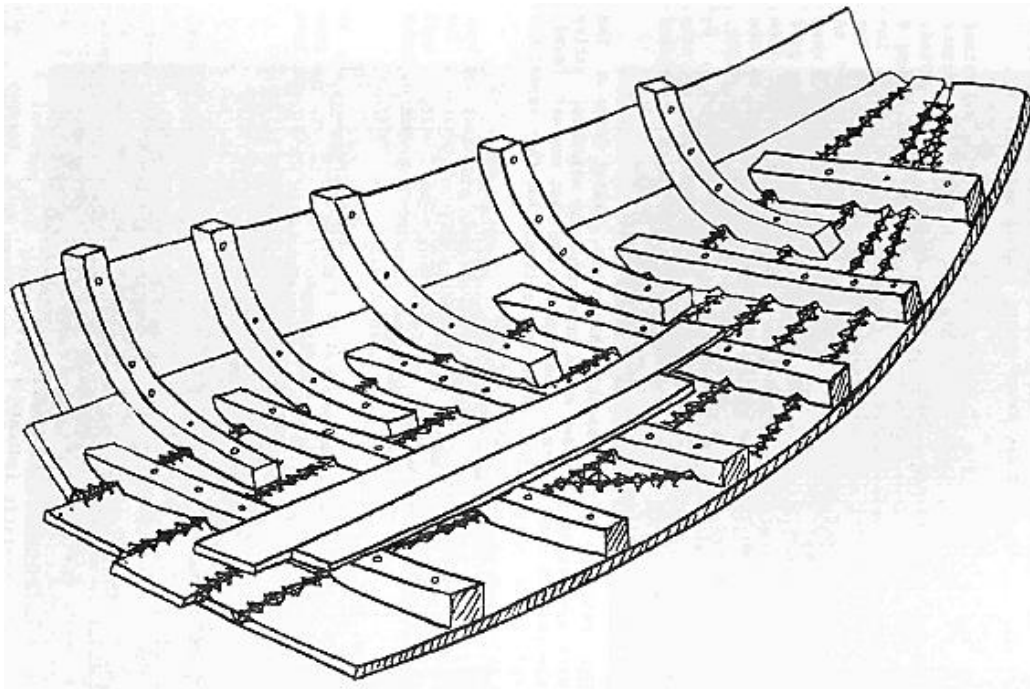
Keelson / Maststep – Yes

Stringers – nailed ceiling

Taxa - ?; S.M. - ?; Built - ?

Notes – P.K.&R.: Mixed

Cervia



Chronology - 500

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

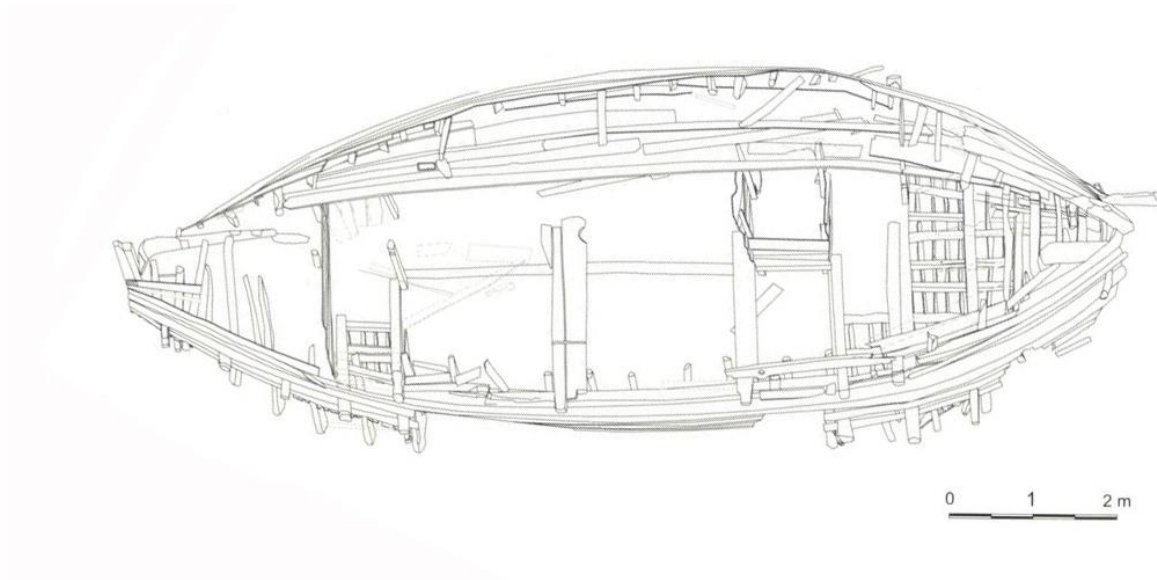
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Pisa D



Chronology 500 - 700

Preserved – 14 x 6 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – Planks on frames

Hull shape – ?

Fasteners – frames/planks: iron nails

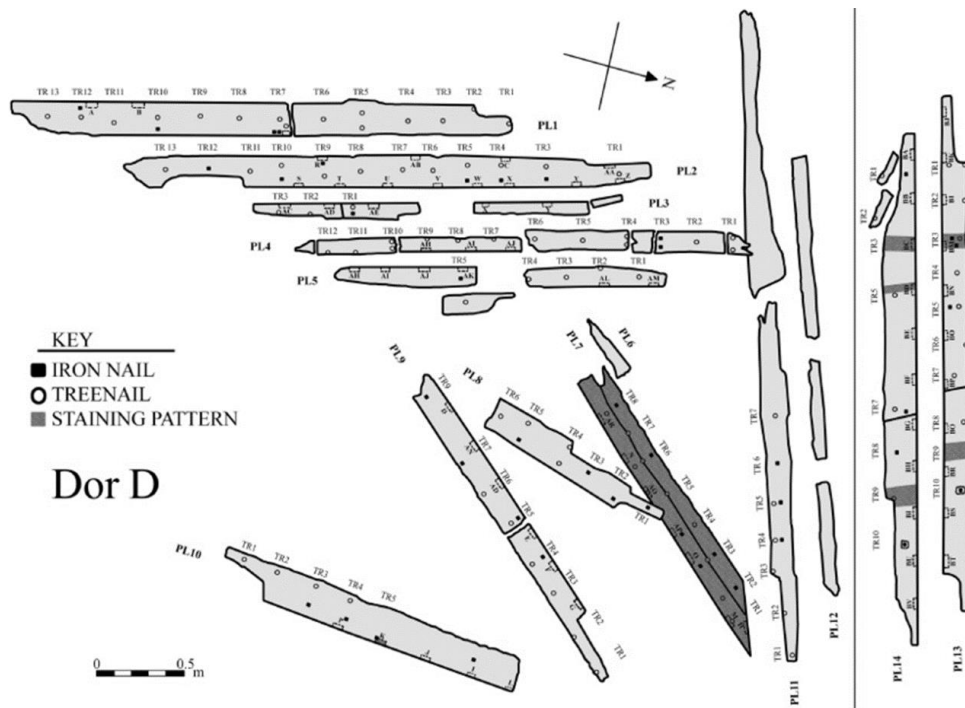
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes –

Dor D



Chronology 539 / 621

Preserved – 4 x 6 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 10-11 cm

Frames molded dimension – ? cm

Plank thickness – 3 cm

Framing pattern – ? // 13 cm

Planking method – unpegged M&T; diag. scarves

M&T – T 3.5 x 0.5 x 6.7 cm // 21.1 cm

Hull shape – ?

Fasteners – floors/planks: treenails and nails

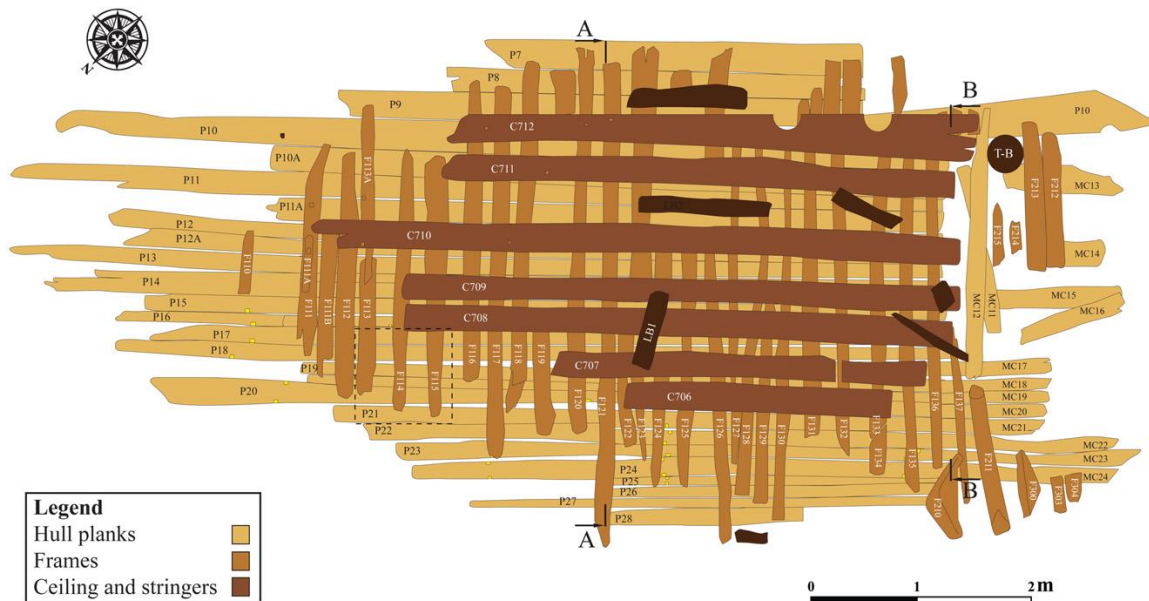
Keelson / Maststep – not preserved

Stringers – not preserved

Taxa - ?; S.M. - ?; Built - ?

Notes – P.K.&R.: mixed construction; ballast

Dor 2006



Chronology – 550 / 625

Preserved – 10.5 x 4.5 m

Length reconstructed – 25 m; Beam reconstructed – 7.5 m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 9-16 cm

Frames molded dimension – 8.5-18.5 cm

Plank thickness – 2-4 cm

Framing pattern – The floor timbers (and futtocks) alternated with half-frames extending beyond the floor timber/futtock joints // 26cm

Planking method – Planks on frames; unpM&T on lower planks // 1.51 m center to center

M&T – M 3.8-6.3 x 0.5-0.6 x 2.4-3.5 cm // 1.45 ; T 2.6-3.2 x 0.4-0.5

Hull shape – ?

Fasteners – Frames/planks: iron nails and treenails

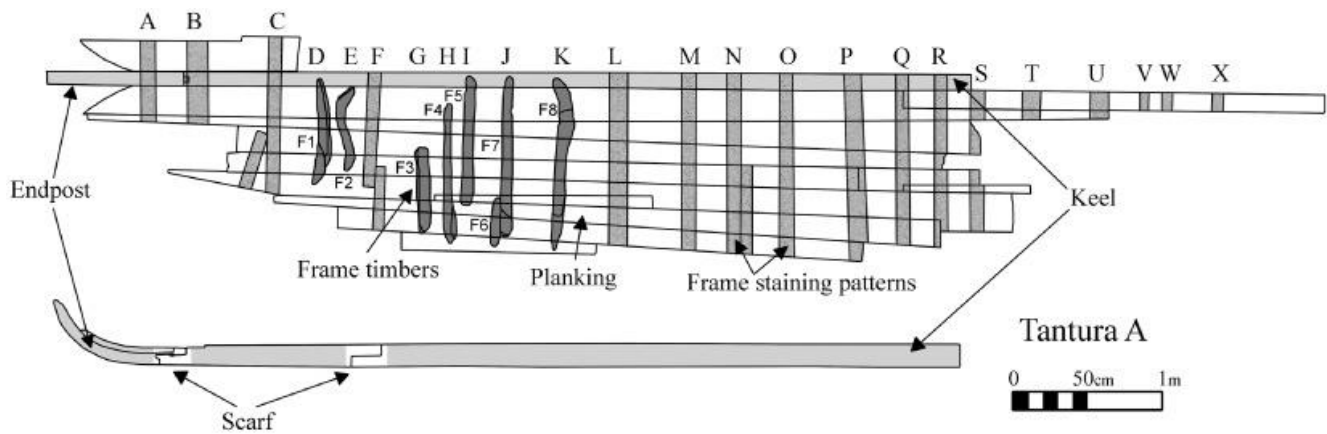
Keelson / Maststep – Not preserved

Stringers – Yes and ceiling

Taxa - ?; S.M. - ?; Built – ?

Notes –

Tantura A



Chronology 575 / 625

Preserved – 9 x 1.75 m

Length reconstructed – 12 m; Beam reconstructed – 4 m

Keel length – 5.2 m preserved

Keel sided dimension – 11 cm

Keel molded dimension – 18 cm

Frames sided dimension – 9 cm

Frames molded dimension – 9.5 cm

Plank thickness – 2.5 cm

Framing pattern – floors nailed to the keel and futtocks // 32.4 cm

Planking method – planks on frames

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/planks: iron nails; floors/keel: iron nails

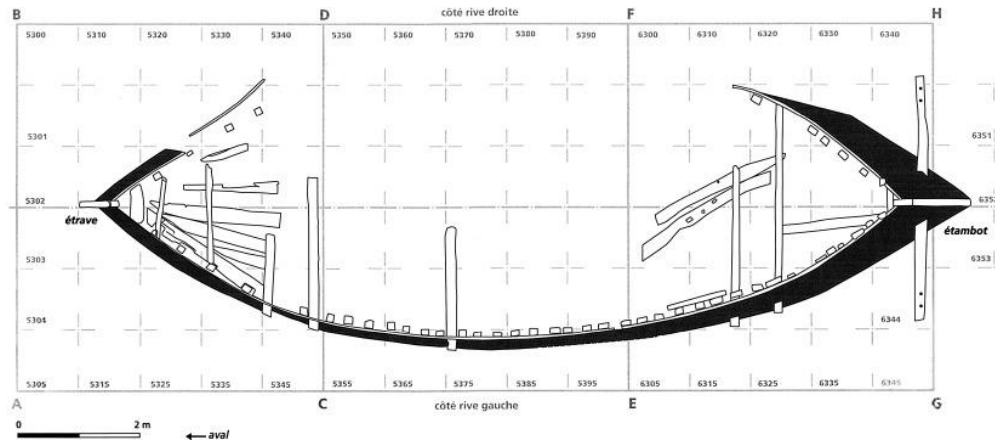
Keelson / Maststep – not preserved

Stringers – not preserved

Taxa - ?; S.M. - ?; Built - ?

Notes – P.K.&R.: Transitional. First eastern evidence true planks on frames

Port Berteau 2



Chronology 599 / 600

Preserved – 13.1 x 4 m

Length reconstructed – 14.6 m; Beam reconstructed – 4.8 m

Keel length – 10.8 m

Keel sided dimension – 12 cm

Keel molded dimension – 15 cm

Frames sided dimension – 10 cm

Frames molded dimension – 13 cm

Plank thickness – 3 cm

Framing pattern – Floors and futtocks // 10-20 cm

Planking method – Planks on frames

Hull shape – Flat floor, round turn of the bilge

Fasteners – Floors/planks: treenails, nails on hoods;

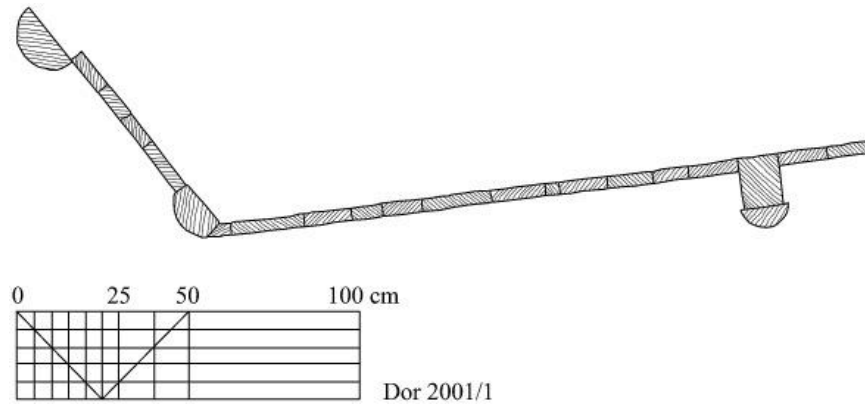
Keelson/maststep – Not preserved

Stringers – Not preserved

Taxa - ?; S.M. - ?; Built - ?

Notes – Frame-based

Dor 2001/1



Chronology 500 / 535

Preserved – 11.5 x 4.5 m

Length reconstructed – 16.9 m; Beam reconstructed – 5.4 m

Keel length – ?

Keel sided dimension – 11 cm + false keel 11-13 cm

Keel molded dimension – 15 cm + false keel 5-9 cm

Frames sided dimension – 7.5-9 cm

Frames molded dimension – 8.5-12 cm

Plank thickness – 2-3.3 cm

Framing pattern – Alternating floors and angular half-frames, plus extending futtocks, some connected to the floors; // 24 cm

Planking method – planks on frames; but joints; calked

Hull shape – Flat floor, angular turn of the bilge

Fasteners – floors/keel: almost all nailed; frames/planks: nailed

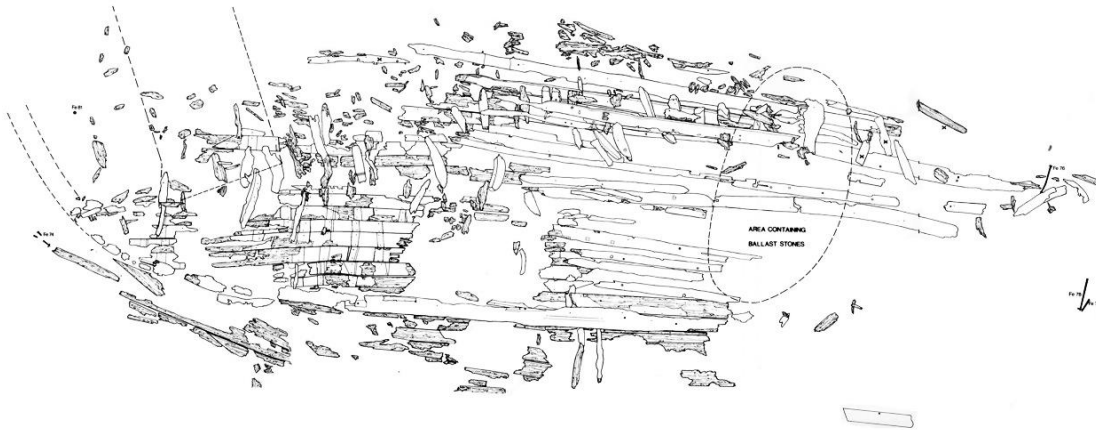
Keelson / Maststep – maststep preserved

Stringers – Yes

Taxa - ?; S.M. - ?; Built - ?

Notes – P.K.&R.: Possibly Egyptian; no keelson documented, a longitudinal piece could be part of it

Yassiada 1



Chronology 600 / 650

Preserved – 15 x 6.3 m

Length reconstructed – 20.52 m; Beam reconstructed – 5.2 m

Keel length – ?

Keel sided dimension – 22 cm

Keel molded dimension – 35.5 cm + false keel 4.5 cm

Frames sided dimension – 14 cm

Frames molded dimension – 14 cm

Plank thickness – 3.5-4.2 cm

Framing pattern – Alternating long and short floors and half-frames, all w/ futtocks // 30-35 cm

Planking method – unpM&T first 16 strakes

M&T – M 5 x 0.5 x 3.5 cm (T 3 x 0.5 x 7 cm) // 17-85 cm

Hull shape – wine-glassed, round turn of the bilge

Fasteners – floors/planks: iron nails, spikes and bolts; frames/keel: 1 in 4 frames bolted. Almost others nailed

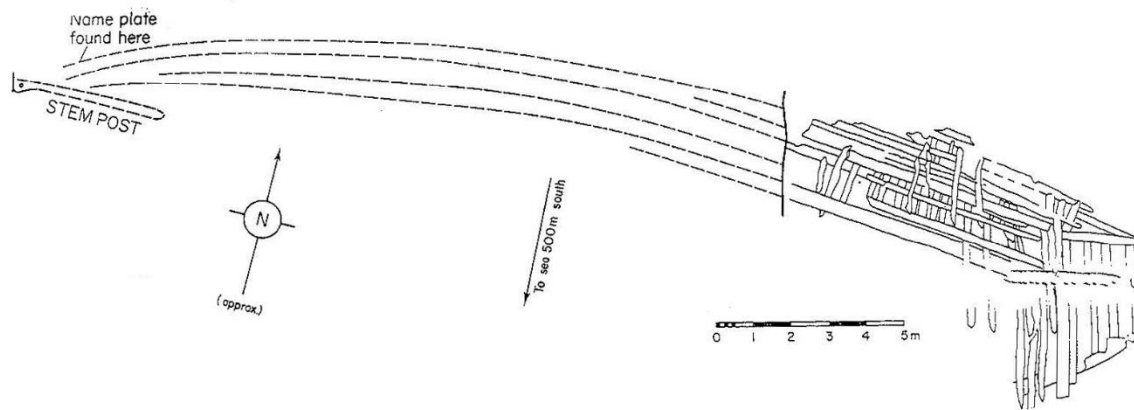
Keelson / Maststep – Yes, not preserved

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – P.K.&R.: Mixed

Pantano Longarini



Chronology 600 / 650

Preserved – 9.1 m

Length reconstructed – 31.5 m; Beam reconstructed – 10.25 m

Keel length – ?

Keel sided dimension – 40 cm

Keel molded dimension – 45 cm

Frames sided dimension – 18

Frames molded dimension – 25 cm

Plank thickness – 5 cm

Framing pattern – Alternating floors and half-frames // 35 cm

Planking method – loose unpM&T, diagonal, S and Z scarves

M&T – T ? X ? x ? cm // 100 cm

Hull shape – Flat floor, round turn of the bilge

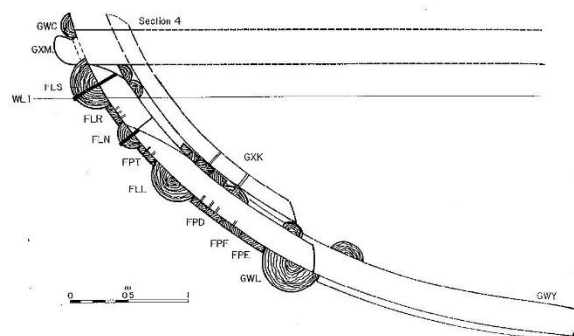
Fasteners – floors/planks: iron nails

Keelson / Maststep – ?

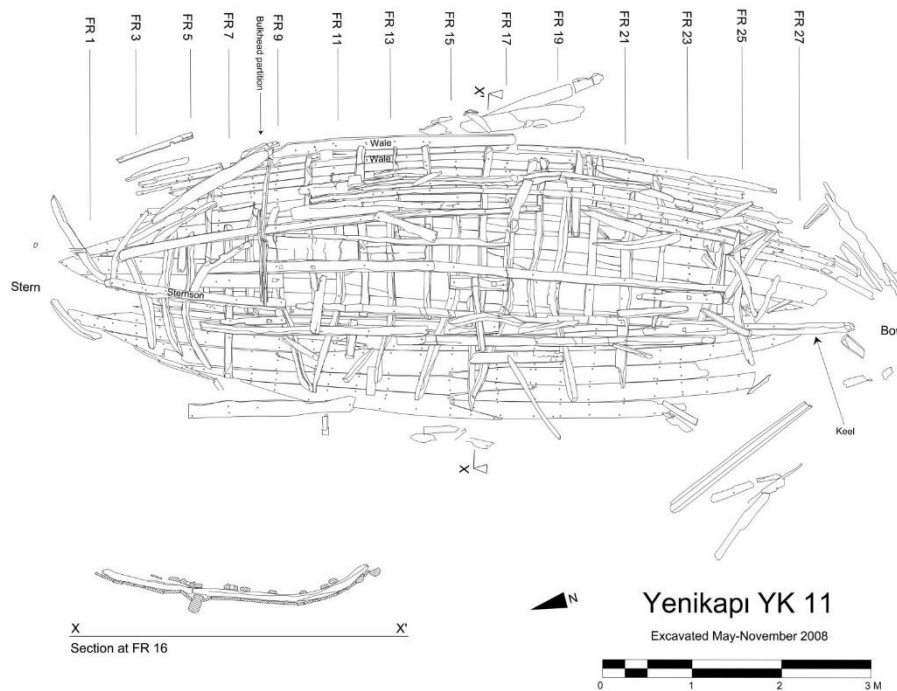
Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – P.K.&R.: Mixed



Yenikapi 11



Chronology 600 / 650

Preserved – 9 x 3 m

Length reconstructed – 11.2 m; Beam reconstructed – 3.8 m

Keel length – ?

Keel sided dimension – 10.6 cm

Keel molded dimension – 19 cm

Frames sided dimension – 9 cm

Frames molded dimension – 10 cm

Plank thickness – 2-2.5 cm

Framing pattern – floor timbers and paired half-frames (overlapping) // 31 cm

Planking method – unpm&T // 45 cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – frames/keel: iron spike; Frames/planks: iron nails

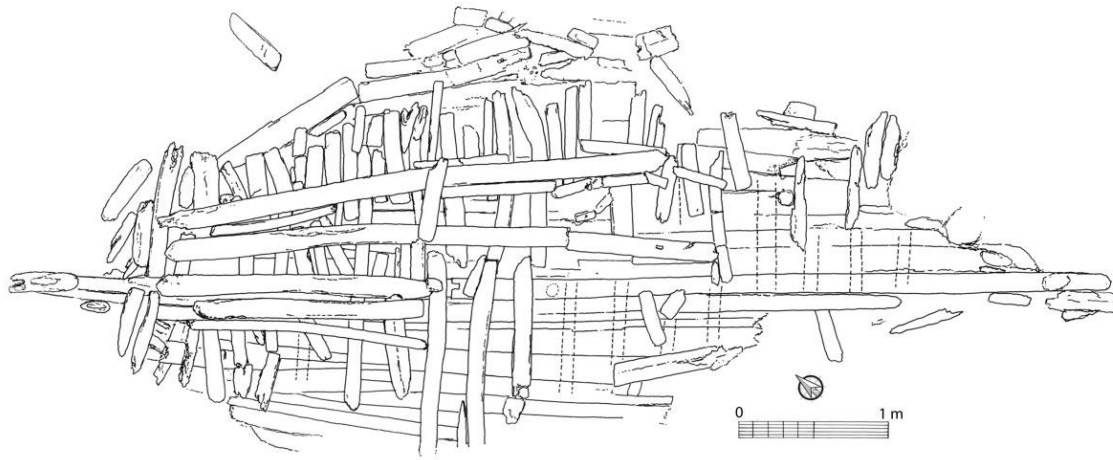
Keelson / Maststep – sternson bolted to the keel

Stringers – evenly spaced

Taxa - ?; S.M. - ?; Built - ?

Notes – Possibly a small merchantman

Tantura E



Chronology 600 / 800

Preserved – 7.6 x 3.1 m

Length reconstructed – 12.5 m; Beam reconstructed – 4 m

Keel length – 7.6 m

Keel sided dimension – 10 cm

Keel molded dimension – 17 cm + false keel 4.5 cm

Frames sided dimension – 10 cm

Frames molded dimension – 12 cm

Plank thickness – 2.2-2.8 cm

Framing pattern – Alternating floors and half-frames w/ futtocks //26 cm

Planking method – planks on frames, but-joined

Hull shape – Flat floor, sharp turn of the bilge

Fasteners – floors/planks: nailed; floors/keel: almost all nailed

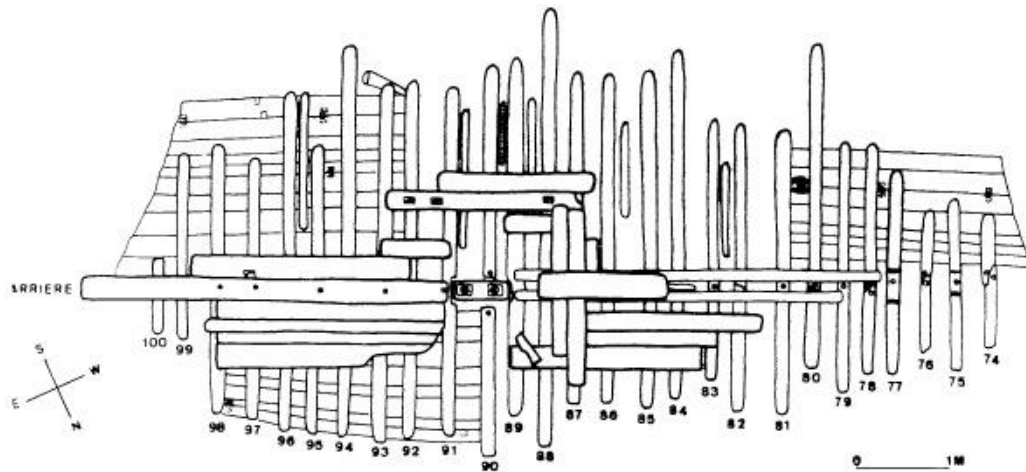
Keelson / Maststep – one central timber, no maststep

Stringers – Yes

Taxa - ?; S.M. - ?; Built - ?

Notes – P.K.&R.: Frame-based, frame-first

St. Gervais 2



Chronology 650 / 700

Preserved – 9.5 x 4.5 m

Length reconstructed – 15-18 m; Beam reconstructed – ? m

Keel length – 3.9 m preserved

Keel sided dimension – 9-15 cm

Keel molded dimension – 20-24 cm

Frames sided dimension – floors 12-20 cm; half-fr. 10-15 cm

Frames molded dimension – floors 22-40 cm; half-fr. 10-27 cm

Plank thickness – 2.5-3 cm (garboard 4 cm)

Framing pattern – Alternating floors and half-frames nailed to each other in the center // av. 25 cm

Planking method – spaced unpegged M&T, empty mortises

M&T – T ? X ? x 7 cm (T 2.8 x ? x 8.8 cm) // 100 cm

Hull shape – wine-glassed, round turn of the bilge, straight sides

Fasteners – almost floors fastened to the keel; floors/planks: nails and treenails; keel/after keelson: bolted

Keelson / Maststep – central timber 4 m preserved, s/m: 32/20cm, over sister timbers s/m: 9/9 cm; aft timber s/m: 21-40 cm, over the floors

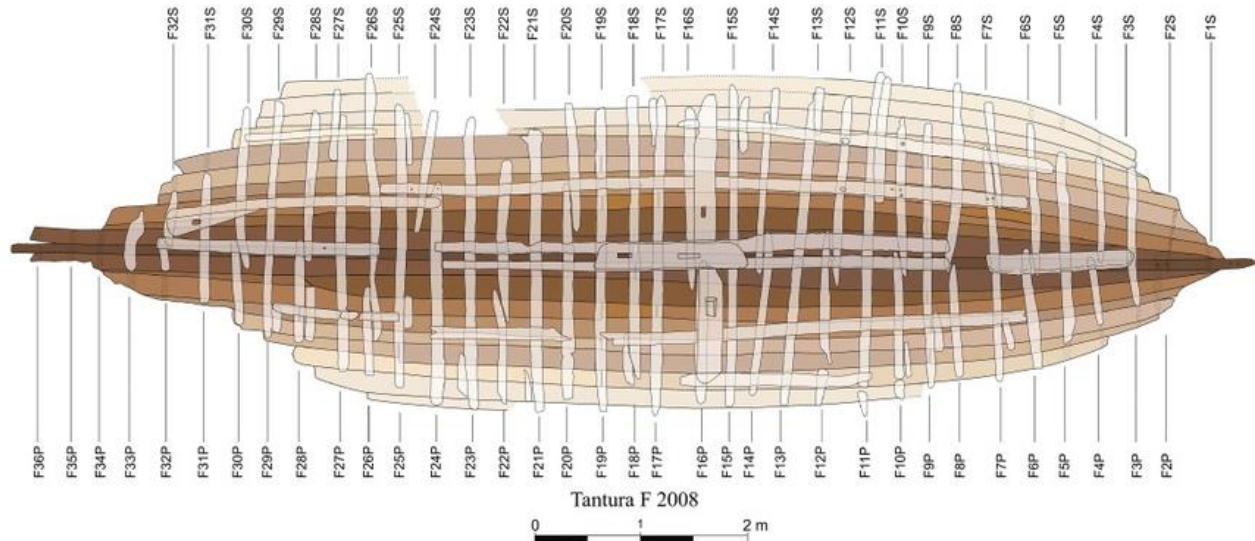
Stringers –

Wales – connected to the frames

Taxa - ?; S.M. - ?; Built - ?

Notes – P.K.&R.: frame-based, frame-first

Tantura F



Chronology 650 / 700

Preserved – 12 x 4 m

Length reconstructed – 15.7 m; Beam reconstructed – 5.2 m

Keel length – ?

Keel sided dimension – 10.4 cm

Keel molded dimension – 12-16.8 cm

Frames sided dimension – 9.5 cm

Frames molded dimension – 12 cm

Plank thickness – 2.5 cm

Framing pattern – Alternating floors and half-frames w/ futtocks

Planking method – planks on frames, butt-joined

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/planks: iron nails; floors/keel: almost all w/ nails

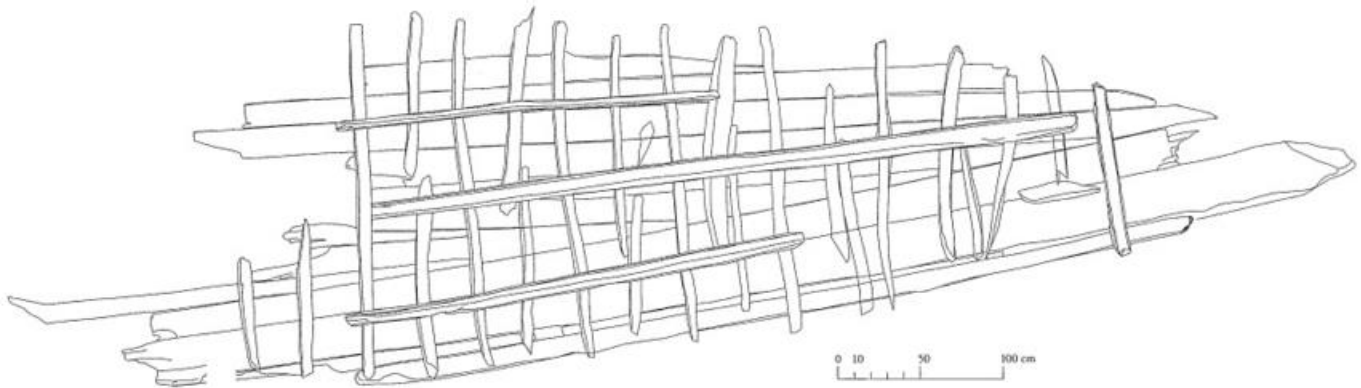
Keelson / Maststep – Yes, preserved

Stringers – Yes

Taxa - ?; S.M. - ?; Built - ?

Notes – P.K.&R.: frame-based, frame-first

Yenikapi 17



Chronology 652 / 870 (C14)

Preserved – 8.2 x 2.25 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – not preserved

Keel sided dimension – not preserved

Keel molded dimension – not preserved

Frames sided dimension – 6 cm

Frames molded dimension – 8 cm

Plank thickness – ? cm

Framing pattern – Alternating floors and half-frames (overlapping)

Planking method – planks on frames

Hull shape – ?

Fasteners – floors/keel: ?; frames/planks: iron nails

Keelson / Maststep – ?

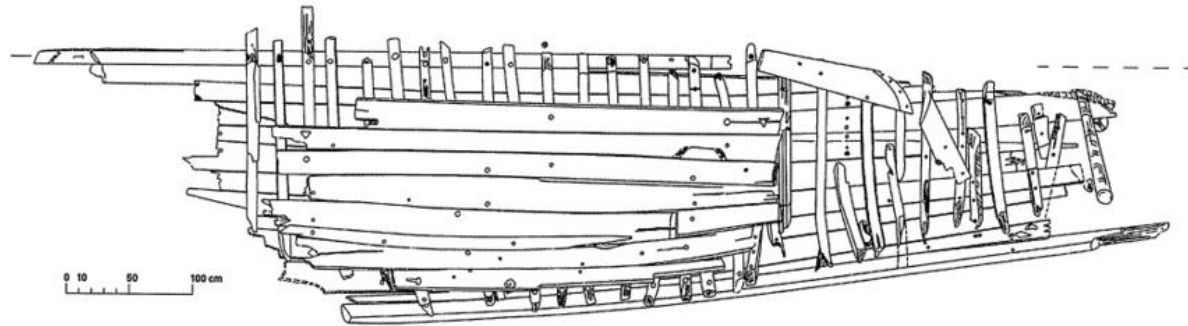
Stringers – two, half logs

Wales – connected to the frames

Taxa - ?; S.M. - ?; Built - ?

Notes – merchantman

Yenikapi 3



Chronology 668 / 987 (C14)

Preserved – 9.12 x 2.28 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – floors and futtocks

Planking method – coaks // ? Cm up to the first wale

Hull shape – ?

Fasteners – floors/planks: treenails and iron nails

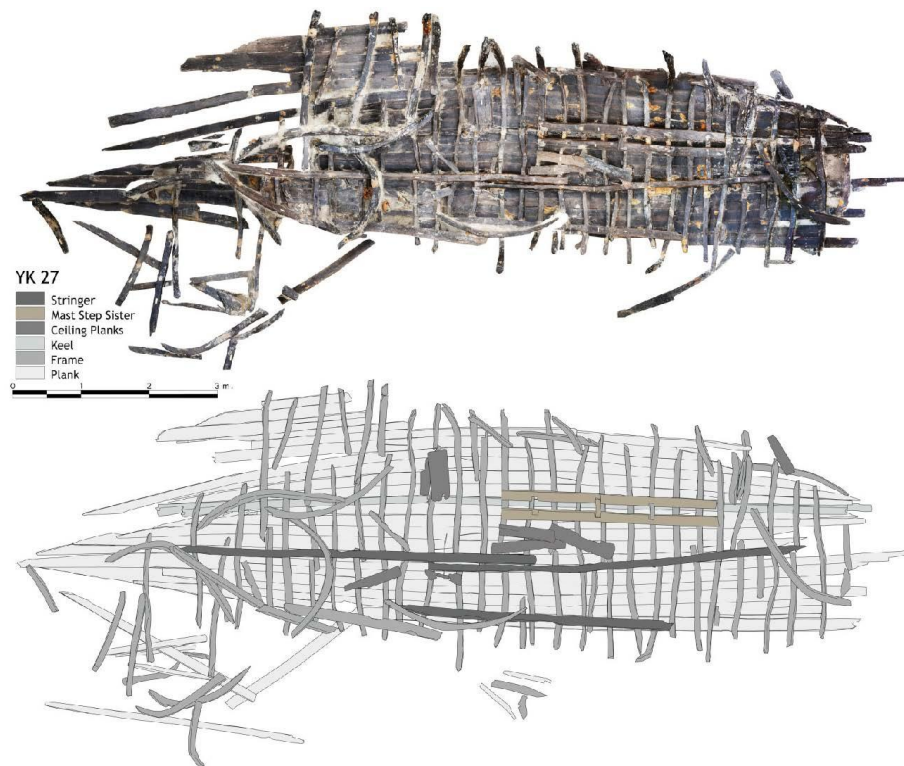
Keelson / Maststep – not preserved

Stringers – thick ceiling 2-4 cm

Taxa - ?; S.M. - ?; Built - ?

Notes – Possibly a middle-sized merchantman

Yenikapi 27



Chronology 672 / 869 (C14)

Preserved – 12 x 4.3 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – floors and futtocks

Planking method – planks on frames

Hull shape – ?

Fasteners – floors/keel: ?; frames/planks: iron nails

Keelson / Maststep – ?

Stringers – three

Taxa - ?; S.M. - ?; Built - ?

Notes – merchantman

Yenikapi 28

Possibly part of Yenikapi 27



Chronology 672 / 869 (C14)

Preserved – 7 x 4 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – floors and futtocks

Planking method – planks on frames

Hull shape – ?

Fasteners – floors/keel: ?; frames/planks: iron nails

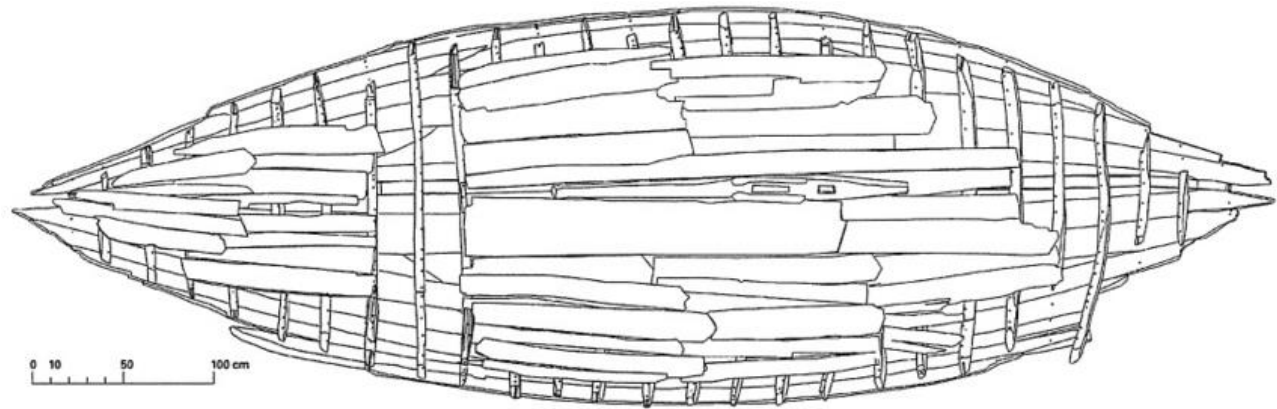
Keelson / Maststep – ?

Stringers – three

Taxa - ?; S.M. - ?; Built - ?

Notes – merchantman

Yenikapi 12



Chronology 672 / 876 (C14)

Preserved – 7 x 2.3 m

Length reconstructed – 9.6 m; Beam reconstructed – 2.6 m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – floor timbers and futtocks aligned

Planking method – coaks // ? cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – Frames/planks: treenails and iron nails

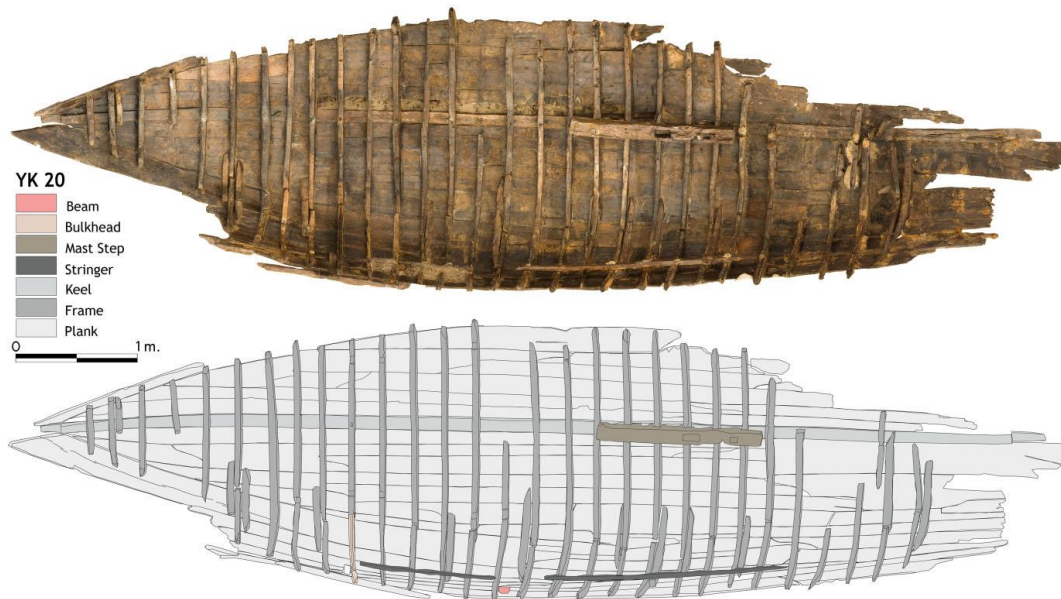
Keelson / Maststep – maststep on the center of the keel

Stringers – nailed ceiling

Taxa - ?; S.M. - ?; Built - ?

Notes – Possibly a small merchantman

Yenikapi 20



Chronology 687 / 975 (C14)

Preserved – 8.76 x 2.25 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – floor timbers and futtocks aligned

Planking method – coaks // ? Cm below the first wale

Hull shape – Flat floor, round turn of the bilge

Fasteners – Frames/planks: treenails and iron nails

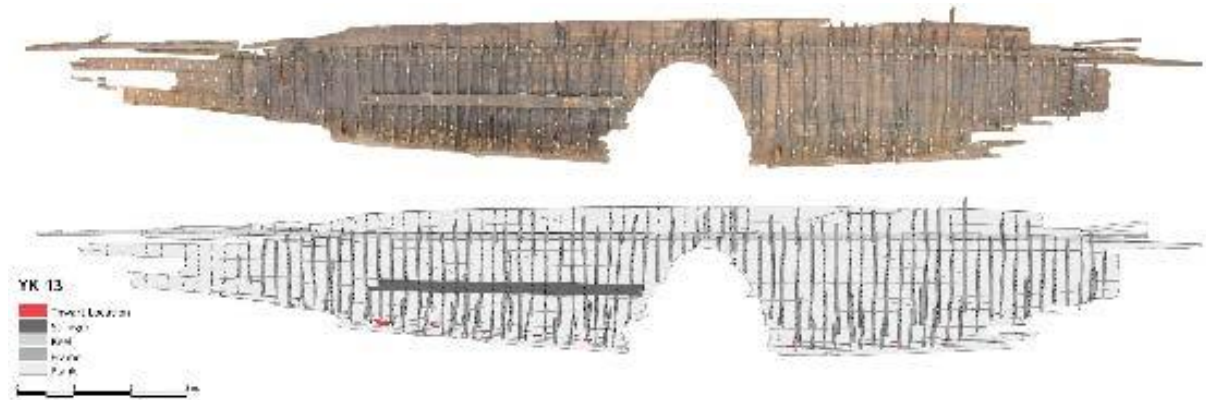
Keelson / Maststep – maststep on the center of the keel

Stringers – one nailed ceiling plank

Taxa - ?; S.M. - ?; Built - ?

Notes – Possibly a small merchantman

Yenikapi 13



Chronology 690 / 890 (C14)

Preserved – 20.8 x 2.8 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – floors and half-frames

Planking method – coaks // ? cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – ?

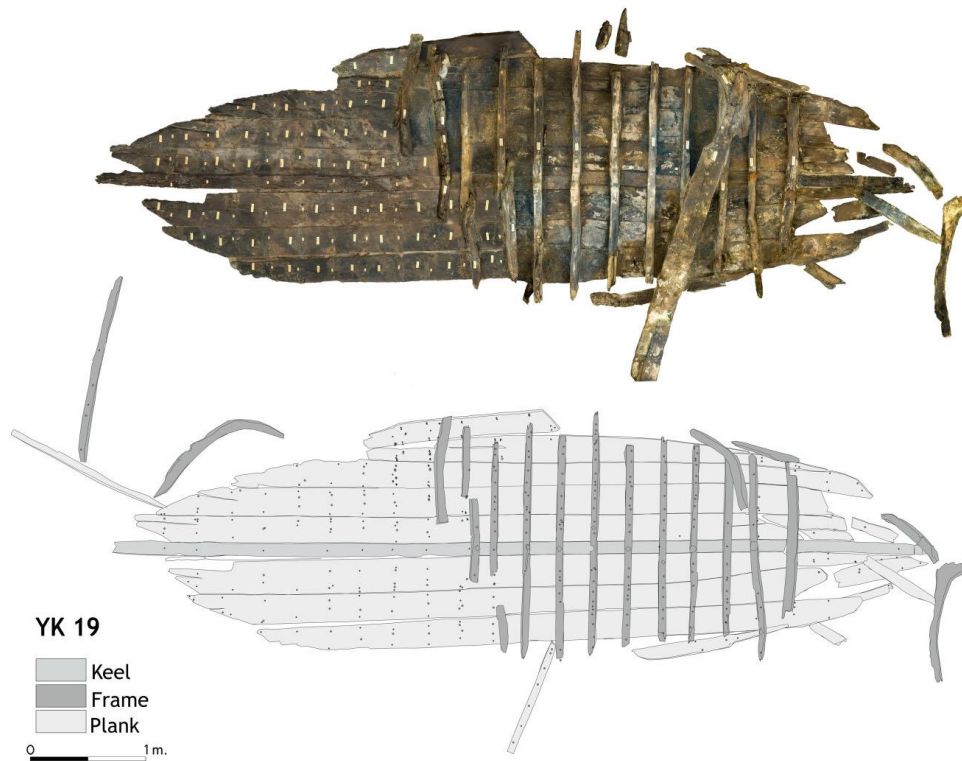
Keelson / Maststep – portion of a keelson

Stringers – one and two wales

Taxa - ?; S.M. - ?; Built - ?

Notes – galley

Yenikapi 19



Chronology 700 / 750

Preserved – 7.325 x 2.5 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – floor timbers and futtocks aligned

Planking method – coaks // ? cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – Frames/planks: ?

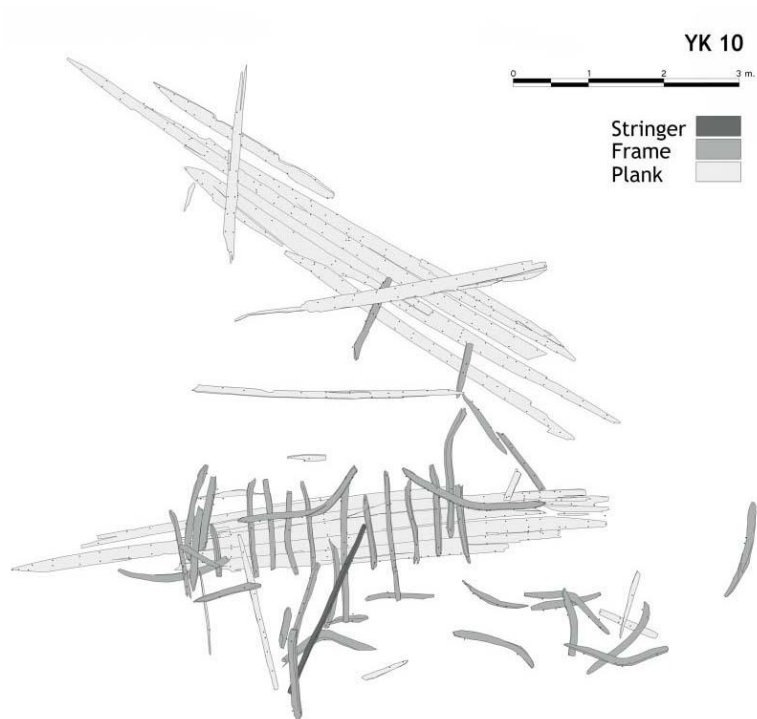
Keelson / Maststep – maststep on the center of the keel

Stringers – one nailed ceiling plank

Taxa - ?; S.M. - ?; Built - ?

Notes – Possibly a small merchantman

Yenikapi 10



Chronology 700 / 800

Preserved – 10 x 10 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – floors and futtocks

Planking method – planks on frames (diagonal scarves)

Hull shape – flat floor, round turn of the bilge

Fasteners – floors/planks: ?

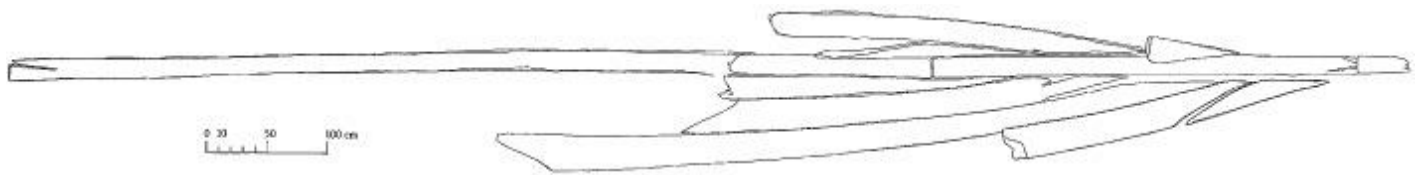
Keelson / Maststep – not preserved

Stringers – two preserved

Taxa - ?; S.M. - ?; Built - ?

Notes – Possibly a middle-sized merchantman

Yenikapi 15



Chronology 700 / 800

Preserved – 11.45 x 1.3 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – 7.55 m preserved (keel and post)

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – 2.3 cm

Framing pattern – ?

Planking method – ?

Hull shape – ?

Fasteners – floors/Keel: some floors fastened w/ iron nails; frames/planks: iron nails

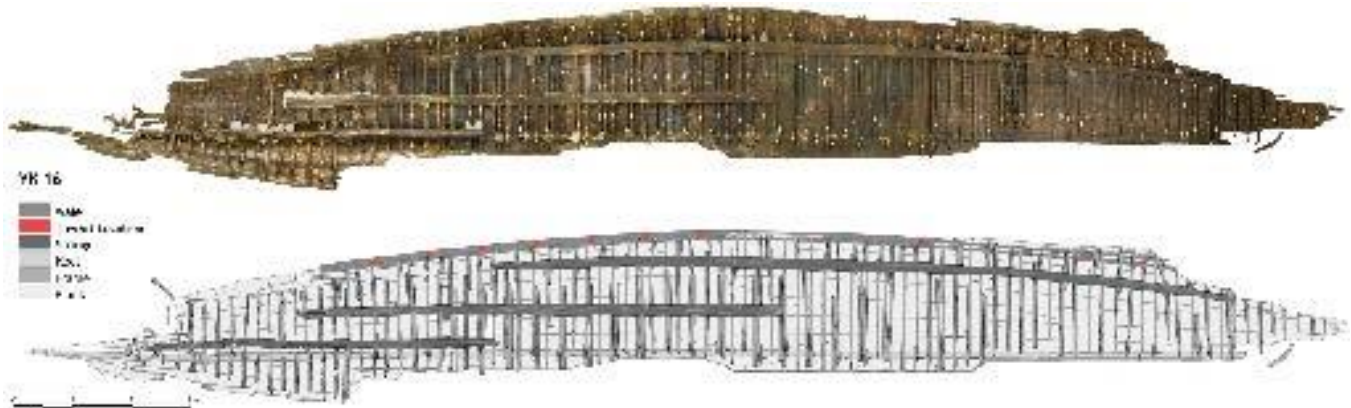
Keelson / Maststep – not preserved

Stringers – not preserved

Taxa - ?; S.M. - ?; Built - ?

Notes – merchantman

Yenikapi 16



Chronology 720 / 890 (C14)

Preserved – 22.5 x 2.4 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – coaks // 70-200 cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – ?

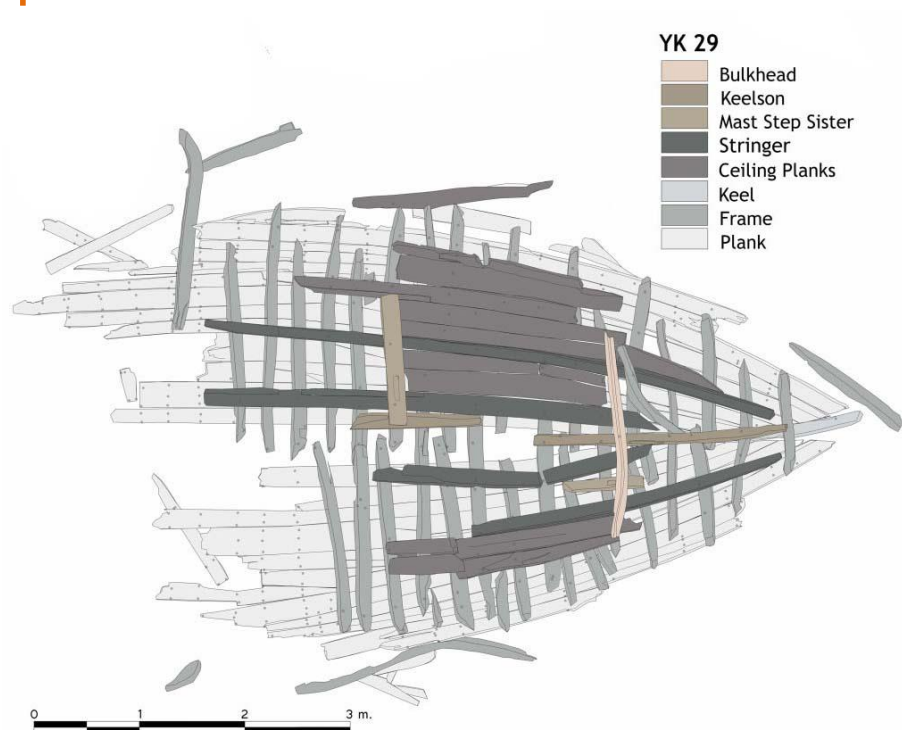
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – galley

Yenikapi 29



Chronology 750 / 850

Preserved – 7.9 x 4.5 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – Alternating floors and half-frames

Planking method – planks on frames

Hull shape – ?

Fasteners – floors/keel: ; frames/planks: iron nails

Keelson / Maststep – ?

Stringers – evenly spaced

Taxa - ?; S.M. - ?; Built - ?

Notes – merchantman

Yenikapi 30



Chronology 750 / 850

Preserved – fragmentary

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length –

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – ?

Hull shape – ?

Fasteners – ?

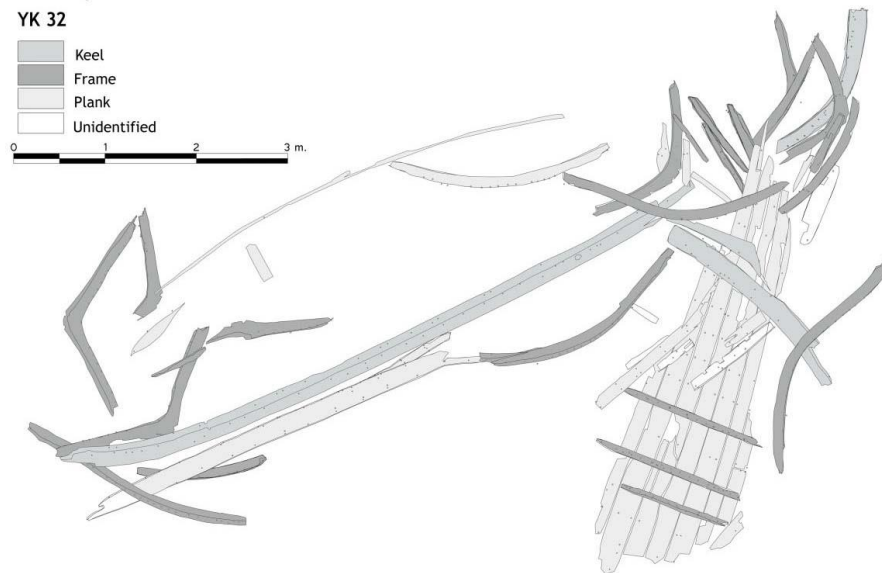
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – Possibly a small merchantman

Yenikapi 32



Chronology 750 / 850

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – coaks

Hull shape – ?

Fasteners – floors/keel: ; frames/planks: treenails and iron nails

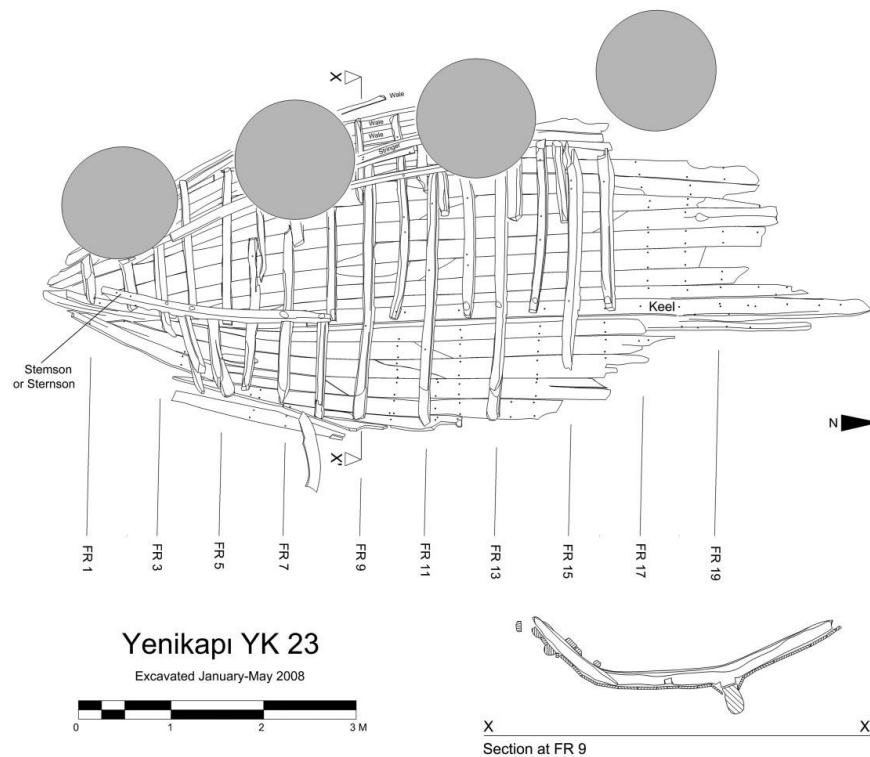
Keelson / Maststep – stemson

Stringers – ceiling

Taxa - ?; S.M. - ?; Built - ?

Notes – merchantman

Yenikapi 23



Chronology 775 / 825

Preserved – 9 x 3.7 m

Length reconstructed – 15 m; Beam reconstructed – 5 m

Keel length – 6.6 m preserved

Keel sided dimension – 17.5 cm

Keel molded dimension – 33 cm

Frames sided dimension – 11 cm

Frames molded dimension – 15 cm

Plank thickness – 2.5-4 cm

Framing pattern – Alternating floors and half-frames and futtocks (unattached)
// 38 cm

Planking method – coaks // 50 cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/keel: ; frames/planks:

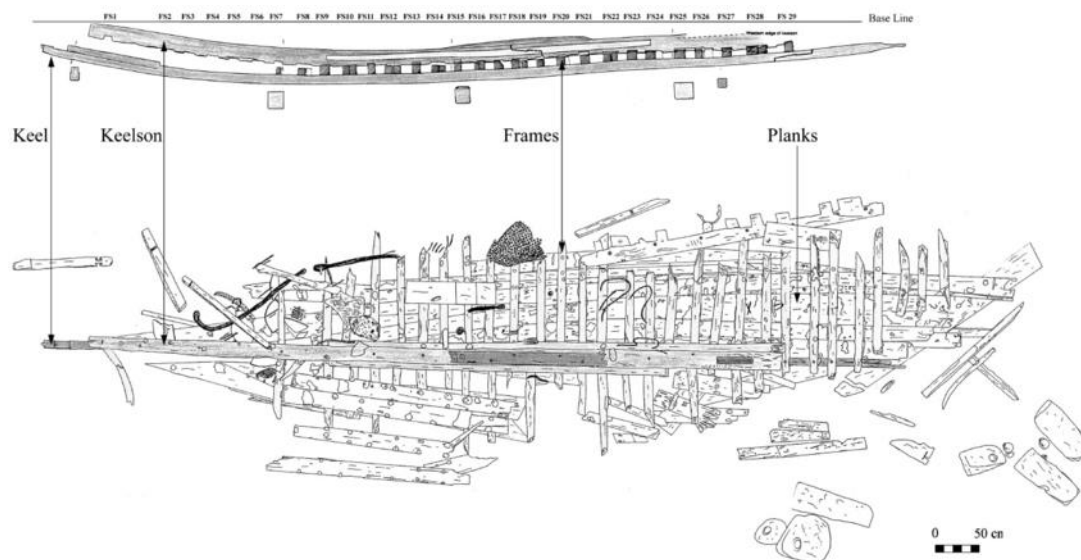
Keelson / Maststep – stemson or sternson bolted to the keel

Stringers – two preserved

Taxa - ?; S.M. - ?; Built - ?

Notes – sturdy merchantman

Tantura B



Chronology 800 / 850

Preserved – 12 x 3 m

Length reconstructed – 18-23 m; Beam reconstructed – 5 m

Keel length – 9.8 m

Keel sided dimension – 10.4 cm

Keel molded dimension – 9.5 cm

Frames sided dimension – 9.6 cm, half-fr. 8.7 cm

Frames molded dimension – 9.7 cm, half-fr. 9.1 cm

Plank thickness – 3 cm

Framing pattern – Alternating floors and half-frames w/ futtocks // 26 cm

Planking method – planks on frames, butt-joints and S scarves

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/keel: all nailed; frames/planks: iron nails

Keelson – 12.2-20 x 15.7-18 cm

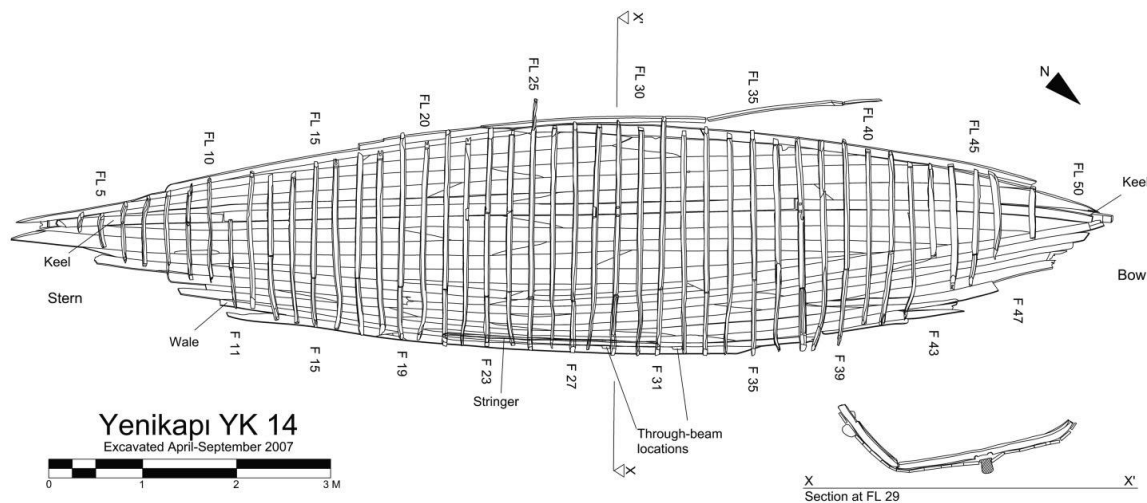
Maststep – recess on the keelson

Stringers – not preserved

Taxa - ?; S.M. - ?; Built - ?

Notes – P.K.&R.: frame-based, frame-first. Keelson in two pieces

Yenikapi 14



Chronology 800 / 850

Preserved – 12 x 2.5 m

Length reconstructed – 14.65 m;

Beam reconstructed – 3.4 m

Keel length – ?

Keel sided dimension – 11.2 cm

Keel molded dimension – 14.4 cm

Frames sided dimension – 5.8 cm

Frames molded dimension – 9.5 cm

Plank thickness – 2-2.5 cm

Framing pattern – alternating L-shaped floor timbers w/ short futtocks // 23 cm
(short floor arms scarved to the futtocks, not nailed)

Planking method – coaks // 39 cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/keel: every second or third floor fastened w/ iron nail;

floors/planks: trenails and nails

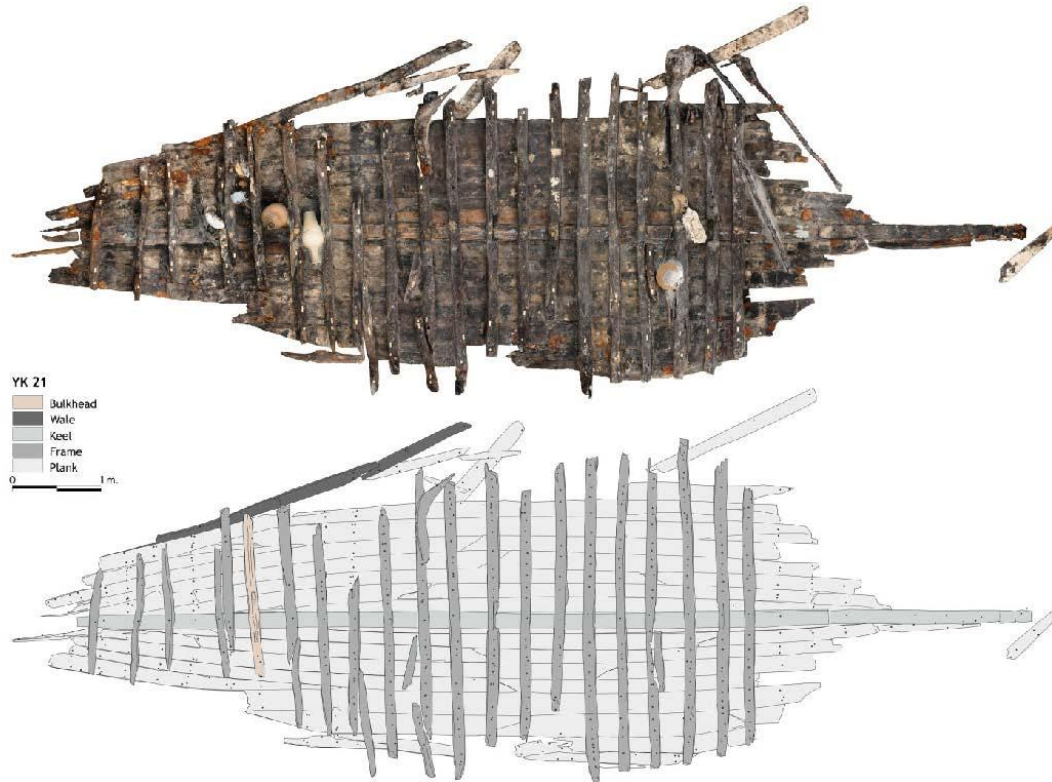
Keelson / Maststep – not preserved

Stringers – not preserved

Taxa - ?; S.M. - ?; Built - ?

Notes – considered too long and narrow to be a cargo vessel

Yenikapi 21



Chronology 800 / 900

Preserved – 11 x 4 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – 7.55 m preserved (keel and post)

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – coaks

Hull shape – flat floor

Fasteners – floors/Keel: some floors fastened w/ iron nails; frames/planks: iron nails

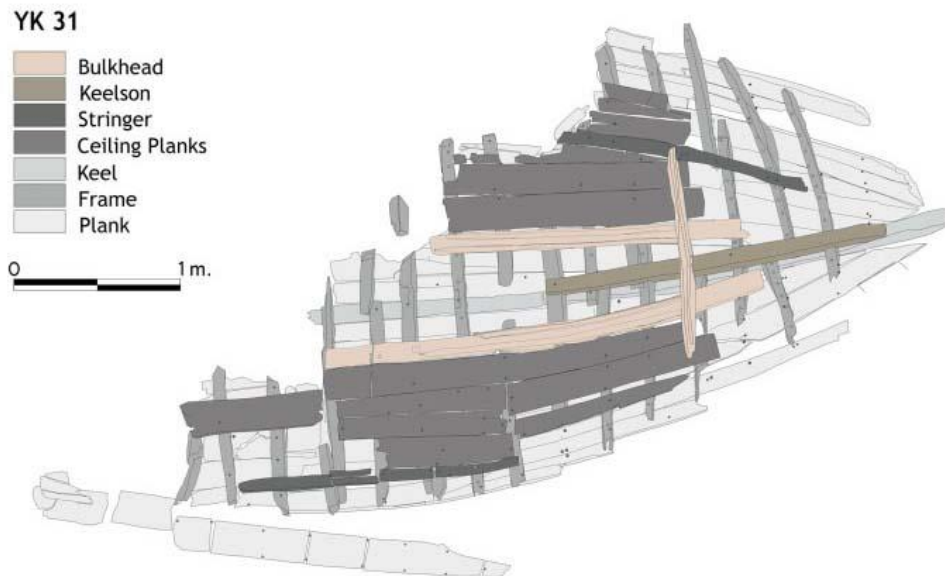
Keelson / Maststep – not preserved

Stringers – not preserved

Taxa - ?; S.M. - ?; Built - ?

Notes – merchantman

Yenikapi 31



Chronology 800 / 900

Preserved – 5 x 3 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – floors and futtocks (not fastened)

Planking method – planks on frames (S-shaped scarves)

Hull shape – ?

Fasteners – floors/keel: ; frames/planks: iron nails

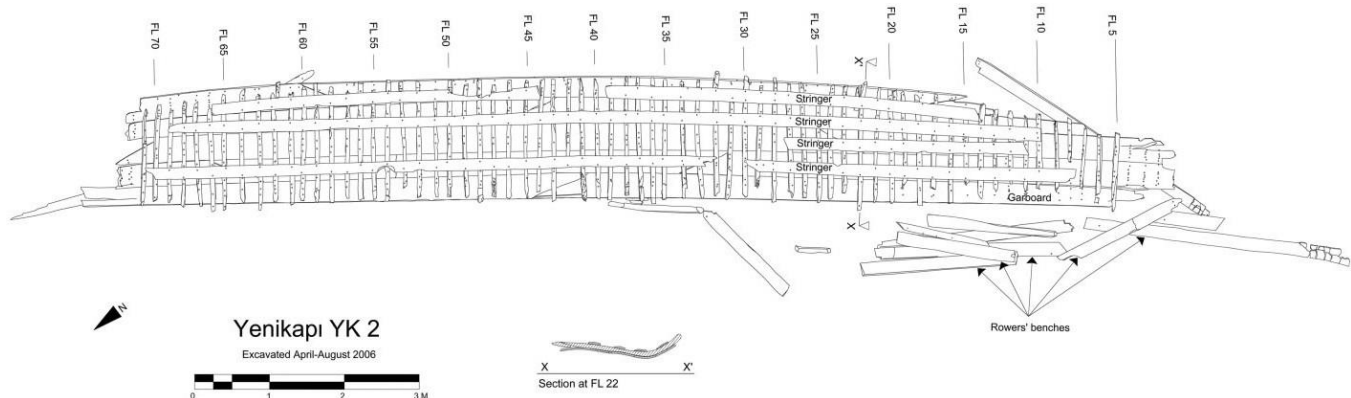
Keelson / Maststep – stemson

Stringers – ceiling

Taxa - ?; S.M. - ?; Built - ?

Notes – merchantman

Yenikapi 2



Chronology 850 / 950

Preserved – 14.5 x m

Length reconstructed – 30 m; Beam reconstructed – 4 m

Keel length – not preserved

Keel sided dimension – not preserved

Keel molded dimension – not preserved

Frames sided dimension – 6 cm

Frames molded dimension – 6 cm

Plank thickness – 1.7-2.5 cm

Framing pattern – Alternating floors and half-frames // 20 cm Planking method – coaks // 74 cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/planks: treenails and iron nails

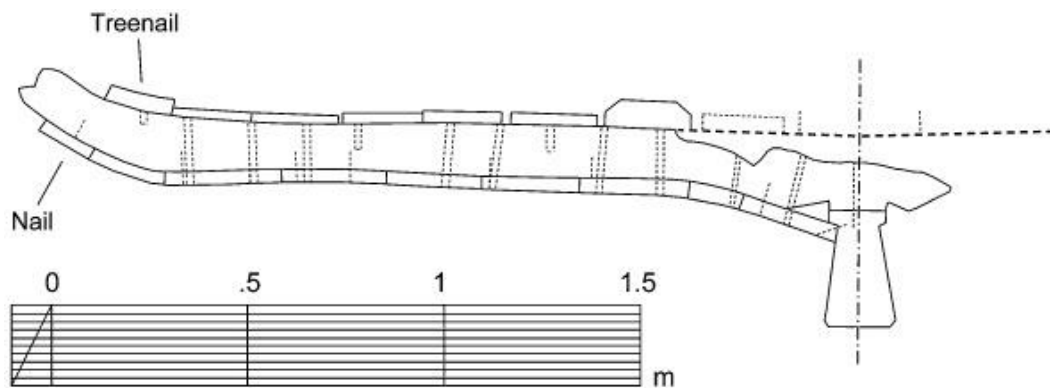
Keelson / Maststep – not preserved

Stringers – four, evenly spaced, 16.5 x 2-3 cm

Taxa - ?; S.M. - ?; Built - ?

Notes – galley

Bozburun



Chronology 874

Preserved – 13 x 4 m

Length reconstructed – 14.3 m; Beam reconstructed – 4.9 m

Keel length – 7.4 m

Keel sided dimension – 15-18 cm

Keel molded dimension – 29 cm

Frames sided dimension – 12 cm

Frames molded dimension – 14.5 cm

Plank thickness – 3.3 cm

Framing pattern – alternating L-shaped floor timbers w/ short futtocks // 35 cm

Planking method – coaks

Hull shape – Slightly wine-glassed; round turn of the bilge

Fasteners – floors/keel: iron spikes; frames/planks: iron nails and treenails; Planks: coaks

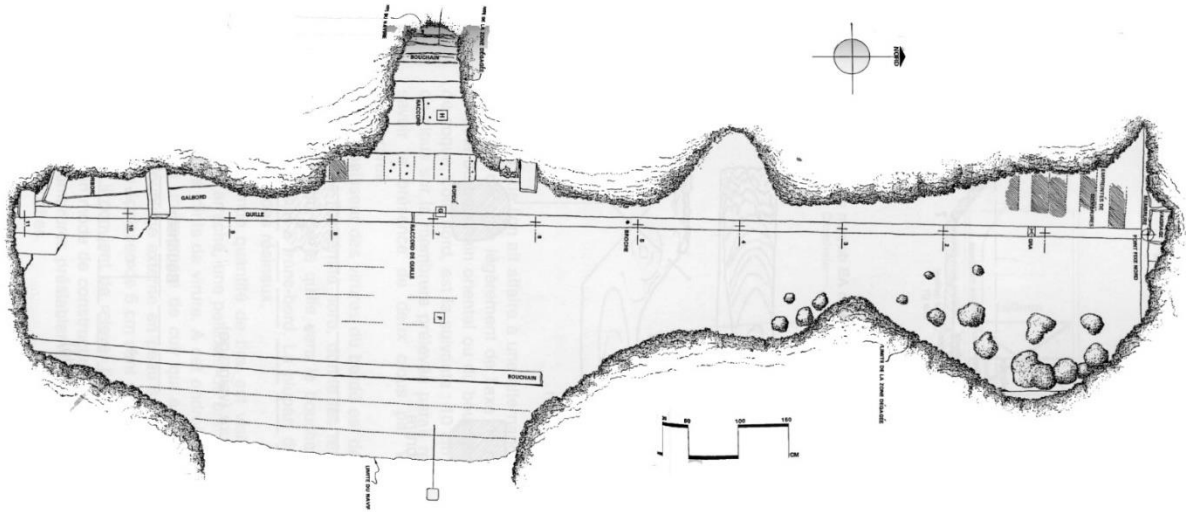
Keelson / Maststep – Yes, preserved

Stringers – Yes

Taxa - ?; S.M. - ?; Built - ?

Notes – N/A; Only small fragment of "maststep"; lateen sail

Bataiguier



Chronology 900 / 1000

Preserved – 11.4 x 4.3 m

Length reconstructed – 20 m; Beam reconstructed – ? m

Keel length – ? Visible along 11.1 m

Keel sided dimension – 10 cm

Keel molded dimension – 19 cm

Frames sided dimension – 18 cm

Frames molded dimension – 20 cm

Plank thickness – 4 cm

Framing pattern – long-armed floor-timbers alternating to port and starboard // 10-13 cm

Planking method – planks on frames

Hull shape – Flat floor, sharp 135° turn of the bilge

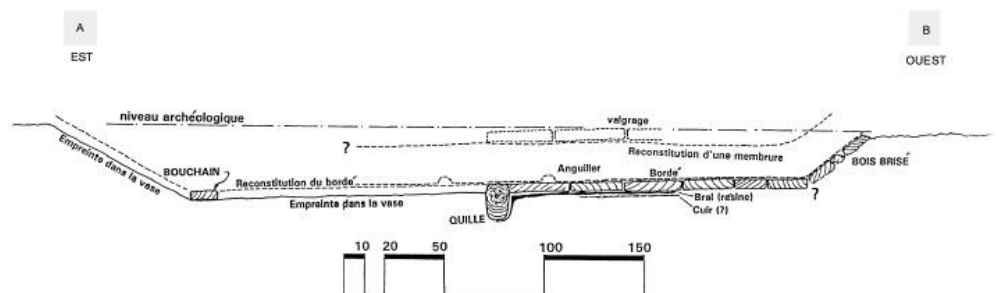
Fasteners – floors/planks: 2 iron nails per plank; floors/keel: all nailed

Keelson / Maststep – not preserved

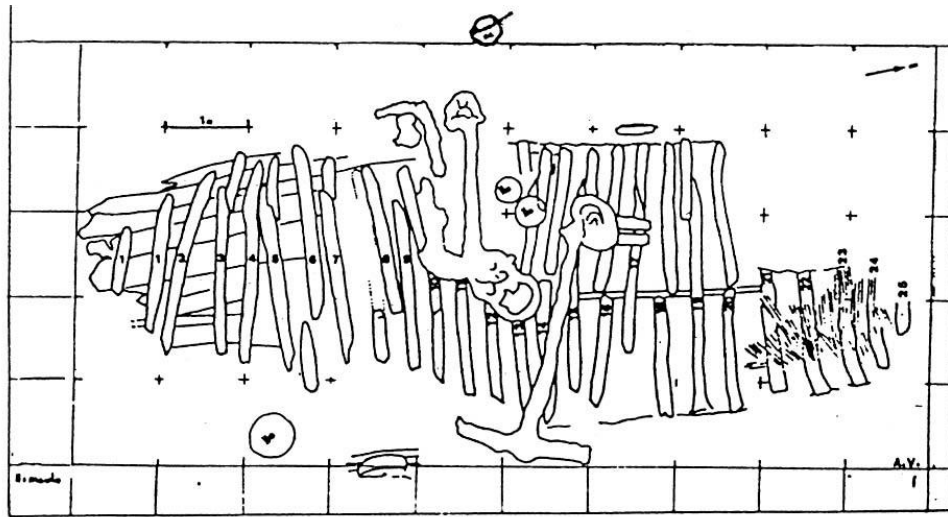
Stringers – ceiling

Taxa - ?; S.M. - ?; Built - ?

Notes –



Agay A



Chronology 900 / 1000

Preserved – 10.5 x 4 m

Length reconstructed – 22 m; Beam reconstructed – 7 m

Keel length – ? Visible along 4 m

Keel sided dimension – 10.5 cm

Keel molded dimension – 17.5 cm

Frames sided dimension – 12.5-14.5 cm

Frames molded dimension – 10-13 cm

Plank thickness – 2-2.6 cm

Framing pattern – Alternating floors and half-frames and futtocks // 14-23 cm

Planking method – planks on frames

Hull shape – Flat floor timbers, z rounded bilge and straight sides

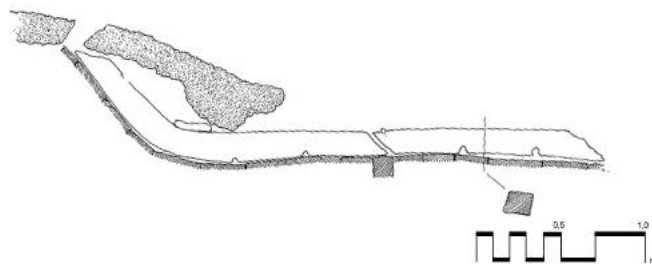
Fasteners – floors/planking: iron nails; floors/keel: all nailed

Keelson / Maststep – Not preserved

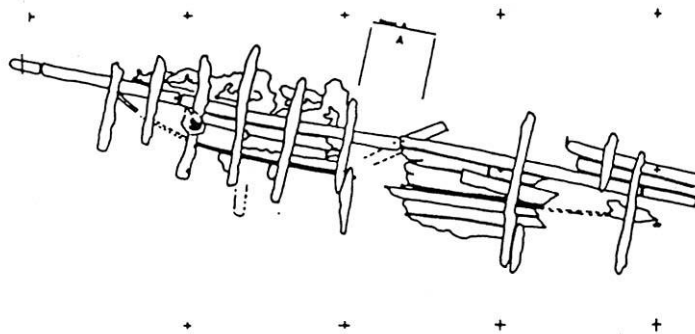
Stringers – Ceiling

Taxa - ?; S.M. - ?; Built - ?

Notes –



Agay B



Chronology 900 / 1000

Preserved – x m

Length reconstructed – 9 m; Beam reconstructed – 2.5 m

Keel length –

Keel sided dimension – 5.5 cm

Keel molded dimension – 7 cm

Frames sided dimension – 6 cm

Frames molded dimension – 6 cm

Plank thickness – 1.8 cm

Framing pattern – floors and futtocks

Planking method – planks on frames

Hull shape – round bottom

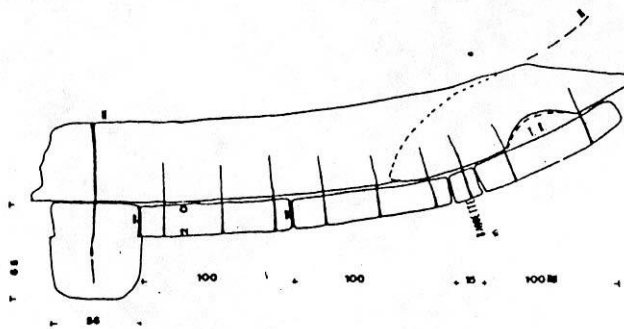
Fasteners – floors/planking: iron nails

Keelson / Maststep – ?

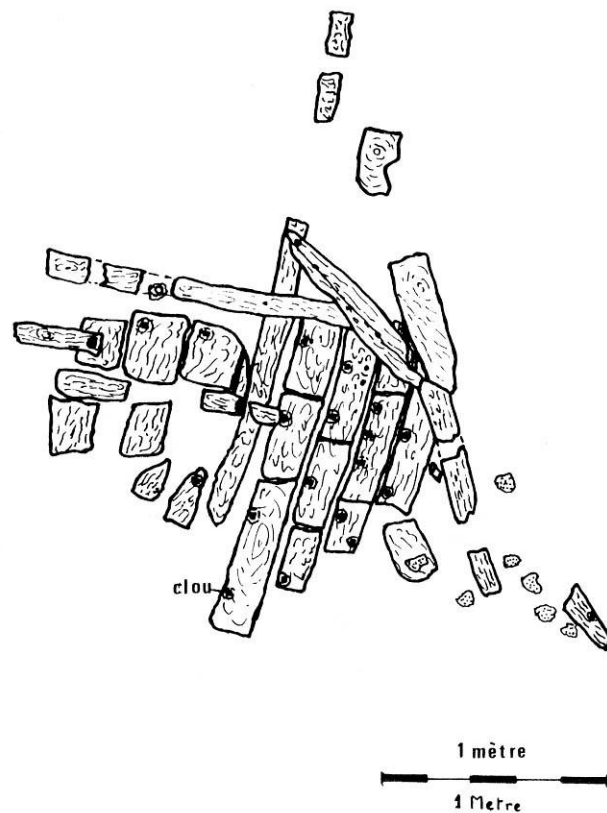
Stringers – Ceiling

Taxa - ?; S.M. - ?; Built - ?

Notes –



Estéou



Chronology 900 / 1000

Preserved – 3 x 2 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – planks on frames

Hull shape – ?

Fasteners – frames/planks: iron nails

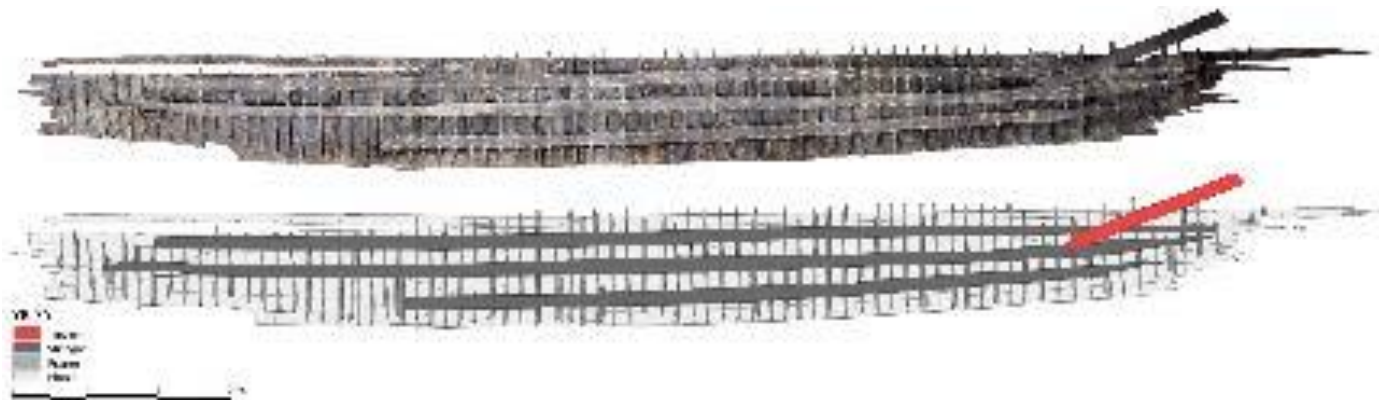
Keelson / Maststep – not preserved

Stringers – not preserved

Taxa - ?; S.M. - ?; Built - ?

Notes –

Yenikapi 25



Chronology 900 / 1000

Preserved – 19 x 1.5 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – coaks // 30-35 cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – ?

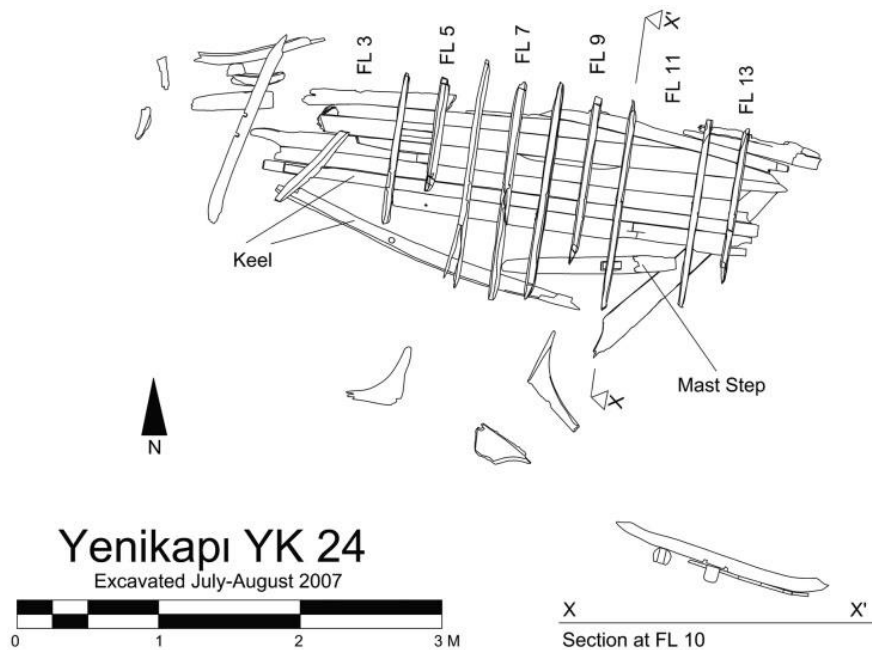
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – galley

Yenikapi 24



Chronology 900 / 1000

Preserved – 5 x 3 m

Length reconstructed – 8 m; Beam reconstructed – 2.5 m

Keel length – 3.19 m preserved

Keel sided dimension – 8.2 cm

Keel molded dimension – 10.6 cm

Frames sided dimension – 6.1 cm

Frames molded dimension – 9.7 cm

Plank thickness – 2-2.3 cm

Framing pattern – floors and futtocks // 27 cm

Planking method – coaks // 28 cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/keel: some were fastened, some with treenails, some with iron nails; floors/planks: treenails and iron nails

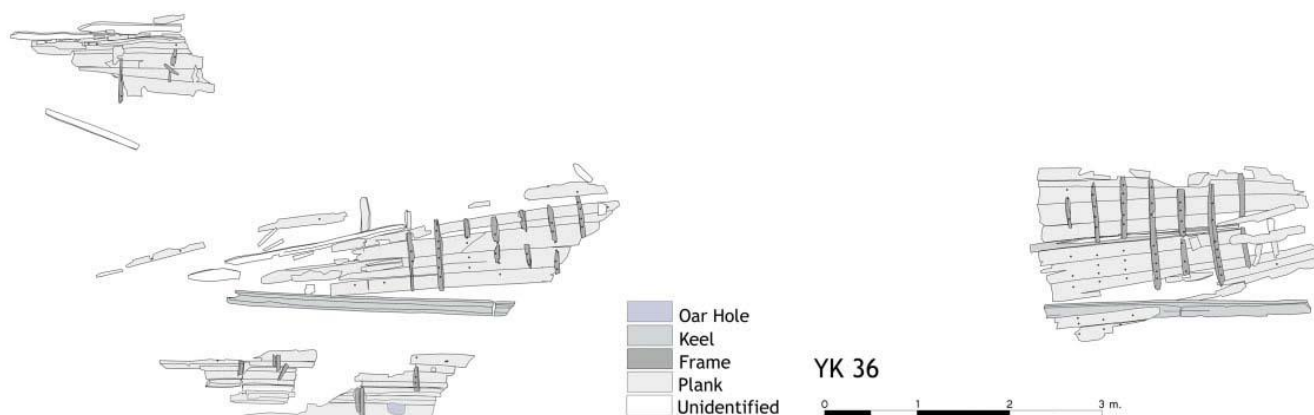
Keelson / Maststep – Not preserved; disarticulated maststep 1.27 m, 12 x 9.5 cm

Stringers – Not preserved

Taxa - ?; S.M. - ?; Built - ?

Notes – Small cargo or fishing vessel

Yenikapi 36



Chronology 900 / 1000

Preserved – 30 x 10 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – coaks // ? cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – galley

Plaza Nueva



Chronology – 947 / 1023

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 10 cm

Frames molded dimension – 10 cm

Plank thickness – 2 cm

Framing pattern – ?

Planking method – planks on frames?

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – frames/planks: iron nails

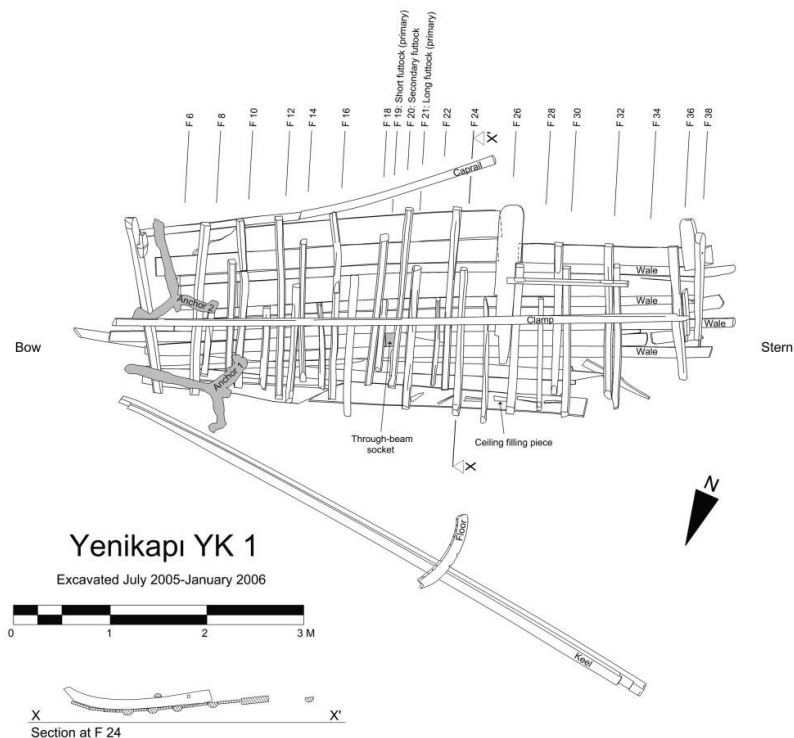
Keelson / Maststep – preserved keelson

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes – No notes

Yenikapi 1



Chronology 950 /1050

Preserved – 6.5 x 3 m

Length reconstructed – 10 m; Beam reconstructed – 3.5 m

Keel length – 6.2 m

Keel sided dimension – 10.3 cm

Keel molded dimension – 13.6 cm

Frames sided dimension – 6.6 cm floors and 8.2 cm futtocks

Frames molded dimension – 9.5 cm floors and 11.3 cm futtocks

Plank thickness – 1.7-2.5 cm

Framing pattern – alternating L-shaped floor timbers w/ short futtocks // 28 cm

Planking method – coaks // 27 cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/keel: 12/20 floors fastened iron nails; floors/planks: treenails and iron nails

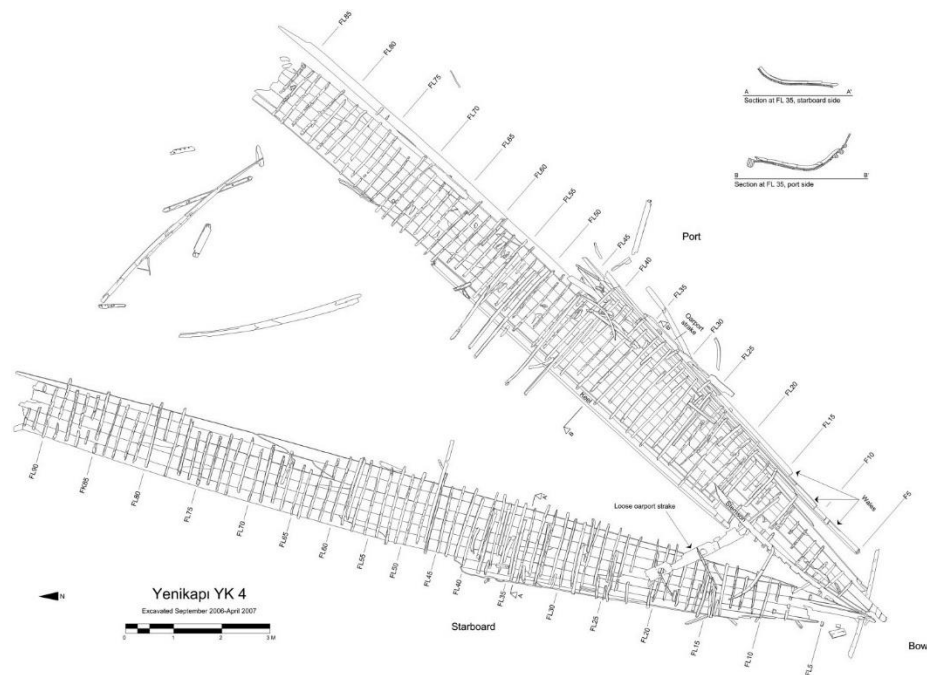
Keelson / Maststep – not preserved

Stringers – a single light stringer

Taxa - ?; S.M. - ?; Built - ?

Notes – was overhauled and its sides raised

Yenikapi 4



Chronology 950 / 1050

Preserved – 18 x ? m

Length reconstructed – 30 m; Beam reconstructed – 4 m

Keel length – ?

Keel sided dimension – 14 cm

Keel molded dimension – 16.5 cm

Frames sided dimension – 6-7 cm

Frames molded dimension – 6-7 cm

Plank thickness – 2.5-3 cm

Framing pattern – floors and paired half-frames // 23 cm

Planking method – coaks // 150 cm up to the waterline

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors and half-frames/ keel: iron spike; floors/planks: treenails and iron nails

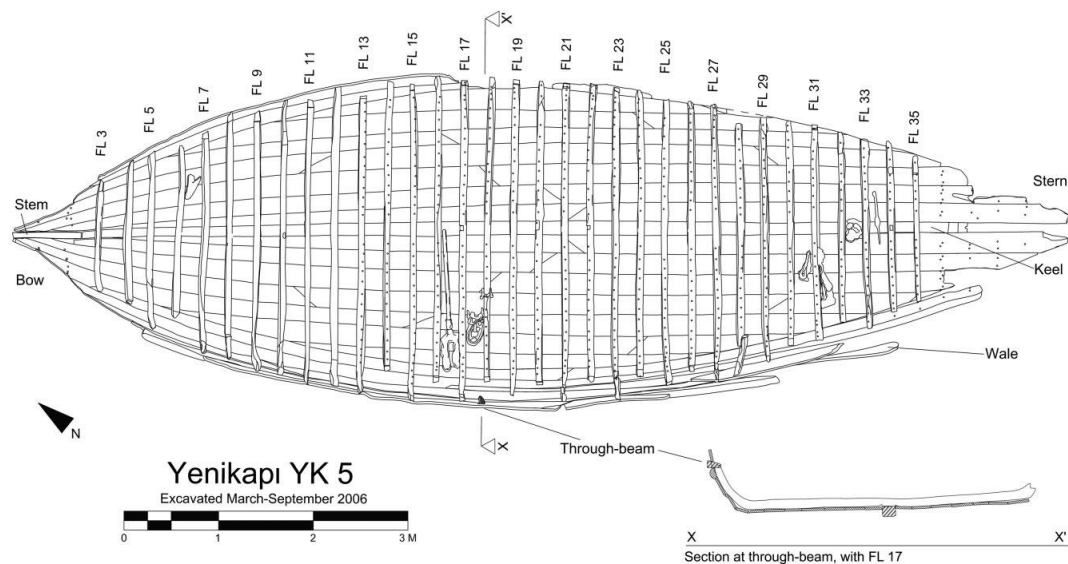
Keelson / Maststep – stemson preserved; there was no maststep

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – galley

Yenikapi 5



Chronology 950 /1050

Preserved – 12 x 3.5 m

Length reconstructed – 14.5 m; Beam reconstructed – 5 m

Keel length – 8.2 m

Keel sided dimension – 12.1 cm

Keel molded dimension – 8.9 cm

Frames sided dimension – 7.5 cm

Frames molded dimension – 11 cm

Plank thickness – 2-2.5 cm

Framing pattern – alternating L-shaped floor timbers scarfed to in-line futtocks // 28 cm

Planking method – coaks // 31 cm in the lower hull; planks on frames above

Hull shape – Flat floor, sharp turn of the bilge

Fasteners – floors/keel: every other floor fastened w/ iron nail; floors/planks: treenails and iron nails

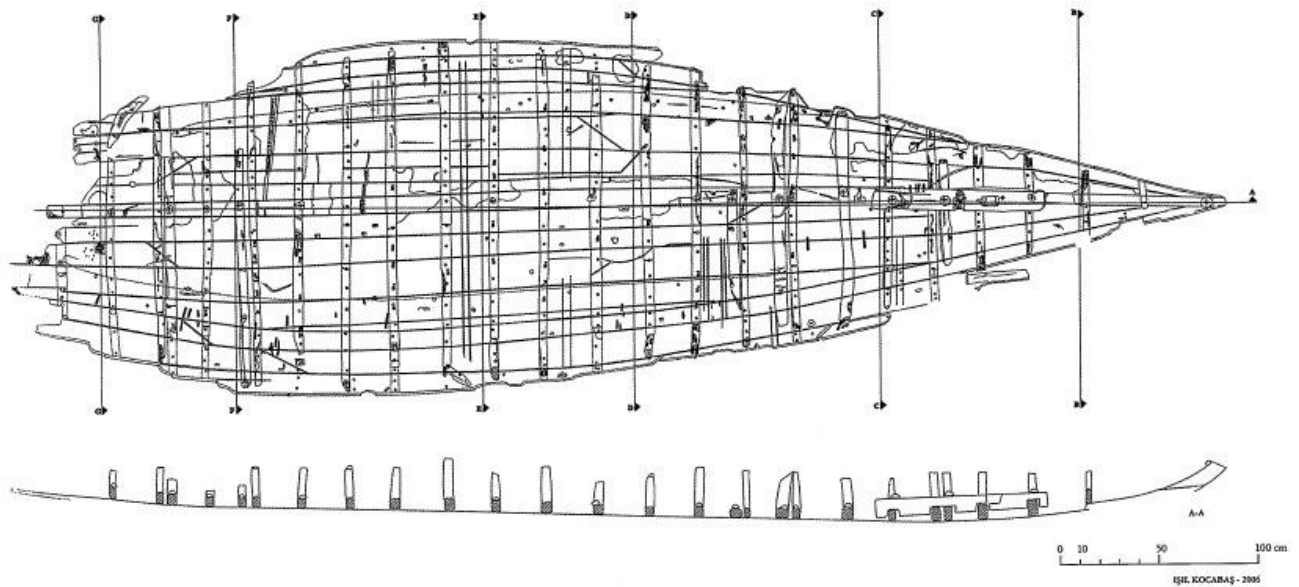
Keelson / Maststep – maststep not preserved, 1.35 m long

Stringers – not preserved

Taxa - ?; S.M. - ?; Built - ?

Notes – cargo ship

Yenikapi 6



Chronology 950 /1050

Preserved – 6.2 x 1.9 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – floor timbers and futtocks aligned

Planking method – coaks // 30-35 cm

Hull shape – Flat floor, round turn of the bilge

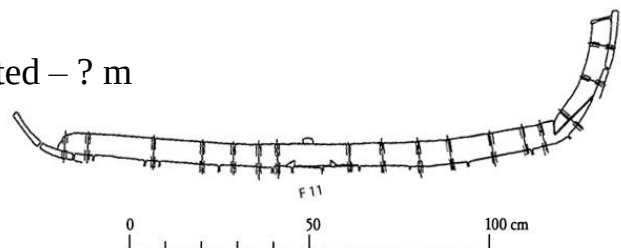
Fasteners – ?

Keelson / Maststep – a maststep fastened to the keel and frames

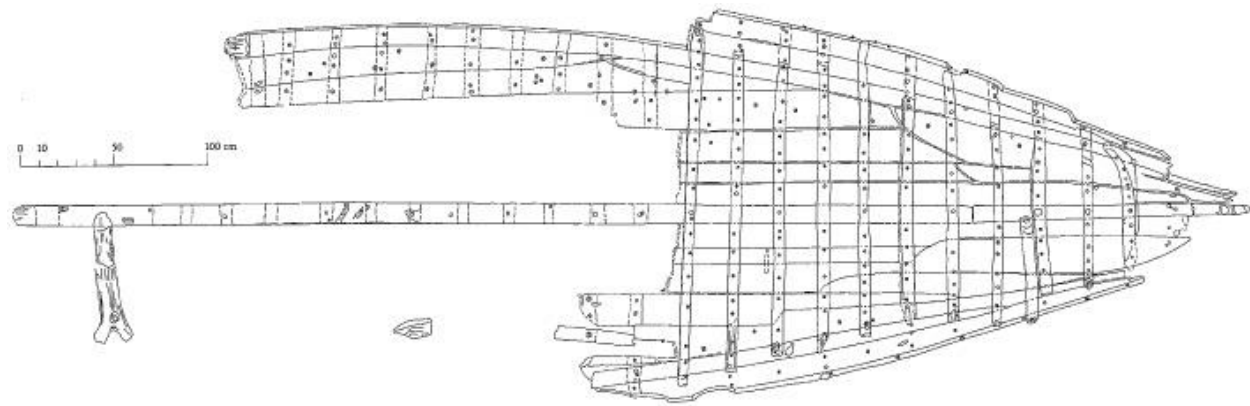
Stringers – Bilge keels

Taxa - ?; S.M. - ?; Built - ?

Notes – Possibly a small merchantman; rigged w/ a spritsail



Yenikapi 7



Chronology 950 /1050

Preserved – 6.6 x 2.1 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – floor timbers and futtocks aligned

Planking method – coaks // ? cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – ?

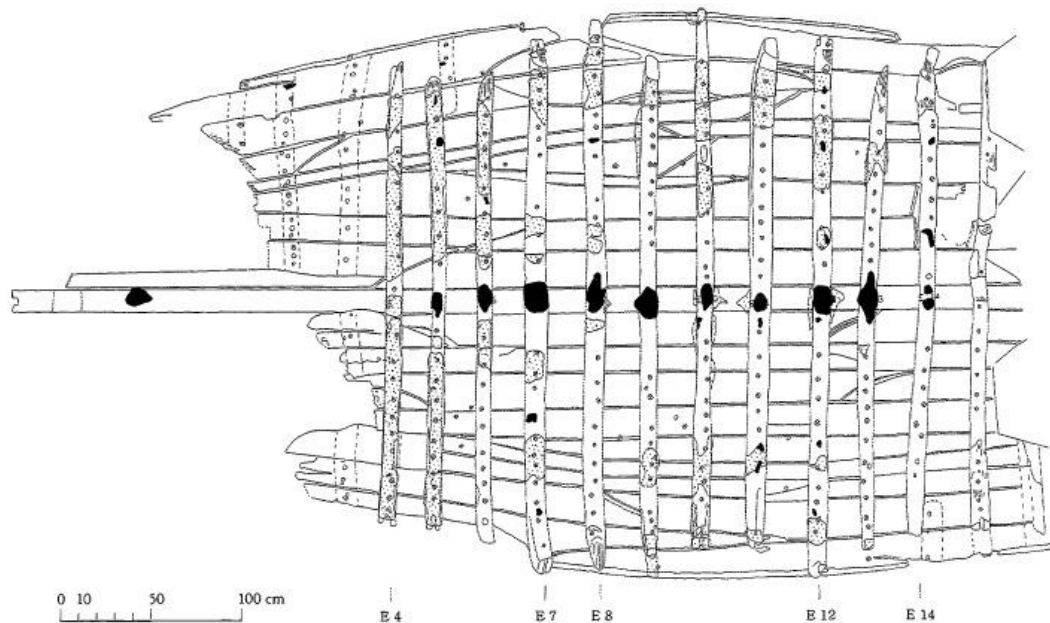
Keelson / Maststep – not preserved

Stringers – Bilge keels

Taxa - ?; S.M. - ?; Built - ?

Notes – Possibly a small merchantman

Yenikapi 8



Chronology 950 /1050

Preserved – 5 x 2.9 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – 2.5 cm

Framing pattern – floor timbers and futtocks aligned

Planking method – planks on frames, coaks in strake scarves

Hull shape – Flat floor, round turn of the bilge

Fasteners – Frames/planks: treenails and iron nails

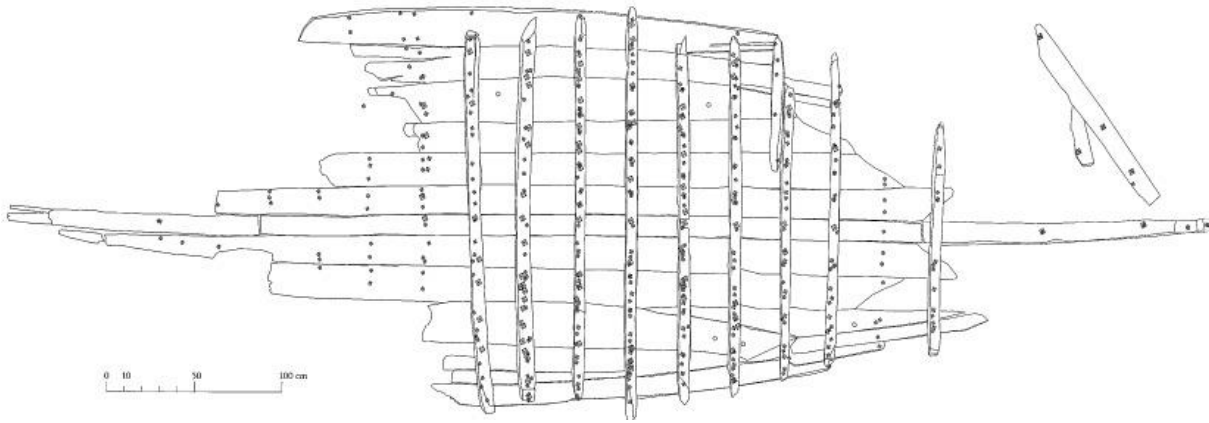
Keelson / Maststep – not preserved

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – Possibly a small merchantman

Yenikapi 9



Chronology 950 /1050

Preserved – 6.54 x 1.98 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – floor timbers and futtocks overlapping

Planking method – coaks // ? cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – Frames/planks: treenails and iron nails

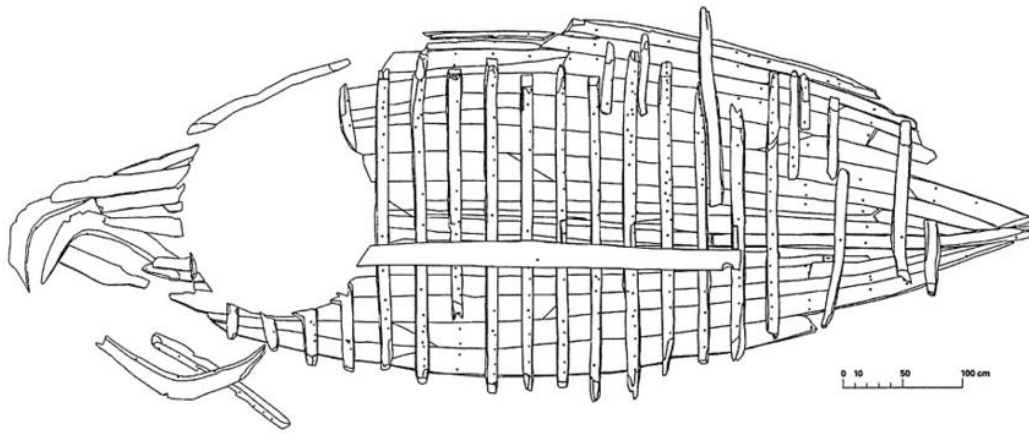
Keelson / Maststep – a maststep fastened to the keel and frames

Stringers – ?

Taxa - ?; S.M. - ?; Built - ?

Notes – Possibly a small merchantman

Yenikapi 18



Chronology 950 / 1050

Preserved – 8.25 x 3.2 m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – floor timbers and futtocks aligned

Planking method – coaks // ? cm

Hull shape – Flat floor, round turn of the bilge

Fasteners – Frames/planks: treenails and iron nails

Keelson / Maststep – maststep on the center of the keel

Stringers – one nailed ceiling plank

Taxa - ?; S.M. - ?; Built - ?

Notes – Possibly a small merchantman

Serçe Limani

Chronology 1025 /1050

Preserved – 14 x 3 m

Length reconstructed – 15.66 m;

Beam reconstructed – 5.2 m

Keel length – 11.23 m

Keel sided dimension – 11 cm

Keel molded dimension – 16 cm

Frames sided dimension – 12 cm

Frames molded dimension – 16 cm

Plank thickness – 3.5 cm

Framing pattern – Full midship frame, long-armed floor-timbers alternating to port and starboard, a few half-frames, V-shaped tail-frames, and futtocks // 33 cm

Planking method – frames on planks, diagonal and s-scarves

Hull shape – Flat floor, sharp turn of the bilge

Fasteners – Keel/keelson: iron forelock bolts; floors/keel: iron nails; floors/planks: iron nails.

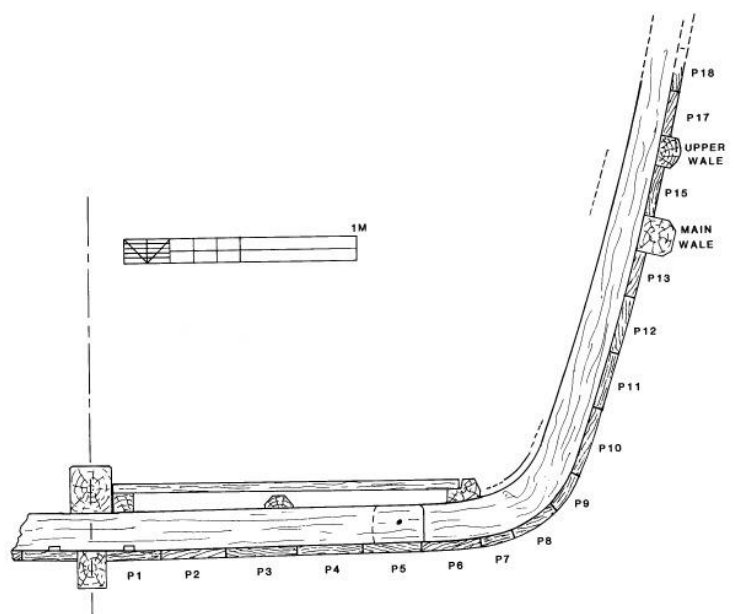
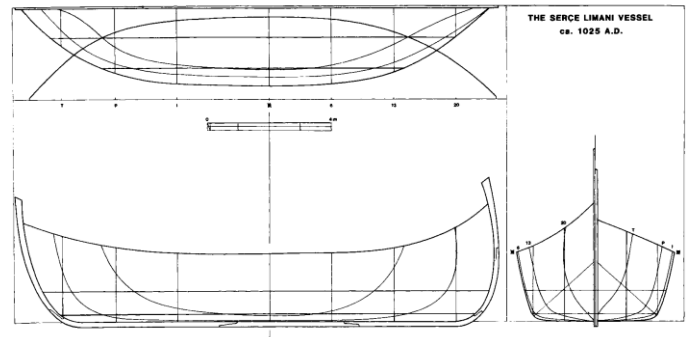
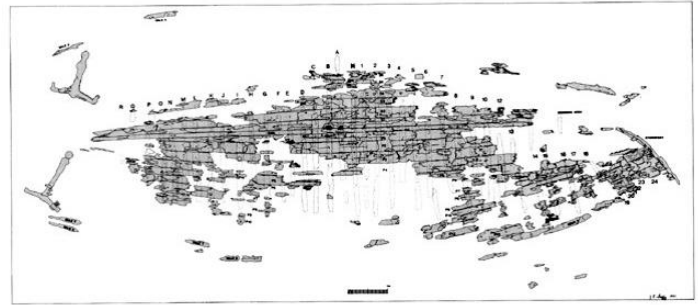
Keelson – 2.17 m preserved; 18 x 20 cm

Maststep – one or two, not preserved

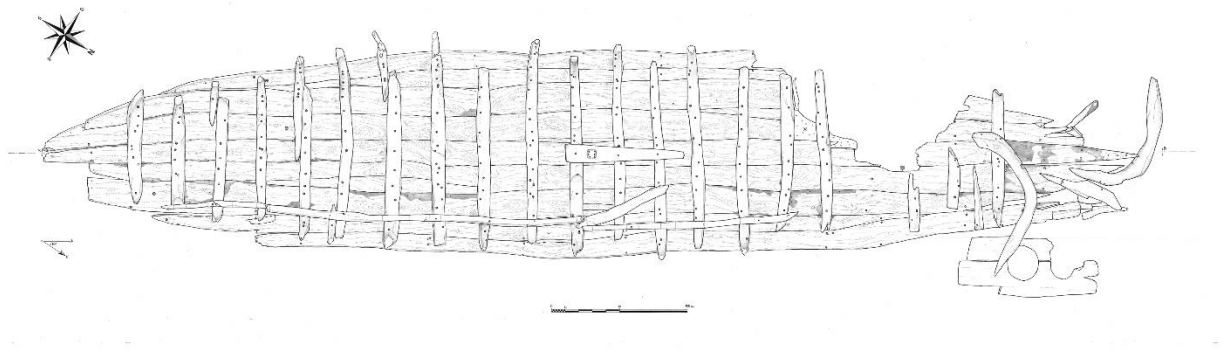
Stringers – yes

Taxa - ?; S.M. - ?; Built - ?

Notes –



Preceñicco



Chronology 1040 / 1220

Preserved – 8 x 1.6 m

Length reconstructed – 8 m; Beam reconstructed – ? m

Central plank length – ?

Keel sided dimension – 16-19 cm

Keel molded dimension – 3.5 cm

Frames sided dimension – 9 cm

Frames molded dimension – 9-13 cm

Plank thickness – 3.5 cm

Framing pattern – Floors and futtocks; Alternating L-shaped floors. R&S = 33 cm.

Planking method – Planks on frames

Hull shape – Flat floor, round turn of the bilge

Fasteners – floors/planking: treenails

Keelson – No keelson

Maststep – short, spanning 3 floors

Stringers – One preserved along the turn of the bilge

Taxa - ?; S.M. - ?; Built - ?

Notes –

Sisak



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Lido de Venice



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Pomposa



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Corte Cavanella 1-2



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Planier 3



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Toulon 1



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Toulon 2 *Horeia*



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Jules Verne 6



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

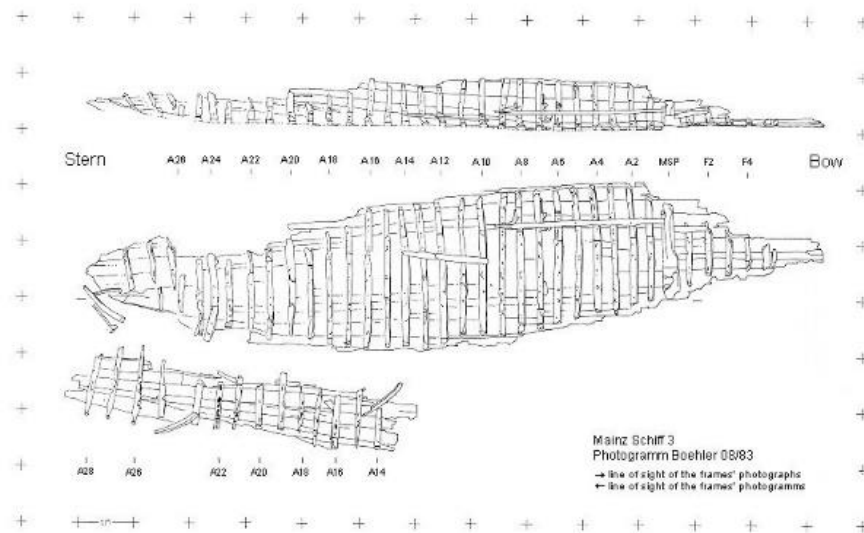
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Mainz 3



Chronology - 248

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – Flat bottom, round turn of the bilge

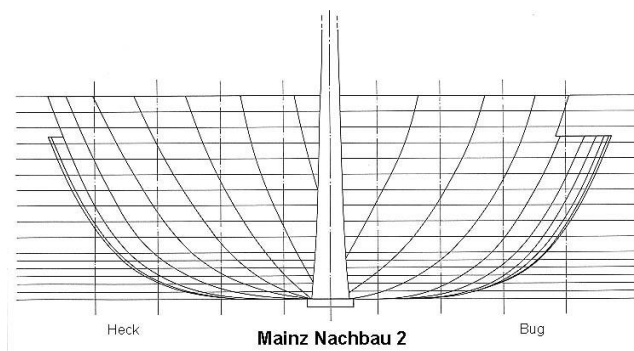
Fasteners – ?

Keelson / Maststep – ?

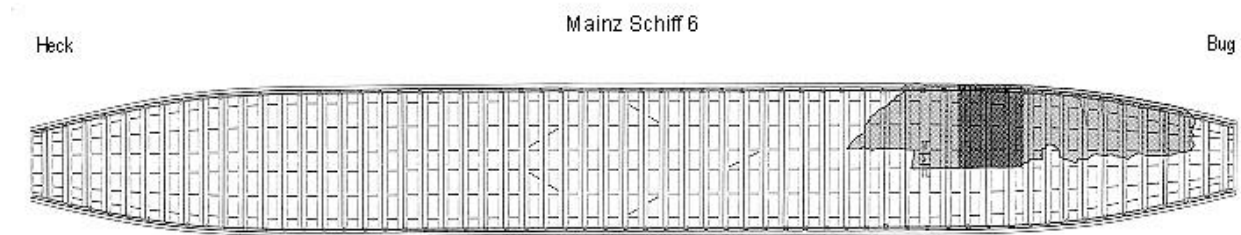
Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –



Mainz 6



Chronology - 81

Preserved – 11 x 2.6 m

Length reconstructed – 40 m; Beam reconstructed – 5 m

Keel length – No keel architecture

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – 15-20 cm

Frames molded dimension – 7 cm

Plank thickness – 3 cm

Framing pattern – Floor timbers and L futtocks

Planking method – Bottom based

Hull shape – Flat floor, L chine

Fasteners – Frames/planks: iron nails

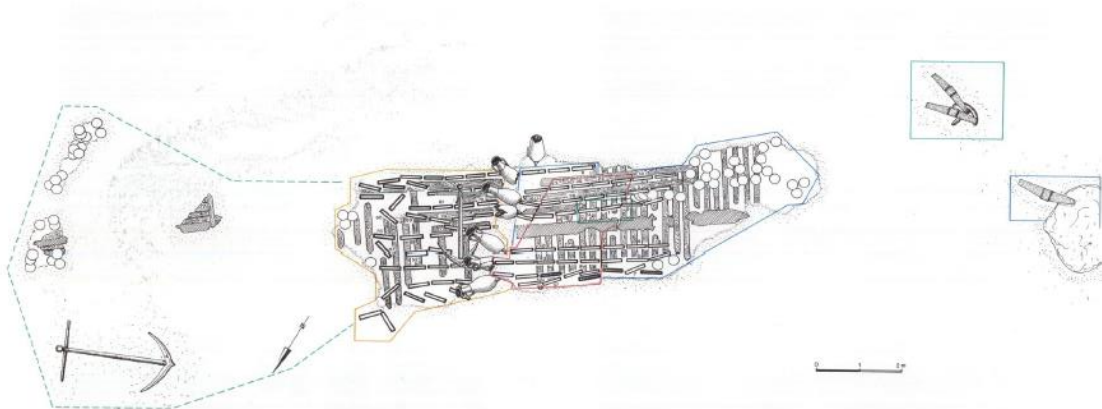
Keelson / Maststep – No

Stringers – Yes

Taxa - ?; S.M. - ?; Built – Moguntiacum

Notes – Type Zwammerdam

Sud Lavezzi 2



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Cavanella d'Adige



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Olbia 3



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Olbia 4



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Olbia 5



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Olbia 6



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Olbia 7



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Phanagoria



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

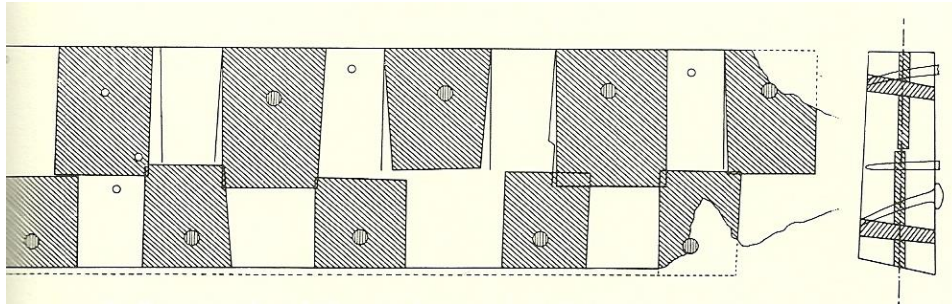
Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Grand Conglue



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Antibes



Chronology – ?
Preserved – ? x ? m
Length reconstructed – ? m; Beam reconstructed – ? m
Keel length – ?
Keel sided dimension – ? cm
Keel molded dimension – ? cm
Frames sided dimension – ? cm
Frames molded dimension – ? cm
Plank thickness – ? cm
Framing pattern – ?
Planking method – pM&T
M&T – T ? X ? x ? cm // ? cm
Hull shape – ?
Fasteners – ?
Keelson / Maststep – ?
Stringers – ?
Taxa - ?; S.M. - ?; Built – ?
Notes –

Mèdes 6



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Port la Nautique



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

Mandirac 1



Chronology – ?

Preserved – ? x ? m

Length reconstructed – ? m; Beam reconstructed – ? m

Keel length – ?

Keel sided dimension – ? cm

Keel molded dimension – ? cm

Frames sided dimension – ? cm

Frames molded dimension – ? cm

Plank thickness – ? cm

Framing pattern – ?

Planking method – pM&T

M&T – T ? X ? x ? cm // ? cm

Hull shape – ?

Fasteners – ?

Keelson / Maststep – ?

Stringers – ?

Taxa - ?; S.M. - ?; Built – ?

Notes –

INSTITUTO
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