Transparent beauty - glass from Croatian museums: from prehistory to the middle ages

Gregl, Zoran; Leljak, Mia

ARCHAEOLOGICAL MUSEUM IN ZAGREB

MUZEJ MIMARA

TRANSPARENT BEAUTY

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GLASS FROM CROATIAN MUSEUMS

FROM PREHISTORY TO THE MIDDLE AGES

THE EXHIBITION IS HELD UNDER THE AUSPICES OF THE PRESIDENT OF CROATIA, IVO JOSIPOVIĆ

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GLASS FROM CROATIAN MUSEUMS

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Preface by the three directors

The exhibition *TRANSPARENT BEAUTY: Glass from Croatian Museums*, organized by three national museums – the Archaeological Museum in Zagreb, the Museum of Arts and Crafts, and the Mimara Museum, presents the greatest achievements of craft and artistic creation formed in glass from prehistory to the present day. This unique museum project involved, in addition to the main museums above, the participation of another thirty-three museums from throughout all of Croatia, and for the first time offers the Croatian and international public insight into this exceptional aspect of the Croatian cultural and artistic heritage. The exhibition, presented simultaneously at three separate museums in Zagreb, features the most luxurious and unique examples of glass.
The selected examples of transparent beauty clearly testify to the civilizational accomplishments and creativity of the artists, as well the richness of the glass collections in Croatian museums, placing those of our museums alongside the choicest exponents from the treasuries of European museums as a whole.

At the Archaeological Museum in Zagreb the exhibition *TRANSPARENT BEAUTY: Glass from Croatian Museums – From Prehistory to the Middle Ages*, visitors can learn about the earliest creations in glass made in the period from the 2nd millennium BC to the 14th century AD, selected items that are kept in the holdings of archaeological collections throughout Croatia (Zagreb, Split, Zadar, Osijek, Vinkovci, etc..).
At the Museum of Arts and Crafts, the exhibition *TRANSPARENT BEAUTY: Glass from Croatian Museums – From the 15th to the 20th Centuries* presents the achievements of European glassworking from the stylistic periods of the Renaissance, the Baroque, Biedermeier, Historicism, Art Nouveau, and Art Deco. This part of the exhibition, dominated by material from the collections of the Museum of Arts and Crafts, concludes with the creations of Croatian artists in glass – from Tomislav Krizman to Raoul Goldoni.
In a separate section in the Mimara Museum, in the exhibition *TRANSPARENT BEAUTY: Glass in Contemporary Croatian Sculpture*, visitors can become acquainted with the creations of modern Croatian sculptors working in glass (Kuzma Kovačić, Kažimir Hraste, Dražen Trogrlić, Gordana Drinković, and others), many of whose works will undoubtedly become valuable exponents of museum collections in Croatia.

The organizing museums gratefully thank the Ministry of Culture of the Republic of Croatia and the City of Zagreb for their wholehearted support of this project, which was conceived and accomplished as a contribution by the museum community celebrating the entrance of Croatia ino the European Union.
No less thanks are also offered to general and media sponsors, with whose aid the exhibition was more easily created and successfully became a reality.
We would also like to thank all participants – both institutions and individuals, for every form of assistance offered.
Special thanks go to the chief patron of the exhibition, the Presdient of the Republic of Croatia, Ivo Josipović.
The kind gesture of the President's patronage makes this exhibition, opened at such a special historical moment, historical in and of itself.

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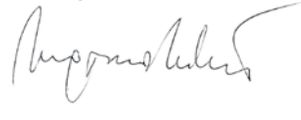

The history of glass

"I would like to show Posidonius some glass-blower who by his breath moulds the glass into manifold shapes that could scarcely be fashioned by the most skillful hand."
(Seneca, Epistulae XIV, 90, 31).[1]

Revolutionary changes occurred in Roman glass production thanks to the discovery that molten glass could be blown. Although the Roman glassworkers did not invent this technique, rather it is attributed to workshops in the Syrian-Palestinian region, the process was perfected in Italy. The earliest workshops were located in the area of Rome and Campania, and in the coastal region of the northern Adriatic Sea. Many glassworkers from the East moved to Italy, where they opened their own workshops, and a settlement of glassworkers existed in Rome – the *vicus vitrarius* near the *Porta Capena*. To the middle of the 1st century AD, Roman glass production had surpassed all its ancient predecessors in its innovations, productivity, and the sheer quantity of vessels produced, while the second half of the 1st century was the period when the forms of vessels, as well as their functions, were most varied. Glass production had spread to the provinces to the end of the 1st century, leading to the creation of recognizable regional styles. The story of glass, however, begins long before the appearance of the Romans.
Glass, a mixture of three components – silica, lime, and soda – is the earliest artificially made material. The actual creation and origin of glass, however, have remained unknown to the present. Some consider that the Phoenicians were responsible for the discovery of glass. This theory is in a certain manner corroborated by the report of Pliny the Elder (*Naturalis Historia 36, 191*):[2] *..."It is said that a ship laden with nitre (saltpetre) was moored at the shore, and the merchants preparing food could find no stones to support their cauldrons, so they used some lumps of nitre they took from the vessel. The action of the fire in combination with the sand of the seashore caused transparent streams of an unknown liquid to flow forth: this, it is said, was the origin of glass."*
In addition to the Phoenicians, Egypt and Mesopotamia are also mentioned as the cradles of glassworking. The first glass products like beads, which were made using simple tools, come from Mesopotamia and are dated to ca. 2500 BC.

AMPHORISK, *cat. 11.*

Greece
5th-4th century BC
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum)

1 *Cuperem Posidonio aliquem vitrearium ostendere, qui spiritu vitrum in habitus plurimos format qui vix diligenti manu effingerentur.*

2 *Fama est adpulsa nave mercatorum nitri, cum sparsi per litus epulas pararent nec esset cortinis attollendis lapidum occasio, glaebas nitri e nave subdidisse, quibus accensis, permixta harena litoris, tralucentes novi liquores fluxisse rivos, et hanc fuisse originem vitri.*

The use of a core was the oldest technique used to produce glass vessels. It is dated to ca. 1500 BC, and continued in use up to the beginning of the 1st century AD. The core was made from a mixture of clay, mud, sand, and organic binders that was then wrapped around the end of a metal rod in the shape of the interior of the desired form of vessel. It was then dipped into a molten glass mass or molten canes were wound around the nucleus, it was smoothed by rolling on a stone slab, reheated, and decorated by trailing glass threads or using tools. The most common designs that were added were zigzag patterns, garlands, and feather-like patterns. After decoration, the body of the vessel was then reheated and smoothed so that traces of the tools would not be visible. The rod and nucleus were then removed, and other parts of the vessels, like the rim, neck, foot, or base, would be added subsequently after reheating, but they remained unpolished.

Production using a mould was also a technique that the Roman glassworkers took over from their predecessors. The technique of making glass objects in moulds is known even from the prehistoric period, but it reached a true peak in the period of Hellenism, when it began to be used to make glass vessels. The technique involved pouring molten glass into various types of moulds that could be made of clay, stone, metal, or even wood. Roman glassworkers used three kinds of moulds: simple open moulds, such as had been used in prehistory (to make gems, stamps, decorations, etc.), multi-part closed moulds (to make vessels of mosaic and single-coloured glass), and moulds over which glass discs were bent (to make vessels of mosaic glass and vessels with a net pattern - *reticello*).

It should be noted that glassworking was not always a widespread craft. The tradition of producing glass objects extends far into the past in the East, while the Romans only learned of it in the 1st century BC (Fleming 1997, 25). Up to that point, the Romans were neither producers nor significant importers of glass products (Whitehouse 1988, 5). It was mentioned earlier that in the beginning the production of glass vessels was based on Hellenistic traditions and techniques of manufacture, and it was a lengthy process. As the vessels had thick walls, large quantities of glass were necessary for each individual item. This meant greater costs for the glassworker, who had to purchase large quantities of raw glass, but also for the purchaser, who had to pay more for the vessel. Hence the production and use of glass was limited, available only to the upper classes. The invention of free blowing led to significant changes in glass production. The introduction of the blow-pipe meant that the manufacture of vessels became much quicker, and the vessels were much thinner, meaning that lesser quantities of glass were necessary for their production, hence they became cheaper and accessible to all strata of society. From the middle of the 1st century BC to the beginning of the 1st century AD, glass ceased to be a luxury item, and production was almost exclusively vessels for everyday use. Strabo (*Geographia 16, 2, 25*) noted that in Rome a bowl or cup could be bought for a

CUP, *cat. 42.*

Velika Mrdakovica, grave 108
Mid-1st century
Municipal Museum of Šibenik

copper coin, and the emperor Gallienus always drank from a golden goblet, while he despised glass, claiming that nothing was so commonplace (*Historiae Augustae* XVII, 5).[3]

Already, at the very start in the 1st century AD, the technique of blowing glass into relief moulds began to be used. The master glassworkers utilized moulds with several parts, in the beginning three- and four-part, and later most often two-part, so that the vessel could be removed undamaged from them. This technique enabled the imitation of metal (gold and silver) vessels in glass. The vessels could also be decorated with figural depictions in shallow or high relief, and many also bore the signatures of the master glassworkers, such as Ennion and Aristeas.

The organization of Roman glass production was at a high level, although considering the various conditions in different parts of the Empire, it most probably was not uniform. In the West, and particularly in Rome itself, industry in general, both in terms of organization and technical factors, was at a higher level than in those areas that the Romans had conquered.

Glass production, followed by trade, was focused in two directions: the production and export of raw glass, and the production and export of glass vessels. Trade also took place in half-finished objects, which were then completed by specialized master glassworkers, i.e. painted, incised, polished, and finished in other manners.

Furnaces for producing raw glass were enormous containers that could make up to several stones of raw glass, while furnaces for manufacturing glass vessels were of small dimensions (most often with a diameter between 45 and 65 cm), constructed of brick and tile mixed with clay. They were composed of two parts: the lower circular section that served as a firebox, and the upper square section with a dome that served for melting glass. Each furnace had only one opening, which meant that only one glassworker could work at it. Naturally, this slowed down the production dynamics, hence several glass furnaces in one place are often found at sites. The furnaces also contain an area for annealing (gradually cooling) the finished vessels. The very process of cooling was slow and lengthy, particularly since the vessel could not be moved until they had reached room temperature, which took approximately 18-20 hours. However, the thicker the vessel walls, the longer the cooling process. The appearance of Roman glassworking furnaces is shown on pottery lamps found at Asseria, Ferrara, and Spodnje Škofije nearby Koper.

An important segment of Roman glass production was recycling glass, which was particularly intensive in the western part of the Empire. There were specialized merchants involved in collecting broken glass for recycling. Martial (*Epigrams* I, 41) reported that on the streets of Rome sulfur matches, used to light torches, were exchanged for broken glass (... *Transtiberinus ambulator, qui pallentia*

RELIQUARY, *cat. 170.*

Winchester
End of the 10th century
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum)

3 *Bibit in aureis semper poculis aspernatus vitrum, ita ut diceret nil esse communius.*

sulphurata fractis permutat vitreis), which was then taken to the western part of the city – Trastevere, where it was recycled.

Glass was manufactured both by men (Ennion, Aristeas) and women (Sentia Secunda, Neikas), as is known from the numerous inscription on vessels, clay lamps, or funerary monuments. Roman glassworkers were most probably free citizens, considering that they could move freely around the Empire, and establish workshops where they would be the most profitable and where the demand for their work was greatest (Stern 1999, 458).

As early as in the descriptions of Pliny the Elder (*Naturalis Historia 36, 195-198*), who considered glass as valuable as rock crystal and gold, it can be seen that glass as a material was highly valued in the Roman period. The unbelievable possibilities of glass to bend, stretch, and gather together again when hot, its exceptional fluidity when molten, the innumerable ways to form and decorate it, represent its most important characteristics. Its flexibility and the possibility to copy other materials better than any other substance, its lack of colour and transparency, almost like crystal, are the greatest virtues of glass.

Glass was present everyday in various forms in the life of Romans. Its use can be traced in all spheres of life, from the commonplace everyday affairs to religious and symbolic events. Glass was tied to life, death, light, the gods, wealth, entertainment... Various forms of glass vessels were used every day to served food and drinks, but also for their storage and transport. Glass vessels were also used in pharmacy and cosmetics, for the storage of various medicinal preparations, dried herbs, ointments, balms, and oils.

Another important characteristic of glass was noted in an interesting way by Petronius (*Satiricon 50*), who has Trimalchio speak the following at the banquet: "*...But I prefer glass, if you don't mind my saying so; it doesn't stink, and if it didn't break, I'd rather have it than gold ...*". One great advantage of glass is that it does not retain any odors, hence glass vessels can constantly be used to store various ingredients (good, cosmetic preparations). Cosmetic vessels were also used during the cremation of the deceased, as they were used for special ointments that would then be thrown together with the bottle at the site of incineration to alleviate any unpleasant odors. Other forms of vessels were also used in funerary rituals, such as bottles, jugs, and cups, which served for ritual libations above the grave of the deceased, after which, just like the cosmetic bottles, they were placed in the grave. Symbolic and ritual meaning can certainly be sought in the placement of golden glass bases by the deceased. These were circular bases that contain gold foil placed between two layers of glass with depictions of various scenes: mythological, Christian, portrait busts, and so forth. Most of them have been found in Rome, and in Italy in general, in the loculi of catacombs, and to a lesser extent in graves.

Glass was also utilized in many other aspects of life: in fashion (jewellery, mirrors), games (tokens, cubes), architecture (decorative elements, window glass), and art (figurines, mosaics).

From prehistory up to the present day glass has not ceased to fascinate use with its beauty: so mystical, fragile, brilliant, refined... The Romans very soon came to recognize the unbelievable possibilities offered by glass and to utilize them far better than their predecessors. The discovery that all that was necessary for the production of glass vessels was human breath and a hollow pipe led to expansions in production, and then in distribution throughout the Empire. Over time, in its innumerable forms and functions, glass became a component part of the social, cultural, and economic life of the Romans.

MOSQUE LAMP, *kat. 180.*

Syria
Mid-14th century
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum)

Catalogue

Prehistoric period

1.
RAW GLASS

Sisak
1st-4th centuries
Technique: smelting
Height 15.5 cm
Archaeological Museum in Zagreb;
A-7664

A fragment of pale blue raw glass.

Published:
Fadić 1997: 52

A. Đ.

1.

2.
SMALL JUG

Egypt
2nd millennium BC
Technique: pressed in a mould and incised
Height 9.8 cm; diameter of the base 4.3 cm; diameter of the body 0.5 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1337

The jug made of blue glass paste was produced through pressing and cutting. The oval body on a flat base extends into a tall, slender neck. The slender handle, cut from the same piece of glass paste, extends from the top of the body to the upper part of the neck. The rim of the mouth is straight, protruding, and streaked with pieces of orange-yellow glass paste. A hollow 0.5 cm in diameter extends 2.5 cm in depth from the jug opening. The surface of the entire jug is rough.

Published:
Katalog Muzeja Mimara 1987: 270, 443, cat. no. 1
Muzej Mimara – Vodič po zbirkama 1988: 10, 11, cat. no. 7.1
Tomorad 2003: 68, photo. no. 67
Ratković-Bukovčan 2004: 16, 41, 67, cat. no. 1

Analogies:
Neuburg 1949: 9, 10

L. R. B.

3.

BALSAMARIUM

Egypt
15th century BC
Technique: glass paste wound around an earthen core
Height 5.9 cm; diameter of the body 4.8 cm; dia. of the rim 1.9 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1334

The balsamarium was made by winding glass paste around an earthen core. The primarily blue mass was decorated with yellow trails creating a "feathered" decoration. The trails are slightly protrusive in several places. The body of the small container is oval and broad, and at the very top of the upper section, two small handles of irregular cylindrical form were applied, through which a braided gold chain was threaded. The body continues into an extremely short neck, and the rim of the opening is protruding and turned outwards.

Published:
Katalog Muzeja Mimara 1987: 271, 443, cat. no. 7.3.
Muzej Mimara – Vodič po zbirkama 1988: 10
Ratković-Bukovčan 1990: 195
Ratković-Bukovčan 2001: 9, photo. no. 2
Tomorad 2003: 68
Ratković-Bukovčan 2004: 17, 18, 43, 68, cat. no. 3
Vodič Muzeja Mimara 2007: 18, photo. no. 2

Analogies:
Kisa 1908a: 9, photo. no. 4.

L. R. B.

4.

AMPHORISK

Egypt
14th century BC
Technique: glass paste wound around an earthen core
Height 10 cm; diameter of the body 4.5 cm; dia. of the rim 2 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1335

The amphorisk was made by winding blue glass paste around an earthen core. The circular base continues into a foot wrapped in a thin trail of yellow glass at the juncture with the body. The tall body is oval in the upper section, where two small handles were attached opposite one another. The body extends into a slender neck with a thickened rim to the opening. The blue base color is decorated with variously formed rows of trails of yellow, milky, and pale blue glass, divided into three bands. The lower part of the amphorisk and the neck are decorated with "feathered" trails, while the central section is enveloped by rows of trails in a garland pattern.

Published:
Vodič kroz dio zbirke Ante Topića Mimare 1983: 152, cat. no. 242
Katalog Muzeja Mimara 1987: 272, 443, cat. no. 7. 4.
Muzej Mimara – Vodič po zbirkama 1988: 10
Ratković-Bukovčan 2001: 13, photo. no. 5
Tomorad 2003: 68
Ratković-Bukovčan 2004: 18, 44, 68, cat. no. 4

Analogies:
Neuburg 1949: Pl. II, photo. no. 3
Goldstein 1979: 52, no. 11, 12

L. R. B.

5.

NECKLACE

Bezdanjača Cave, Vrhovine near Otočec
12th-11th centuries BC
Technique: wound on a rod
Diameter of the beads 1.2 – 0.6 cm
Archaeological Museum in Zagreb; AMZ P-20263

The necklace iscomposed of 31 transparent blue glass beads and 2 snail shells. The glass beads have a white color on the surface caused by calcium accumulations from lengthy deposition in a damp cave.

Published:
Malinar 1998: Pl. X, 1
Vodič, Pretpovijesna zbirka, AMZ: 91, fig. 120

Analogies: unknown.

L. B.

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6.

GLASS BEADS

Prozor, Kompolje (Otočac)
6th-5th centuries BC
Technique: wound around a rod, applied decoration
Diameter of the beads: 4.0 – 1.4 cm
Archaeological Museum in Zagreb; AMZ P-12063, P-12175, P-12102

Various types of glass beads from the Iapodian Collection of the Archaeological Museum in Zagreb.

Unpublished.

Partial analogies:
Bakarić, Križ, Šoufek 2006: 165, cat. 147
Bakarić 2003: 101, cat. 52; 173, cat. 195; 190, 295
Marić 1968: Pl. VII, 2

L. B.

7.

NECKLACES

Prozor, Otočac, excavations in 1881; Hrvatsko (Vlaško) polje, Otočac, excavations in 1876
7th century BC
Technique: wound around a rod
Diameter of the beads 1-3 cm
Archaeological Museum in Zagreb; AMZ P-13032, AMZ P-13834

The necklaces consist of 41 and 44 glass beads of various sizes, respectively. The beads are transparent, green, yellow, and blue. Air bubbles are visible within the beads and on the surface.

Published:
Bakarić 2004: 361, cat. 9.1
Bakarić, Križ, Šoufek 2006: 157, cat. 99
Balen-Letunić 2006: 62

Analogies:
Drechsler-Bižić 1972-73: Pl. XXIV, 2; Pl. XXXIX
Bakarić 2004: 36, cat. 8

L. B.

8.

NECKLACE

Hrvatsko (Vlaško) polje, Otočac, excavations in 1876
7th-6th centuries BC
Technique: wound around a rod
Diameter of the beads 2.0-0.5 cm
Archaeological Museum in Zagreb, AMZ P-13661

The necklace is composed of 88 dark blue glass beads of various dimensions. The colour of the beads varies from opaque dark blue to transparent blue. Air bubbles are visible within the beads and on the surface.

Published:
Bakarić 1993: p. 105. cat. 68

Analogies:
Križ, Stipančić 2006: p. 173, cat. 194, 195; p. 182, cat. 247; p. 183, cat. 250, p. 188, cat. 283

L.B.

9.

FIBULA

Hrvatsko (Vlaško) polje, Otočac, excavations in 1876
5th-4th centuries BC
Technique: wound around a rod
Length of the fibula 7 cm; dia. of the beads 2.5-2.3 cm; thickness of the beads 1.5-1.1 cm; dia. of the bead hole 1 cm
Archaeological Museum in Zagreb, AMZ P-14349

A double-looped bronze fibula with four glass beads on the bow. The foot of the fibula is preserved with four coils on one side and five on the other, while the head is missing. A circular bronze plaque was placed between the coils and the beads to cover the large hole in the glass beads. The beads are made from opaque yellow glass with four groups of two blue-white concentric circles (“eyes”). The beads have a large hole through which the wire of the fibula was threaded, so that it can be hypothesized that the wire of the fibula had a coating of some organic material.

Unpublished

Analogies:
Bakarić, Križ, Šoufek 2006: 191, cat. 302; 187; cat. 277; 181, cat. 240
Stern, Schlick-Nolte 1994: 198-199, Cat. No. 41

L. B.

8.

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10.

AMPHORISK

Greece
5th-4th century BC
Technique: glass paste wound around an earthen core
Height 6.8 cm; diameter of the body 4.3 cm; dia. of the rim 2.5 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1354

The amphorisk was made by winding glass paste around an earthen core. The entire surface of the small vessel is covered with iridescence. The rounded blue body with a tiny circular foot of decorative purpose attached to the bottom is decorated with yellow and white glass trails, arranged in double rows. The base of the body of the vessel and the upper part are wrapped with only a few horizontal thin, pale glass trails, while the central part was completely covered with dense parallel rows of thicker trails creating a zigzag motif.
The body extends into a short broad neck that ends in a bell-shaped turned-out rim. Two attached oppositely placed handles extend from the top of the body of the amphorisk to the upper section of the neck. Along the entire edge of the opening, a thin rounded trail of pale glass was applied.

Published:
Katalog Muzeja Mimara 1987: 444, cat. no. 7. 10.
Muzej Mimara – Vodič po zbirkama 1988: 10.
Ratković-Bukovčan 2001: 19, photo. no. 11
Ratković-Bukovčan 2004: 19, 45, 72, cat. no. 11

Analogies:
Gläser der Antike – Sammlung Erwin Oppenländer 1974: 62, no. 140, no. 141; 64, no. 146
Glass at the Fitzwilliam Museum 1978: 19, no. 23b; 20, no. 25a
Goldstein 1979: 38;
Historic Glass from Collections in North West England 1979: 5, no. 18
Bergman, Oliver Jr. 1980: 36, no. 4, no. 5

L. R. B.

11.

AMPHORISK

Greece
5th-4th century BC
Technique: glass paste wound around an earthen core
Height 7.2 cm; diameter of the body 5 cm; diameter of the rim 2.6 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1355

The amphorisk was made by winding glass paste around an earthen core. The teardrop-shaped blue body, with a small circular foot of decorative purpose attached to the bottom, is decorated with trails of yellow and pale blue glass. The lower part of the small vessel and its upper section were coated with thin horizontally place yellow trails of glass, while the central section of the vessel was covered completely by dense rows of pale blue glass bands creating a zigzag motif.
The body extends into a short neck ending and a gently turned-out rim of the opening. Two small handles extend from the top of the body of the amphorisk to the broadened part of the neck. A thin, rounded trail of yellow glass was applied along the entire edge of the opening.

Published:
Katalog Muzeja Mimara 1987: 444, cat. no. 7. 12
Muzej Mimara – Vodič po zbirkama 1988: 10
Ratković-Bukovčan 2001: 20, photo. no. 12
Ratković-Bukovčan 2004: 19, 46, 73, cat. no. 12

Analogies:
Goldstein 1979: p. 38.
Glass at the Fitzwilliam Museum 1978: 19, no. 23b; p. 20, no. 25a
Historic Glass from Collections in North West England 1979: 5, no. 18
Bergman, Oliver Jr. 1980: 36, no. 4, no. 5.
Gläser der Antike – Sammlung Erwin Oppenländer 1974: 62, no. 140, no. 141; 64, no. 146

L. R. B.

12.

OINOCHOE

Greece
4th century BC
Technique: glass paste wound around an earthen core
Height 11.2 cm; diameter of the base 2.5 cm; dia. of the body 6.6 cm; dia. of the rim 3.6 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1356

The oinochoe was made by winding glass paste around an earthen core. The globular body of the small blue jug, which ends at the base in a circular foot, is decorated by variously shaped yellow and pale blue glass trails. The upper and lower parts are covered in horizontal thin trails, while the central part of the body is completely covered in thick, dense pale blue and yellow bands creating a zigzag motif.
The body extends into a neck ending in a wide, everted, wavy trefoil rim of the mouth. A thin pale blue glass trail was applied along the entire edge of the mouth. A tall, slender glass handle extends from the upper part of the body to the top of the neck.

Published:
Katalog Muzeja Mimara 1987: 272, 444, cat. no. 7.11.
Muzej Mimara – Vodič po zbirkama 1988: 10.
Ratković-Bukovčan 2001: 4, 21, photo. no. 13
Ratković-Bukovčan 2004: 19, 47, 74, cat. no. 13
Vodič Muzeja Mimara 2007: 18, photo. no. 3

Analogies:
Gläser der Antike – Sammlung Erwin Oppenländer 1974: 55, no. 127
Glass at the Fitzwilliam Museum 1978: 19, no. 23d
Goldstein 1979; 38, 126, no. 261

L. R. B.

13.

NECKLACE

Srijemska Mitrovica, Republic of Serbia
4th century BC
Technique:
Length of the beads 1.8 cm; width of the beads 1.05 cm
Archaeological Museum in Zagreb; P-5235

A necklace composed of 262 transparent greenish-white glass beads. The beads are shaped like an amphora, and are perforated in the upper section. The necklace was part of a grave inventory.

Published:
Brunšmid 1902: p. 80-81, fig. 39: 1-7
Majnarić-Pandžić 1970: p. 45, Pl. XXIII: 5, 6
Muzeopis... 1846 -1996, 1996: p. 82, cat. 27

Analogies:
Popović 1996: p. 105-125
Dizdar, Potrebica 2002: 26, 111-131 2002.
Marić 1964: p. 5-128.

I. D.

12.

13.

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14.

BEADS WITH THREE FACES

Prozor, Otočac, excavations in 1881
3rd-2nd centuries BC
Technique: wound on a rod, applied decoration
Height 2.6-3.2 cm; diameter of the beads ca. 1.8 cm; height 2.0-3.2 cm; diameter of the beads 2.8 cm
Archaeological Museum in Zagreb; AMZ P-12979, AMZ P-12978, AMZ P-12980, AMZ P-12918, AMZ P-15167, AMZ P-15423

Six beads with three faces made in the same manner: three faces in relief, separated by vertical lines, are depicted on the cylindrical surface of the beads. The surface of the beads is dark blue, while two faces were coloured white, and the third yellow (2 beads), two faces were colored yellow, and the third white (3 beads); two faces were colored green, and the third white (1 bead). The eyes were formed from blue and white concentric circles, and the noses are droplet-shaped. One or two rows of white relief decorations were placed above and below the faces.

Published:
Balen-Letunić 1990: 41-54
Bakarić, Križ, Šoufek 2006: 167, cat. 164, cat. 165
Drechsler-Bižić 1961: Pl. XIII

Analogies:
Karwowski 2005: fig. 6 d-e
Schlick-Nolte 1994: 192-193, cat. no. 37
Popović 2007: 816

L. B.

15.

BEADS

Zvonimirovo-Veliko polje, grave LT 71
First half of the 2nd century BC
Technique: wound on a rod
Diameter 0.5 cm; diameter of the hole 0.3 cm; width 0.3 cm; diameter 1.5 cm; diameter of the hole 0.3 cm; width 0.8 cm
Municipal Museum Virovitica; PN 504

Beads of oval shape made from cobalt blue (52) and ocher (4) glass, and one bead of oval shape made of cobalt blue glass with a decoration of four spirals in white. The beads were found among a pile of incinerated bones of the deceased, and they were strung in two parallel rows.

Published:
Dizdar 2009: p. 52

Analogies:
Gebhard 1989: Pl. 47/658-687-718, Pl. 59/870
Zepezauer 1993: 77-78, 80-81, T. 10/29-40

M. D.

16.

BRACELET

Sisak
2nd century BC
Technique: wound on a rod
Diameter 5.7 cm; height 0.8 cm
Municipal Museum Sisak, 510:SIK 28021

A bracelet of transparent cobalt blue glass with a moulded outer side. The relief ribs, the middle one tallest and widest, are undecorated. The bracelet belongs to group 7a (acc. to T. E. Haevernick) or series 17 (acc. to R. Gebhard).

Unpublished.

Analogies:
Radimsky 1895: 210, Pl. V, 2
Haevernick 1960
Gebhard 1989
Bakarić, Križ, Šoufek 2006: p. 191, cat. no. 298
Dizdar 2006: p. 86, Pl. 6, 3

I. B.
K. F.

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17.

BRACELET

Zvonimirovo-Veliko polje, grave LT 70
First half of the 2nd century BC
Technique: wound on a rod
Exterior diameter 6 cm; interior diameter 5 cm; width 1 cm; thickness 0.5 cm
Municipal Museum Virovitica PN 913

A bracelet with three smooth lengthwise ribs of series 25 (group 6a), the central rib the widest. The bracelet is made of colourless glass with yellow foil in the inner side. The bracelet was placed on the pile of burnt bones of the deceased in the northeastern part of the grave.

Published:
Dizdar 2009: p. 52, Fig. 1.

Analogies:
Gebhard 1989: p. 17, Pl. 24, 320-324
Križ 2005: Pl. 17, 5, Pl. 48, 3
Dizdar 2006: p. 81

M. D.

18.

BRACELET

Zvonimirovo-Veliko polje, grave LT 86
First half of the 2nd century BC
Technique: wound on a rod
Exterior diameter 9.8 cm; interior diameter 7.9 cm; width 2.4 cm; thickness 1.2 cm
Municipal Museum Virovitica; PN 1048

A bracelet with five smooth lengthwise ribs of series 27 (group 7a), the central rib the widest. The bracelet is made of colourless glass with yellow foil on the inner side. The bracelet was placed with the burnt bones of the deceased in a wheel-made bowl with a S-shaped body.

Published:
Dizdar 2012: p. 49, Fig. 5

Analogies:
Gebhard 1989: p. 18, Pl. 24, Pl. 25, 327-343
Križ 2005: Pl. 55, 3
Dizdar 2006: p. 86-90, Fig. 1

M. D.

19.

19.

RING

Zvonimirovo-Veliko polje, grave LT 31
First half of the 2nd century BC
Technique: wound on a rod
Exterior diameter 2.5 cm; interior diameter 1.8 cm; width 0.8 cm; thickness 0.3 cm
Municipal Museum Virovitica; PN 504

A ring of extended semicircular section with slanted grooves on the outside. The ring was made of colourless glass with a yellow foil ion the inner side. The ring was placed with a bronze belt at the edge of the pile of burnt bones of the deceased.

Published:
Tomičić 2000: p. 82

Analogies:
Gebhard 1989: p. 171, Pl. 45, 632

M. D.

20.

20.

FIBULA WITH TWO SPIRAL COILS AND A GLASS BEAD ON THE BOW

Prozor, Otočac, excavations in 1881
2nd–1st centuries BC
Technique: wound on a rod
Length of the fibula 6.8 cm; length of the bead 4.8 cm
Archaeological Museum in Zagreb, AMZ P-12976

The fibula has two spiral coils and a glass bead on the bow. The glass bead is elongated, with deep grooves that join in the middle of the bead in a straight line.

Published:
Bakarić, Križ, Šoufek 2006: p. 171, cat. 185
Balen-Letunić 2006: p. 62

Analogies:
Marić 1968: Pl. XIII, 5

L. B.

21.

21.

NECKLACE

Prozor, Otočac, excavations in 1881
1st century BC
Technique: wound on a rod
Diameter of the beads 1.3–0.3 cm
Archaeological Museum in Zagreb, AMZ P-12246

The necklace is composed of 62 glass beads of varied shape: circular with a hole in the middle, elongated biconical, triangular. The beads were made from transparent brownish-yellow and greenish glass.

Published:
Bakarić, Križ, Šoufek 2006: p. 159, cat. 107

Analogies:
Marić 1968: Pl. VII: 16-23

L. B.

22.

22.

SMALL BOWL

Alexandria
1st century BC
Technique: polished marbled glass
Height 4.1 cm; diameter of the rim 16.9 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1352

The bowl was made using the mosaic (marbled) glass technique. The surface of the polished bowl is formed from a fused, irregular, and polygonal slab of transparent green glass containing trails of yellow opaque glass coiled in irregular spirals. The upper part of the rim of the rounded bowl, which continues in a flattened circular base, is turned out in a bell-shape. A thin spirally twisted trail of yellow glass was applied along the edge of the entire rim.

Published:
Katalog Muzeja Mimara 1987: p. 273, 444, cat. no. 7.16.
Muzej Mimara – Vodič po zbirkama 1988: p. 11, 12
Ratković-Bukovčan 2001: p. 25, photo. no. 15
Tomorad 2003: p. 68
Ratković-Bukovčan 2004: p. 21, 48, 75, cat. no. 15
Vodič Muzeja Mimara 2007: p. 19, photo. no. 4

Analogies:
Neuburg 1949: Pl. X, no. 34
Gläser der Antike-Sammlung Erwin Oppenländer 1974: p. 117,122, no. 322
Goldstein 1979: p. 181, no. 475

L. R. B.

Classical period

23.

BALSAMARIUM WITH GOLD FOIL

Salona
End of the 1st century BC – first half of the 1st century AD
Technique: bending glass with gold foil bands
Height 6 cm; diameter of the body 5.3 cm; diameter of the rim 2 cm
Archaeological Museum in Split; G-87

A balsamarium with sloping walls of mosaic ribbon glass with opaque bands of dark blue, green, brown, and gold. Horizontal grooves were cut on the shoulder, at the point of maximum diameter, and in the centre and edge section of the flat base. The cylindrical neck ends in a low, funnel-shaped, partially broken rim, where two bands of concentric lines were incised on the inner side.

Published:
Von Saldern 1964: p. 42, fig. 1
Fadić 1997: p. 79, cat. no. 2
Buljević 2002: p. 393, cat. no. 1
Buljević, Ivčević 2007: p. 4

Analogies:
Isings 1957: form 7, p. 23
Calvi 1968: group B, p. 29-31
Goldstein 1979: p. 203, cat. no. 556, Pl. 31; Pl. 132
Recent Important Acquisitions Made by Public and Private Collections in the United States and Abroad 1980: p. 88, no. 3
Harden 1987: p. 18, cat. no. 17
Lazar 2004: p. 20, fg. 8

J. J.

24.

PYRIFORM BALSAMARIUM

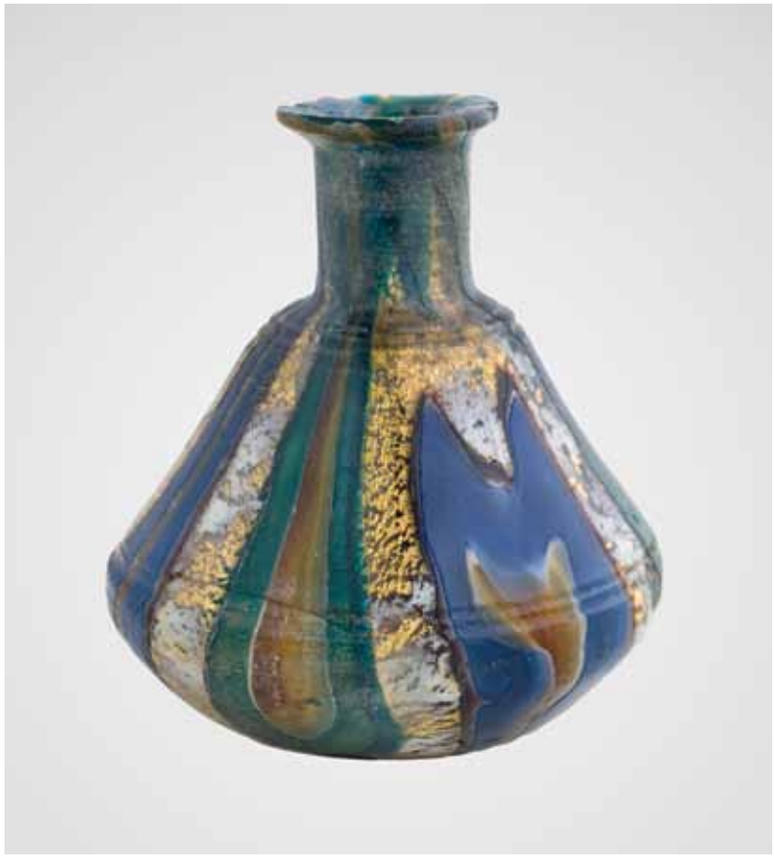
Salona
End of the 1st century BC – middle of the 1st century AD
Technique: free-blown
Height 12.8 cm; diameter of the body 8.1 cm; diameter of the rim 4 cm
Archaeological Museum in Split; G-71

A pyriform balsamarium of opaque pale green blown glass with an applied white glass spiral band. The body extends into a cylindrical neck with a thickened and flattened rim. The base is slightly concave and damaged.

Published:
Fadić 1997: p. 85, cat. no. 85

Analogies:
Isings 1957: type 28a, p. 42
Calvi 1968: type Hα, p. 35, Pl. A. 16
Israeli 2003: p. 209, cat. no. 244

J. J.



23.

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PYRIFORM BALSAMARIUM

Salona
End of the 1st century BC – middle of the 1st century AD
Technique: free-blown
Height 6.3 cm; diameter of the body 4.7 cm; diameter of the rim 2 cm
Archaeological Museum in Split; G-86

A pyriform balsamarium of opaque, free blown dark brown with densely applied and marvered (pressed) trails of white glass. At the base the trails are arranged in a pattern similar to a bird's feather, the outlines of which can be discerned in the lines extending along the entire body. The rim of the neck is everted and flattened on the upper side, while the transition to the neck is narrowed. The base is flat.

Published:
Fadić 1997: p. 79, cat. no. 3
Buljević 2002: p. 397, cat. no. 35
Buljević, Ivčević 2007: p. 17

Analogies:
Isings 1957: form 26a, p. 40
Calvi 1968: group Hα, p. 35, Pl. A. 16
Roffia 1993: p. 102, 103, cat. no. 144-164
Nenna, Arveiller-Dulong II 2005: p. 30, cat. no. 92
Mandruzzato, Marcante 2007: p. 14, cat. no. 12

J. J.

26.

BALSAMARIUM WITH A STRUCTURED BODY

Salona
Second half of the 1st century
Technique: free-blown
Height 5.3 cm; diameter of the body 3.4 cm; diameter of the rim 1.7 cm
Archaeological Museum in Split; G-115

A balsamarijum with a structured body of transparent free blown green glass. The transition from the body to the neck is pinched, as is the body in the middle. The part of the body below the "waist" is narrower than the upper part of the body, which narrows towards the neck with an emphasized shoulder. The base is flat.

Published:
Fadić 1997: p. 81, cat. no. 38
Buljević 2002: p. 394, cat. no. 10

Analogies:
Calvi 1968: group L, p. 38, cat. no. 116, Pl. 4. 2.
The Constable-Maxwell Collection of Ancient Glass 1979: p. 59, cat. no. 87
Whitehouse I 1997: p. 74, cat. no. 208
Mandruzzato, Marcante 2007: p. 20, cat. no. 223

J. J.

27.

SMALL FLASK (BALSAMARIUM)

Iberia
1st century
Technique: free-blown
Height 9.6 cm; diameter of the body 4.3 cm; diameter of the rim 2 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1445

The small bottle of transparent/opaque blue glass was made by blowing. The surface of the bottle is partly covered by iridescence. The entire surface of the bottle is decorated with wavy curved trails of milk glass of unequal widths marvered (pressed) into the surface of the walls.
The teardrop shaped body with a flat base extends into a slender neck that widens into a bell-shape at the very top and ends in an everted rim. The rim of the bottle is smooth and rounded.

Published:
Katalog Muzeja Mimara 1987: p. 448, cat. no. 7.58
Ratković-Bukovčan 2004: p. 32, 97, cat. no. 56

Analogies:
Gläser der Antike – Sammlung Erwin Oppenländer 1974: p. 132, no. 358; p. 134, no. 371-373
Calvi 1969: Pl. V, no. 1-5

L. R. B.

27.

28.
PLATE

Vicinity of Šibenik
End of the 1st century BC – 1st century AD
Technique: mould-blown
Height 1.9 cm; diameter of the rim 8.6 cm
Archaeological Museum in Split;
Lukanović Collection, G-1558

A shallow circular plate of partially transparent polychromic mould-blown glass, carried out in the millefiori technique using strands of blue, green, red-brown, and white glass and multicoloured rods. The rim is irregularly rounded. The base is concave.

Published:
Von Saldern 1964: p. 44, fig. 5
Damevski 1976: p. 65, Pl. X.1
Fadić 1997: p. 89, cat. no. 173

Analogies:
Goethert-Polaschek 1977: form 2, cat. no. 4-6, p. 15, 16, Pl. 28. 1
Israeli 2003: p. 90, cat. no. 93
Mandruzzato, Marcante 2005: p. 25, cat. no. 176

J. J.

29.
BEAKER

Nesactium, the cemetery at Budava harbour (near Kavran), cremation grave
End of the 1st century BC – beginning of the 1st century AD
Technique: mould-blown
Height 11.4 cm; diameter of the base 7.1 cm; diameter of the rim 16.2 cm
Archaeological Museum of Istria, Pula;
AMI A-5395

A beaker made of opaque multicoloured glass with a conical body, a low conical foot, and an emphasized standing rim. It is decorated with bands in the form of the letter V in white, black, yellow, and green (motif repeated four times). Turquoise glass appears at one spot on the rim.

Published:
Gnirs 1915: 133, Fig. 86
Fadić 1997: p. 171, no. 144

Analogies:
Isings 1957: p. 57, form 41b
Mandruzzato, Mareante 2005: p. 86, cat. 172-174 (decoration)

A. S.

30.
SMALL VESSEL

Zadar (Iader), Roman necropolis, archaeological excavations in 1975, grave 14
Second half of the 1st century
Technique: free-blown
Height 2.9 cm; width 3.6 cm
Museum of Ancient Glass, A9924

A small multicoloured opaque glass vessel with a biconical body and a curled annular rim.

Published:
Nedved 1980: Pl. 3
Fadić 1997: 129, cat. no. 76.

Analogies:
Isings 1957: 88-89, form 68.

I. F.
B. Š.
A. E. B.
A. Š.

31.
AMPHORISK

Zadar (Iader), Roman necropolis, archaeological excavations in 1975, grave 14
Second half of the 1st century
Technique: free-blown
Height 7.2 cm; width 3.7 cm
Museum of Ancient Glass, A9921

An amphorisk of opaque reddish glass, with a slightly flattened body and a curled rim. Two ribbon handles were applied to the shoulder and below the rim.

Published:
Nedved 1980, Pl. 3
Fadić 1997, 129, cat. no. 76.

Analogies: unknown.

I. F.
B. Š.
A. E. B.
A. Š.

32.
MINIATURE BOAT

Salona
Middle or second half of the 1st century
Technique: mould cast, cut, ground, and polished
Length 15.43 cm; width 4.96 cm; height of the stern 4 cm
Archaeological Museum in Split;
AMS-72155

A small boat of cast, cut, ground, and polished semi-transparent green glass with smooth walls and an elongated oval body. The top of the stem of the prow is heart-shaped, while the stern is curved high above the keel.

Published:
Buljević 2013:

Analogies:
Calvi 1974-1975: p. 479-486
Harden et al. 1987: cat. no. 24, p. 19, 48

Z. B.


29.


30.


31.

33.

FISH-SHAPED BOTTLE

Zadar (Iader), Roman necropolis, archaeological excavations in 2005, grave 59
Second half of the 1st century
Technique: mould-blown
Height 22.7; width 6.4
Museum of Ancient Glass, A9095

A bottle with a relief fish design on the body made of pale green glass, with a long cylindrical neck, and a curled annular rim. The clearly visible joint on the spine of the vessel shows that it was blown into a two-part mould.

Published:
Fadić 2011: 123-135.

Analogies:
Ravagnan 1994: 52, no. 66
Kunina 1997: 278, 281, no. 152
Antonaras 2009: form 119, 283-285, cat. no. 497, Pl. 32.

I. F.
B. Š.
A. E. B.
A. Š.

34.

GLASS FISH

Eastern Mediterranean?
1st-2nd centuries
Technique: free-blown, applied decoration
Length 16.8 cm; height 5.1 cm; width 2.8 cm
Archaeological Museum in Zagreb; A-11964

The fish was free blown. The base is white glass onto which trails of yellow, red, and blue glass were applied, which were then pulled, creating a "feather" design (feathering). The base was then heated and blown into a fish shape. Blue trails were then applied to it, circling three times at the transition point from the head to the body. The same blue glass was used to make the eyes, mouth, and the dorsal and lateral fins. The lower fins and the lower lateral fins were made of yellow glass, which also ended the tail. The mouth has a small square hole.

Published:
Šiljeg, Gregl 2012, p. 147.

Analogies:
Glass from the Ancient... 1957: p. 163, cat. 334
Newby 1993: p. 22
Kunina 1997: p. 158, 159, 294, fig. 123, 124, cat. 200
Whitehouse 2001: p. 210, 211, 358, cat. 774, 775.

Ba. Š.

32.

33.

34.

35.

36.

35.

SMALL JUG

Zadar (Iader), Roman necropolis, archaeological excavations in 2006, cremation grave 506
Second third of the 1st century
Technique: blown into a three-part relief mould
Height 9.7 cm (with the handle 10.0); width 5.1 cm; width of the base 3.3 cm; diameter of the rim 2.3 cm
Museum of Ancient Glass, A9786

A small jug with a cylindrical body. The neck narrows continuously towards the rim. The rim is horizontal with a ringed edge. The handle is applied below the rim and on the shoulder. The central polygonal part of the body is divided into six rectangular fields, each containing a Dionysian symbol in relief (crossed shepherd's staffs, jug, amphora, syrinx, plate, krater). The flat base has two impressed concentric circles in relief, with an umbo in the centre.

Published:
Fadić, Štefanac 2010: 326

Analogies:
Stern 1995: 162
Antonaras 2009: 276, no. 115.

I. F.
B. Š.
A. E. B.
A. Š.

36.

BEAKER

Asseria
Second half of the 1st century
Technique: mould-blown
Height 13.5 cm; diameter of the base 4.2 cm; dia. of the rim 6.25 cm
Archaeological Museum in Split; G-1551

A beaker with stylized depictions of Hercule's club, known as a lotus-bud beaker, of transparent greenish-blue glass, blown into a mould. The body contains vertical rows of three-tiered knobs and small circular relief protrusions, with satyr masks in the lowest row alternating with theatre masks.

Published:
Damevski 1976: p. 69, Pl. XII. 5
Kirigin 1979: cat. no. 476
Fadić 1988: p. 22-70
Fadić 1997: p. 89, cat. no. 194
Fadić 2005: p. 75-98

Analogies:
Isings 1957: form 31, p. 45, 46
Stern 1995: p. 104, fg. 8
Ravagnan 1994: p. 17, cat. no. 233
Larese 2004: p. 54, cat. no. 233, Pl. VIII
Israeli 2011: p. 77

J. J.

37.

SMALL FLASK

Sidon
1st century AD
Technique: mould-blown
Height 6 cm; diameter of the body 4.7 cm; diameter of the rim 1.2 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1359

The small flask of transparent blue glass was made by blowing into a relief mould. Its surface is covered with iridescence. The low foot, bearing traces from the three-part mould, continues into the rounded body with a slightly emphasized hexagonal section. The lower part of the flask has a row of protruding "berries" arranged in separate fields. The surface in the central part of the flask is covered by a relief decorative motif – the uniform rectangular fields divided by columns each contain in alternation a large footed vessel with fruit and a tall empty vase. Above each field, as a logical continuation, there is a small protrusive area that ends crowned by an arch. The body continues into a (broken off) very short and narrow neck. The edge of the rim is sharp and unworked.

Published:
Ratković-Bukovčan 2004: p. 25, 51, 83, cat. no. 29

Analogies:
Gläser der Antike – Sammlung Erwin Oppenländer 1974: p. 142, no. 401-405
Glass at the Fitzwilliam Museum 1978: p. 32, no. 54b
Bergman 1980: p. 60, photo. no. 51
Kunina 1997: p. 297, no. 134-136
Whitehouse 2001: p. 36, 37, no. 506, no. 507

L. R. B.

37.

38.

38.

MOSAIC

Italy
2nd century
Technique: glass cut into small cubes (tesserae)
Height 9 cm; length 16.5 cm; width 3.3 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1383

The mosaic with a charming depiction of a bird and a butterfly was made of tiny cubes of multicoloured glass (*tesserae)*. The bird, shown from the side, is placed in the central part of the mosaic on a green background, and in front of it is shown a butterfly with raised, colourful wings. The slender, lithe body of the bird spills over into the grey, white, and yellow colours on its body and neck, and harmoniously merges with the darker grey nuances and black on the wings and tail. The lively red and orange on the head highlight the large black eye. The fragile black body of the butterfly is overhung by the large and wide wings of grey, white, orange, and red. The upper part of the mosaic is pale blue, capturing the breadth and calmness of the cloudless sky.

Published:
Katalog Muzeja Mimara 1987: p. 447, cat. no. 7. 48
Muzej Mimara – Vodič po zbirkama 1988: p. 14
Ratković-Bukovčan 2004: p. 33, 34, 59, 102, cat. no. 67
Vodič Muzeja Mimara 2007: p. 21, photo. no. 9

Analogies:
Whitehouse I. 2001: p. 36, no. 33

L. R. B.

39.

39.

RIBBED BOWL

Unknown site (Zadar region)
Second quarter of the 1st century AD
Technique: cast and marvered
Height 5.1 cm; width 17.8 cm
Museum of Ancient Glass, A10077

A shallow ribbed vessel made in the mosaic technique from purple and white glass with thick walls. Shallow wheel-cut lines are visible in the interior of the vessel, with 23 ribs on the outer walls. The bowl is reconstructed.

Published:
Fadić 1997: 172, cat. no. 145.

Analogies:
Isings 1957: 18-19, form 3a
Petru 1972: 36, Pl. 21:17
Milleker 2000: 63-64, cat. no. 50.

I. F.
B. Š.
A. E. B.
A. Š.

40.

SMALL RIBBED BOWL

Zagreb-Stenjevec, grave 13, excavations in 1896
1st century
Technique: curved over a mould
Height 5.5 cm; diameter of the rim 12.8 cm
Archaeological Museum in Zagreb; AMZ; inv. No. 11717

A completely preserved small bowl made of dark blue glass. The body is decorated with 17 ribs, the rim has a bevelled outward edge, the base slightly indented.

Published:
Hoffiller 1904: p. 173, Fig. 68/6
Damevski 1976: p. 64, Pl. VII/3
Gregl 1989: p. 18, Pl. 4/1
Fadić 1997: p. 88, 172

Analogies:
Morin-Jean 1922-1923: p. 122, form 68
Berger 1960, p. 18, Pl. 18:32
Isings 1957, form 3a
Czurda-Ruth 1979, p. 26-34, Pl. 12, cat. 114.

Z. G.

40.

41.

SMALL RIBBED BOWL

Unknown circumstances of discovery
1st century
Technique: curved over mould
Height 5.1 cm; diameter of the rim 12.8 cm
Museum of Arts and Crafts; 18908

A small bowl of transparent blue glass. The circular base is slightly reduced. The hemispherical deep body of the bowl is decorated on the exterior surface with emphasized vertical ribs that join at the slightly convex base. The band by the rim is completely smooth.
Bowls of this type probably originate in the region of Syria and Palestine, but they spread throughout the western regions of the Roman Empire, starting from the period of Augustus and continuing to the end of the first century.

Unpublished.

Analogies:
Isings 1957: 18-19, form 3a
Czurda Euth 1979: 26-30, Pl. 12/114
Kraskovská 1981: p. 11
Barkóczi 1988: 61, Pl. III/31
Sternini 1990: 146, 152, cat. no. 602
Fadić 1997: cat. no. 146
Zampieri 1998: 160, cat. no. 256
Larese 2004: 80, cat. no. 345

S. K. T.
M. L.

41.

42.

43.

44.

45.

42.

CUP

Velika Mrdakovica, grave 108
Mid-1st century
Technique: free-blown
Height 5 cm; diameter of the rim 9.2 cm
Municipal Museum of Šibenik, AO 12500

The entirely preserved cup is made of blue glass. The body is hemispherical and relief decorated in the middle with narrow vertical protrusions, the base is flat, and the neck vertical with the rim out-turned. The entire cup is painted on the outside with white lines. The lines are horizontal on the neck and in the upper part of the body, while those painted across the ribbing were wavy. Traces of colour are visible on the lower quarter of the body.

Published:
Brusić 2000: p. 29
Fadić 1998: p. 173, cat. no. 149.

Analogies:
Facchini 1999: p. 172, cat. no. 398
Casagrande, Ceselin 2003: cat. no. 166
Casagrande, Ceselin 2003: cat. no. 241
Fadić 1997: cat. no. 148

T. B.

46.

43.

RIBBED BOWL

Alexandria
1st century AD
Technique: "millefiori" technique in a relief mould
Height 5.7 cm; diameter of the rim 9.5 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1767

The bowl was made using the *millefiori* technique in a relief mould. The main blue color of the glass is streaked with strands and irregular pieces of white glass. The lower part of the bowl, with a regular circular shape, is decorated with vertical, protruding ribs, while the band along the rim, around 1 cm wide, is smooth. The edge of the rim is rounded.

Published:
Ratković-Bukovčan 2001: p. 26, no. 16
Tomorad 2003: p. 68, photo. no. 68
Ratković-Bukovčan 2004: p. 22, 49, 76, cat. no. 17

Analogies:
Gläser der Antike – Sammlung Erwin Oppenländer 1974: no. 325
Goldstein 1979: no. 467

L. R. B.

44.

SMALL BOWL

Skradin-Maraguša
1st – beginning of the 2nd centuries
Technique: free-blown
Height 4.7 cm; diameter 12.2 cm
Municipal Museum of Šibenik, 11799

A small bowl with a conical rounded body made of blue glass. The rim is turned outwards and thickened. The ringed foot is slightly turned out. The bottom is thickened in the middle and protrudes into the inner side of the vessel, while on the outer side it is slightly indented towards the centre, where slight damage can be noted.

Published:
Pedišić 1998: p. 19, 28
Pedišić 2001: 75

Analogies:
Isings 1957: form 42a
Bonomi 1996: 162-163.

T. B.

45.

SMALL BOWL

Salona
1st-3rd centuries
Technique: free-blown
Height 4.2 cm; diameter of the body 7 cm; dia. of the rim 6 cm
Archaeological Museum in Split; G-1396

A small biconical bag-shaped bowl of transparent free blown blue glass with "S" shaped walls. The rim is thickened and flattened. The base is slightly concave.

Published:
Bulić 1905: p. 14
Kirigin 1984: p. 124, cat. no. 14, Pl. X. 14
Fadić 1997: p. 88, cat. no. 150

Analogies:
Calvi 1968: group E, p. 68, cat. no. 176, Pl. 11. 5
Whitehouse I 1997: p. 249, cat. no. 424
Arveiller-Dulong, Nenna 2005: p. 28, cat. no. 18, 19
Mandruzzato, Marcante 2005: p. 27, cat. no. 217

J. J.

46.

SMALL BOWL

Salona
1st century AD
Technique: mould-blown
Height 5.7 cm; diameter of the base 5.4 cm; dia. of the rim 11.6 cm
Archaeological Museum in Split; G-1397

A hemispherical small bowl of transparent green mould-blown glass, with a thickened and flattened rim, and an annular foot.

Published:
Bulić 1905, p. 14
Kirigin 1984: p. 125, cat. no. 28, Pl. XI. 28
Fadić 1997: p. 88, cat. no. 151

Analogies:
Isings 1957: form 42a, 58
Biaggio Simona I 1991: 5.3.2, p. 82, fig. 39. 163. 2. 134
Whitehouse I 1997: p. 74, cat. no. 91

J. J.

48.

47.
SMALL BOWL

Unknown circumstances of discovery
Second half of the 1st-2nd centuries
Technique: free-blown
Height 4.9 cm; diameter of the base 6 cm; diameter of the rim 14.3 cm
Museum of Arts and Crafts; 18907

A circular bowl of transparent slightly coloured glass. The base is circular and slightly reduced. The smooth walls are conically slanted and undecorated. Other than the band on the edge of the rim, the bowl has no decoration.

Unpublished.

Analogies:
Isings 1957: 58, 59, form 42
Hayes 1975: 201, Pl. 15/196
Bonomi 1996: 162, cat. no. 366

S. K. T.
M. L.

48.
BOWL

Osijek, Donji grad/Lower Town, find from a sarcophagus
2nd-3rd centuries
Technique: free-blown, wheel-cut decoration
Height 6 cm; diameter of the rim 10.2 cm; diameter of the base 3 cm
Museum of Slavonia, Osijek; MSO 9002

The bowl was made of free blown white glass, with wheel-cut decoration. The body is hemispherical, the mouth is wide with a straight rim, and the base is slightly indented in the centre. The bowl is decorated in two zones. The motif in the upper band are ovals divided by horizontal lines, while the lower band is decorated by a motif of hexagons with a circle in the centre, and on the outer walls are smaller circles between straight arms.

Published:
Bulat 1976: 91, no. 27, Pl. IV/4, Pl. VII/3
Šaranović Svetek 1986: 58, no. 13, Pl. I/8
Fadić 1997: 177, cat. no. 167
Göricke Lukić 2000: 89, Pl. XXIII/1

Analogies:
Morin – Jean 1936: 236, Fig. 321
Barkóczi 1988: 64, 65, Pl. IV, cat. no. 39, 42
Cabart 2003: 170, Fig. 7

S. F.
M. L.

49.
SMALL BOWL

Tekić–Treštanovačka gradina, grave 19
4th century
Technique: free-blown
Height 4.8 cm; diameter of the rim 13.2 cm
Municipal Museum of Požega; A-1145

A small hemispherical bowl of transparent pale green glass with air bubbles. The edge of the vessel is straight, with a shallow horizontal incision beneath it.

Published:
Sokač-Štimac, Bulat 1974: p. 125, 129, Pl. I:1; p. 132, Pl. II:1
Migotti 1994: p. 56, 59; p. 119, cat. 164b
Slavonija, Baranja i Srijem 2009: 125, cat. no. 396

Analogies:
Demo 1994: p. 119, cat. no. 164b

M. P.

50.
SHALLOW DISH

Zadar (Iader), Roman necropolis, archaeological excavations in 1989, cremation grave 231
Last quarter of the 1st century
Technique: free-blown
Height 2.1 cm; width 13.4 cm
Museum of Ancient Glass, A8045

A shallow dish with a flat base made of emerald green glass with thin walls. The edge of the rim is annular.

Unpublished.

Analogies:
Isings 1957: 61, form 46
Larese, Zebirnati 1998: 153, cat. no. 85
Fadić 1997: 188, cat. no. 185

I. F.
B. Š.
A. E. B.
A. Š.


47.


49.


50.

51.

52.

51.

PLATE

Salona
1st century
Technique: curving over a mould
Height 4 cm; diameter of the rim 17.1 cm
Archaeological Museum in Split; G-36

A plate with smooth walls of polychromic brown and purple glass with white patterns made in the millefiori technique. The rim is rounded. The base is concave.

Published:
Von Saldern 1964: p. 43, fig. 4
Damevski 1976: p. 65, Pl. IX. 1
Fadić 1997: p. 89, cat. no. 175

Analogies:
Goethert-Polaschek 1977: form 1, cat. no. 1-3, p. 15
Goldstein 1979: p. 180, cat. no. 467, T. 24
Roffia 1993: p. 57, cat. no. 28
Ravagnan 1994: p. 225, cat. no. 453

J. J.

52.

SMALL PLATE

Unknown circumstances of discovery
End of the 1st-2nd centuries
Technique: free-blown
Height 3.3 cm; diameter of the base 5.7 cm; diameter of the rim 13.2 cm
Museum of Arts and Crafts; 18906

A shallow circular plate made of transparent colourless glass. The base of the plate is slightly convex, and the slanted walls rise from it in a stepped fashion. A thin trail was applied to the rim, and on two opposite sides it was decorated with tendril-like bands imitating handles.

Unpublished.

Analogies:
Isings 1957: 59, form 43
Hayes 1975: 200, Pl. 14/194, 195
Arveiller Dulong, Nenna 2005: 37, cat. no. 9, 191, cat. no. 524, 525, 526

S. K. T.
M. L.

53.

DISH

Unknown site
Second half of the 1st century AD
Technique: free-blown
Diameter of the base 5.6; diameter of the rim 18.8 cm
Archaeological Museum in Zagreb; A-17752

A dish made of blue glass, with a straight rim and a ringed base, decorated with four wheel-cut grooves on the exterior side of the rim.

Published:
Ožanić-Roguljić 2004: p. 16, cat. no. 100

Analogies: unknown.

I. O. R.

53.

54.

54.
PLATE

Salona
3rd-4th centuries
Technique: free-blown
Height 4.2 cm; diameter of the rim 17.2 cm
Archaeological Museum in Split; G-37

A plate of transparent greenish glass decorated with geometric decorations cut and ground on the exterior side of the walls. The rim is straight.

Published:
Von Saldern 1964: p. 46, fig. 11
Fadić 1997: p. 89, cat. no. 186

Analogies:
Isings 1957: form 116b, p. 144-145
Fremersdorf 1961: p. 65, 66, Pl. 132
Goethert-Polaschek 1977: form 15a, cat. no. 71, p. 29, Pl. 31. 32

J. J.

55.
BEAKER

Zagreb-Stenjevec, outside of grave units
1st century
Technique: free blown
Height 8.8 cm; diameter of the base 3.8 cm; diameter of the rim 9.1 cm
Archaeological Museum in Zagreb; AMZ inv. 11749

The body is slightly convex with a strongly flaring rim, narrowed and rounded towards the base on a circular ringed foot.

Published:
Fadić 1997: p. 198, cat. no. 203

Analogies:
Barkoczi 1988: cat. no. 65
Lazar 2003: p. 92, type 3. 3. 1

Z. G.

56.
BEAKER

Salona
End of the 1st – 2nd century
Technique: free-blown
Height 11.3 cm; diameter of the base 4 cm; body dia. 6.05 cm; rim dia. 6.3 cm
Archaeological Museum in Split; G-64

A conical beaker of transparent free-blown yellowish-green glass with multiple indentations on the body, which widens towards the flattened rim. The base is concave.

Published:
Fadić 1997: p. 89, cat. no. 193

Analogies:
Isings 1957: form 32, p. 46, 47
Larese, Zerbinati 1998: p. 114, cat. no. 41
Larese 2004: p. 25, Pl. LXXIII, cat. no. 41

J. J.

55.

56.

57.

57.
BEAKER

Sisak
1st-2nd centuries
Technique: free-blown
Height 10.7 cm
Archaeological Museum in Zagreb;
A-8196

The beaker was made from pale green glass. The body is biconical, with a wide, thickened rim, and a ringed foot.

Unpublished.

Analogies:
Isings 1957: 50, form 36b
Hayes 1975: 67, cat. no. 137;
Barkóczi 1988: 72, Pl. LXXI/68

M. L.

58.

INDENTED BEAKER

Unknown circumstances of discovery
Second half of the 2nd century
Technique: free-blown
Height 7.5 cm; diameter of the base 4 cm; diameter of the rim 6.5 cm
Museum of Arts and Crafts; 18896

A beaker with smooth rounded sides and emphasized indentations on the surface, one on each of four sides. A broad ringed zone, completely smooth and without decoration, rises above the shoulder, separated from the body of the beaker by a thin line. The rim is rounded and thickened. The bottom of the beaker is also rounded, slightly convex, and placed on a small flat base.

Unpublished.

Analogies:
Massabo 1999: 83, cat. no. 36
Fadić 1997: 196, cat. no. 198
Foy, Nenna 2001: 186, cat. no. 318

S. K. T.
M. L.

59.

BEAKER

Solin
1st-2nd centuries
Technique: free-blown
Height 12 cm; diameter of the base 3.7 cm; dia. of the body 8.3 cm; dia. of the rim 7.2 cm
Archaeological Museum in Zagreb; AMZ A-11247

The oval beaker is made of transparent glass. The circular foot gradually extends into the body of the beaker, which continues to the cylindrical edge of the thickened rim. A wheel-cut horizontal rib separates the edfe of the rim from the body of the vessel. The base is flat.

Unpublished.

Partial analogies:
Lazar 2003: p. 96, fig. 32, 3.4.1

K. F.

60.

SMALL BOWL WITH A COLLAR

Unknown site
Second half of the 1st – 2nd centuries
Technique: free-blown
Height 6.8 cm; diameter of the base 5 cm; diameter of the rim 11 cm
Archaeological Museum in Zagreb; AMZ A-11863

A small bowl made of naturally colored blue-green transparent glass. The ringed foot extends into a hemispherical body that widens slightly towards the moulded collar. The collar is cylindrical with a prominent lower fold. The rim of the vessel is slightly out-turned. The base is slightly indented.

Published:
Damevski 1976: 65, 81, Pl. IX, 4

Analogies:
Morin – Jean 1922-1923: p. 129, form 86, fig. 167
Isings 1957: p. 89, form 69
Doppelfeld 1966: p. 37, group 2.5, fig. 34
Petru 1976: p. 26, Pl. III: 4, 5, 6
Ravagnan 1994: p. 184, cat. no. 380-382
Fadić 1997: p. 88, cat. no. 154
Lazar 2003: p. 69,76-77, fig. 29: 2.4.5

K. F.

58.

59.

60.

61.
BEAKER

Ludbreg
End of the 3rd – 4th centuries
Technique: free-blown
Height 6.7 cm; diameter of the rim 8.4 cm
Municipal Museum of Varaždin; 3728

The beaker of hemispherical shape was made of dark green glass. The base is flat. The rim is turned outwards. The surface of the beaker is undecorated.

Published:
Fadić 1997: p. 200, cat. no. 207
Migotti 1994: 61 ff., 111, no. 142b

Analogies:
Isings 1957: 113, 114, form 96
Keller 1971: T. 18/2
Šaranović-Svetek 1986: 13, T. II/4
Arveiller-Dulong, Nenna 2005: 455, cat. n. 1275

K. F.
M. L.

62.
BEAKER

Zmajevac – Grave 46
4th century
Technique: free-blown, applied decoration
Height 7.8 cm; diameter of the rim 7.5 cm
Museum of Slavonia, Osijek; AA20494

The body of the beaker is half egg-shaped and narrows towards the flat base, while the rim is turned slightly outwards. The body of the beaker is decorated in the central section with blue drops applied later, which were placed on four equally distant sides, in alternating motifs of individual drops of drops placed in a triangular bunch.

Published:
Filipović 2010: p. 37, cat. no. 9

Analogies:
Isings 1057: 119, form 107b
Damevski 1976: 66, Pl. XV/3
Šaranović Svetek 1986: 13, 14, Pl. II/8
Barkóczi 1988: 99, 100, Pl. XIV/ 152
Fadić 1997: 200, cat. no. 206
Whitehouse 1997: 218, cat. no. 376
Arveiller Dulong, Nenna 2005: 456, cat. no. 1276
Lazar 2004: 120, 121, fig. 35/3.10.2.

S. F.
M. L.
K. F

63.
BEAKER

Zmajevac – Grave 77
4th century
Technique: free-blown
Height 6.9 cm; diameter of the rim 7.8 cm
Museum of Slavonia, Osijek; AA20622

The beaker with a hemispherical body without decoration was blown from transparent yellow-green glass. The rim is slightly everted and the base is flat.

Published:
Filipović 2010: p. 55, cat. no. 52

Analogies:
Isings 1957: 113, 114, form 96a
Keller 1971: Pl. 18/2
Damevski 1976: 66, Pl. XV/2
Gregl 1994: 124, cat. no. 175
Šaranović Svetek 1986: 13, Pl. II/4
Simoni 1994: 111, 142b
Arveiller Dulong, Nenna 2005: 455, cat. no. 1275

S. F.
K. F.

64.
BEAKER

Popov Dol
Second half of the 4th – first half of the 5th centuries
Technique: free-blown
Height 6.3 cm; diameter of the rim 8.1 cm
Archaeological Museum in Zagreb; AMZ A-11411

The beaker was made of yellow-green glass. The body is oval. The collar rim is wide and straight with a thickened edge. The base is slightly indented in the centre.

Published:
Damevski 1976: 66, Pl. XV/2
Gregl 1994: 124, cat. no. 175

Analogies:
Isings 1957: 113, 114, form 96a
Keller 1971: Pl. 18/2
Šaranović Svetek 1986: 13, Pl. II/4;
Demo 1994: 111, 142b
Arveiller Dulong, Nenna 2005: 455, cat. no. 1275

M. L.


61.


62.


63.


64.

65.

BEAKER

Sisak
4th – first half of the 5th centuries
Technique: free-blown, applied decoration
Height 8 cm; diameter of the rim 9.5 cm
Archaeological Museum in Zagreb; AMZ A-7685

The beaker was free blown from dark green glass. The body is hemispherical, the base flat. The straight rim is turned outwards. The body of the beaker is decorated with glass drops applied subsequently, placed opposite each other in groups of one and two drops.

Published:
Damevski 1976: 66, Pl. XV/3
Fadić 1997: 90, 200, cat. no. 206

Analogies:
Isings 1057: 119, form 107b
Šaranović Svetek 1986: 13, 14, Pl. II/8
Barkóczi 1988: 99, 100, Pl. XIV/ 152
Whitehouse 1997: 218, cat. no. 376
Arveiller Dulong, Nenna 2005: 456, cat. no. 1276
Lazar 2004: 120, 121, fig. 35/3.10.2.

M. L.

65.

66.

GOBLET

Unknown site
First half of the 5th century
Technique: free-blown
Height 6.9 cm; diameter of the base 4.4 cm; diameter of the rim 6.7 cm
Archaeological Museum in Zagreb; A-11450

A goblet of transparent pale blue glass. The circular base with a slightly thickened edge leads to a short, hollow, cylindrical foot that bears the conical body of the goblet. The thickened rim is slightly out-turned. The base is indented in the centre.

Published:
Fadić 1997: p. 90, 198, cat. no. 201

Analogies:
Morin-Jean 1922-1923: p. 136, form 99, fig.179
Isings 1957: p. 139, form 111
Doppelfeld 1966: p. 72-73, group 4.5, fig. 180
Whitehouse 2005: p. 105, cat. no. 156, Pl. Blown Vessels 338:156

K. F.

66.

67.

68.

69.

67.

BEAKER

Tekić–Treštanovačka gradina, grave 124
4th century
Technique: free-blown
Height 12.1 cm; diameter of the base 1.2 cm; diameter of the rim 8.2 cm
Municipal Museum of Požega; 17.993

A beaker (or lamp) of transparent pale green glass with air bubbles with a conical shape, a rounded base, and a slight depression in the middle. The rim is straight without any thickening. The glass is decorated with shallow horizontal wheel-cut grooves placed in the upper section.

Unpublished.

Analogies:
Migotti 1994: p. 119, cat. no. 165
Migotti 2004: 159; 222, Pl. III, fig. 3
Migotti 2004: 160, 161; 226, Pl. VII, fig. 2
Migotti 2009: 135; 205, Pl. XXI, fig. 5

M. P.

68.

BEAKER

Radovanci near Velika 1922, in the vineyard of Stjepan Stojčević, walled grave-vault with a double burial, chance find
4th century
Technique: free-blown
Height 10.8 cm; diameter of the base 2.6 cm; diameter of the rim 10.8 cm
Municipal Museum of Požega; K 1839

A beaker of conical shape made from transparent, pale green glass with air bubbles. The flat base is slightly convex in the centre. A line was wheel-cut horizontally below the straight rim. The beaker is decorated with blue drops that form three bunches, with single drops between them.

Unpublished.

Analogies:
Sokač-Štimac 1999

M. P.

69.

LAMP

Probably Salona
Second half of the 4th – first half of the 5th centuries
Technique: free-blown
Height 13.4 cm; diameter of the base 1.8 cm; dia. of the rim 8.2 cm
Archaeological Museum in Split; G-1771

A conical vessel (lamp) of colourless free-blown glass decorated with horizontal wheel cuts. The cone ends in a slightly convexly turned-out rim, polished on the top. Above the lower zone of incised lines the traces remained of lines scratched by chance (by the object in which it stood – a candlestick or the ring of a candelabra). The base has a very small diameter. The lamp cannot stand even when empty.

Published:
Buljević 1994: p. 259, cat. no. 13
Fadić 1997: p. 90, cat. no. 211

Analogies:
Isings 1957: form 106d, p. 130, 131
Goethert-Polaschek 1977: form 54, p. 74, cat. no. 314, Pl. 43. 314
Arveiller-Dulong, Nenna 2005: p. 452, cat. no. 1279

J. J.

70.

BEAKER

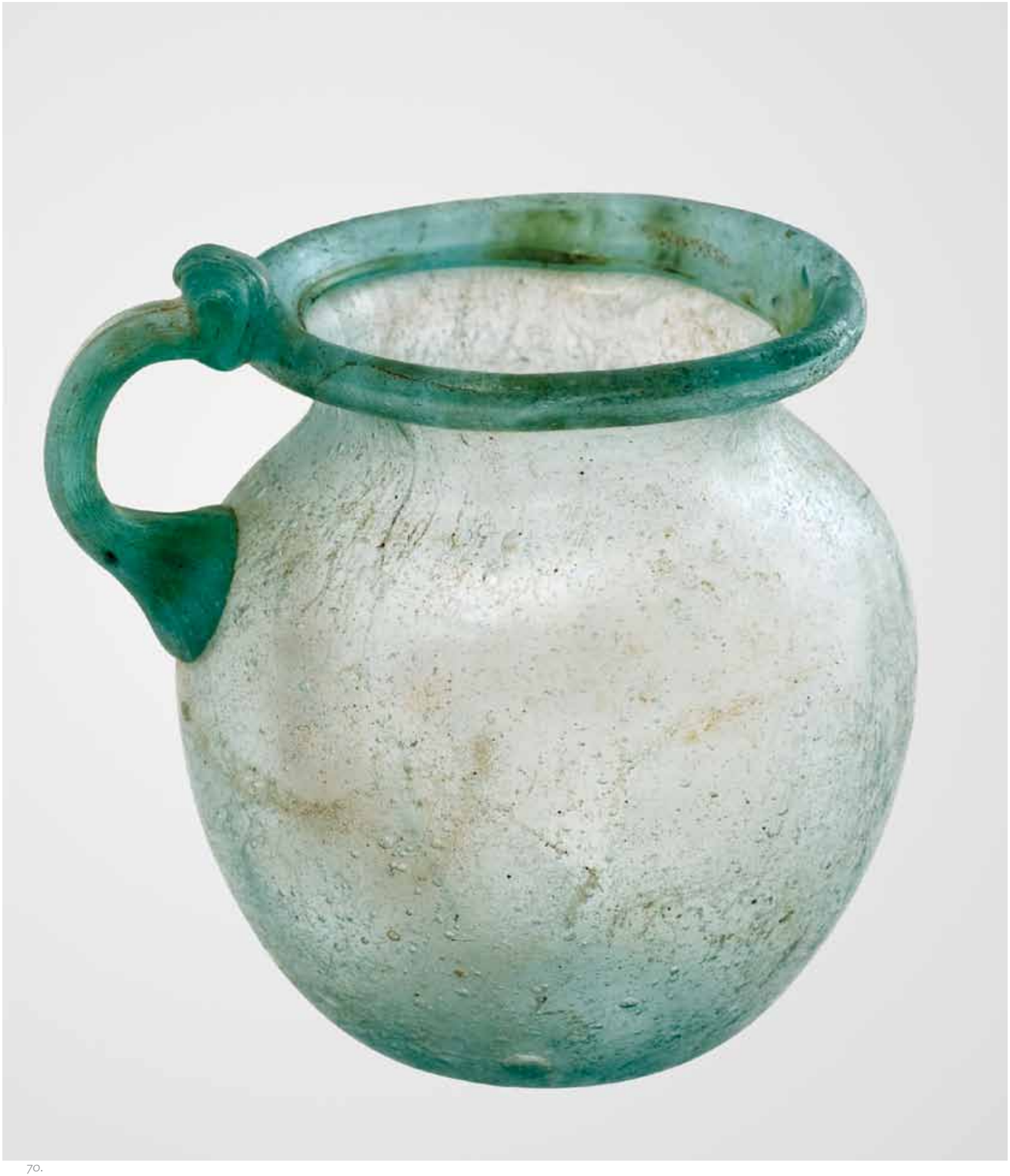
Zadar (Iader), Roman necropolis, archaeological excavations in 2005, cremation grave 8
Last quarter of the 1st century
Technique: free-blown
Height 8.0 cm (with handle 8.4 cm); width 7.4 cm; diameter of the rim 6.1 cm
Museum of Ancient Glass, A8989

A beaker with a globular body made of blue-green glass with thin walls. The short neck extends into an annular rim. The handle with a circular section and a loop was applied to the shoulder and rim. The base is flat.

Unpublished.

Analogies:
Isings 1957: 76, form 57
Fadić 1997: 181, cat. no. 169
Lazar 2008: 114, cat. no. 4.

I. F.
B. Š.
A. E. B.
A. Š.



70.

71.

71.

SMALL JUG WITH ONE HANDLE

Unknown site
End of the 1st century
Technique: free-blown
Height 5.3 cm; width of the neck 1.2 cm, width of the body 4 cm
Archaeological Museum of Istria, Pula; AMI-A-4939

A small jug made of transparent greenish glass with a globular body, flat shoulder, cylindrical neck, and an annular thickened rim. The single thin upright handle is bent at the top and is higher than the rim. The body is decorated with tiny blue globular droplets of unequal size.

Published:
Fadić 1997: p. 153, cat. no. 111.

Analogies:
Isings 1957: p. 71, form 54
Mandruzzato, Marcante 2005: p. 82, cat. 148

A. S.

72.

JUG

Unknown circumstances of discovery
1st century
Technique: mould and free-blown
Height 14.5 cm; diameter of the base 9.5 cm; diameter of the rim 11.5 cm
Museum of Arts and Crafts; 18898

An urn of transparent greenish glass. The base is rounded, slightly reduced. The body is globular with one thin handle that joins the shoulder and the rim of the vessel and ends above the level of the mouth of the vessel. The rim of the vessel is very shallow and slightly tapered with a fire-rounded edge. The body is decorated with thin elongated semicircular lines that created a stylized geometrical netting motif.

Unpublished.

Analogies:
Isings 1957: 76, form 57
Foy, Nenna 2001: 135, cat. no. 166-2,3 (cat. no. 277)
Larese 2004: Pl. LXXXVII, cat. no. 612

S. K. T.
M. L.

72.

73.

73.

VIAL

Pula, Arsenal Street (former Boris Kidrič Boulevard) 1957, grave 12
1st century
Technique: free-blown
Height 3.8 cm; width of the body 5.2 cm
Archaeological Museum of Istria, Pula; AMI-A-4496

A vial made of transparent greenish glass with a discoidal, biconical body with one small, circular upright handle placed at the widest part of the body (carehesium). The cylindrical neck is taller than the body. The rim is ring-shaped and thickened. The foot is broken off the base.

Published:
Mlakar 1970: 3-21, 8, Pl. III, 14
Fadić 1997: 182, no. 171

Analogies:
Isings 1957: 50, form 36

A. S.

74.

JUG WITH A CYLINDRICAL BODY

Unknown site (Zadar region)
Last quarter of the 1st – first half of the 2nd centuries
Technique: mould and free-blown
Height 15.7 cm; width 10.4 cm; diameter of the rim 4.2 cm
Museum of Ancient Glass, A9936

A jug with a cylindrical body and a tubular neck made of blue glass with thin walls. The handle with three lengthwise ribs was applied to the shoulder and below the rim. The base is slightly indented.

Published:
Fadić 1997: 164, cat. no. 138

Analogies:
Isings 1957: 67-68, form 51a.

I. F.
B. Š.
A. E. B.
A. Š.

74.

75.

76.

77.

75.

BOTTLE

Unknown circumstances of discovery
Second half of the 1st – first half of the 2nd century
Technique: free-blown
Height 21.4 cm; diameter of the base 15.5 cm; diameter of the rim 10.6 cm
Museum of Arts and Crafts; 18899

A vessel of transparent greenish glass. The base is circular and flat, the body cylindrical and smooth with two thin horizontal trails on the wall. The short neck ends in a circular mouth and broad rim. The broad single handle, bent at a right angle, extends from the shoulder to the upper edge of the neck, decorated with relief "combing".

Unpublished.

Analogies:
Sorkina 1965: 68, Fig. 1/15
Roffia 1993: 152 cat. no. 348
Kunina 1997: 173, cat. no. 141; 300, cat. no. 233

S. K. T.
M. L.

76.

JUG

Sisak
1st-2nd centuries
Technique: free-blown
Height 11.5 cm; diameter of the rim 3 cm; diameter of the base 7.4 cm
Municipal Museum Sisak, 510:SIK 20247

A jug made of pale green glass, with one handle, an emphasized, turned-out rim, cylindrical neck, conical body, and a flat base. The ribbon handle is attached at a right angle, and the upper part below the rim is ring-shaped.

Unpublished.

Analogies:
Isings 1957: 72-73, form 55a
Calvi 1968: 112-113, Pl. B/8
Bonomi 1996: 139, cat. n. 319, 320
Roffia: 141-142, cat. n. 321, 323, 324

I. B.

77.

JUG

Unknown circumstances of discovery
4th century
Technique: mould and free-blown
Height 15 cm; diameter of the base 4.6 cm; diameter of the rim 4.9 cm
Museum of Arts and Crafts; 18894

A small jug made of yellow transparent glass. The circular ringed base continues to the egg-shaped body with a single ribbon handle and a cylindrical neck. The rim is wide and shallow with an emphasized raised smooth edge. The decoration on the surface consists of very refined applied trails that create a net-like pattern.

Unpublished.

Analogies:
Isings 1957: 150, 151, form 120b
Ružić 1994: 18, Pl. XI/2
S. K. T.
M. L.

78.

79.

80.

78.

JUG

Zmajevac – Grave 67
4th century
Technique: free-blown
Height 33.5 cm; diameter of the base 8 cm; diameter of the rim 8 cm
Museum of Slavonia, Osijek; AA20578

A jug with an oval body and a tall and narrow cylindrical neck ending in an everted thickened rim with a glass collar beneath it. The ribbed ribbon handle extends from shoulder to rim. The jug stands on a moulded foot.

Published:
Filipović 2010: 49, cat. no. 36

Analogies:
Burger 1966: 217, fig. 110, G. 212/1
Barkóczi 1988: 196, Pl. LIII/488
Arveiller Dulong, Nenna 2005: 386, cat. no. 1033

S. F.
M. L.
K. F.

79.

JUG

Zmajevac – Grave 77
4th century
Technique: free-blown
Diameter of the rim 6.1 cm; height of the handle 8 cm
Museum of Slavonia, Osijek; AA20621

A jug with an oval body and cylindrical neck, the latter decorated with wound glass trails. The out-turned rim has a ring-like thickening, as does the base. The ribbon handle is attached to the shoulder and neck of the jug.

Published:
Filipović 2010: 55, cat. no. 51

Analogies:
Barkóczi 1988: 193, Pl. XIX/478
Biaggio Simona 1989: 175, fig. 9
Fülep 1984: 195, Ch. IV/Vi

S. F.
M. L.

80.

JUG

Zmajevac – Grave 157
4th century
Technique: free-blown
Height 18.8 cm; diameter of the base 10.7 cm; diameter of the rim 7.6 cm
Museum of Slavonia, Osijek; AA20915

A jug with a cylindrical body and a narrow neck with an out-turned and ring-like thickened rim. The ribbon handle was subsequently applied to the shoulder of the jug, ending beneath the rim. The base is indented in the center.

Published:
Filipović 2010: 90, cat. no. 128

Analogies:
Isings 1957: 156, 157, form 126
Barkóczi 1988: 185, Pl. XLIII/449
Topál 2003: 163, Pl. 37/62-1
Arveiller Dulong, Nenna 2005: 379, cat. no. 1008

S. F.
M. L.

81.

81.

SMALL JUG

Syria
1st century
Technique: mould-blown
Height 8.1 cm; diameter of the body 5.2 cm; diameter of the rim 3.1 cm
Archaeological Museum Zadar; A10016

A small jug of cobalt blue glass with a globular body decorated with dense perpendicular grooving. The cylindrical neck ends in an out-turned rim. The ribbon handle is fluted and the upper bent section surpasses the height of the rim. The base is slightly indented.

Published:
Fadić 1997: 151, no. 109
Fadić 2001: 202, no. 200

Analogies:
Calvi 1968: 100
Ravagnan 1994: 166, no. 321

S. G.

82.

82.

SMALL JUG

Syria
1st century
Technique: mould-blown
Height 8.4 cm; diameter of the body 5.4 cm; diameter of the rim 2.4 cm
Archaeological Museum Zadar; A10017

A small jug of yellowish glass with a globular body decorated with dense perpendicular grooves. The cylindrical neck ends in an everted rim. The ribbon handle isfluted, made of cobalt blue glass, and the upper bent section surpasses the height of the rim. The base is slightly prominent and gently indented.

Published:
Fadić 1997: 87, 151, no.108
Fadić 2001: 201, no. 199

Analogies:
Calvi 1968: 100
Ravagnan 1994: 166, no. 321

S. G.

83.

BOTTLE

Eastern and Gallic-Rhine workshops
End of the 1st – beginning of the 2nd centuries
Technique: free-blown
Height 23.5 cm; diameter of the body 7.8 cm; diameter of the rim 3.8 cm
Archaeological Museum Zadar; A8318

A bottle of bluish glass with a tall cylindrical body that broadens slightly from the base towards the neck. The slightly rounded and slanted shoulders extend into a short cylindrical neck ending in an everted annular rim. A broad ribbon handle joins the shoulder and the middle of the neck. The base is flat. Seven parallel lines were ground on the body, three broad and four narrow.

Published:
Fadić 1997: 87, 164, no. 136

Analogies:
Isings 1957: 519
Dautova-Ruševljan 1973: 194, Pl. 9:23
Cermanović – Kuzmanović 1987: fig. 39

S. G.

83.

85.

86.

87.

84.

JUG

Unknown site
End of the 1st – beginning of the 2nd centuries
Technique: free-blown
Height 11.2 cm; diameter of the body 13.3 cm; diameter of the rim 4 cm
Archaeological Museum Zadar; A8323

A jug of blue-green glass with a flattened irregular oval body and a cylindrical neck ending in an everted rim. The broad fluted handle joins the shoulder and neck of the jug. The base is slightly indented.

Published:
Fadić 1997: 163, no. 135
Fadić 2001: 221, no. 219

Analogies:
Isings 1957: 31-32, form 14
Ravagnan 1994: 142, 170, no. 272, 328-330

S. G.

85.

SMALL BOTTLE WITH A SQUARE BASE

Rome, unknown circumstances of discovery
Second half of the 1st century
Technique: mould and free-blown
Height 9.8 cm; diameter 2.9 cm; dimensions of the base 5 × 5 cm
Museum of Arts and Crafts; 18893

The bottle was made of transparent slightly green glass. The square base continues into a square vessel with rounded shoulders and a cylindrical neck. The rim is slightly flattened. The ribbon handle extends at a right angle from the edge of the rim to the shoulder.

Unpublished.

Analogies:
Isings 1957: 63-66, form 50a
Barkóczi 1988: 172, Pl. XXXVII/403
Bonomi 1996: 130, cat. no. 292

S. K. T.
M. L.

86.

BOTTLE

Osijek-Divaltova 120, G 32
1st century
Technique: mould and free-blown
Height 15.2 cm; diameter of the base 5.6 cm; diameter of the rim 4 cm
Museum of Slavonia, Osijek; AMO 2027

The bottle of green glass was made by blowing into a mould. The body has a rectangular shape with rounded shoulders, and a short narrow neck. The wide rim was bent inwards and flattened. The base is flat and decorated with a motif of a rhomb within a square. The moulded handle joins the shoulder and neck of the bottle.

Unpublished.

Analogies:
Isings 1957: 66, 67, form 50b
Lazar 2003: 150, form 6.3.2.
Gregl, Lazar 2008: 117, cat. no. 9

M. L.

87.

SMALL BOTTLE

Unknown site
Second half of the 1st – 3rd centuries
Technique: mould and free-blown
Height 7.2 cm; width of the body 3.2 cm; width of the neck 2.1 cm
Archaeological Museum of Istria, Pula; AMI-A-4941

A small bottle made of transparent greenish glass with a hexagonal body, flat base, cylindrical neck, and annular thickened rim. It has a single upright handle bent beneath the rim.

Published:
Fadić 1987: p. 111, Fig. 9, form 4
Fadić 1997: p. 154, cat. no. 113

Analogies:
Isings 1957: p. 63, form 50
Mandruzzato, Mareante 2005: p. 76, cat. 112

A. S.

84.

88.

89.

88.

BOTTLE

Sisak, southeastern necropolis
Second half of the 1st – 2nd centuries
Technique: mould-blown, free-blown
Height 11.5 cm; diameter of the body 6.1 cm; diameter of the rim 3.6 cm
Municipal Museum Sisak, 510:SIK 228
AZA

A bottle made of pale greenish glass with a single handle. The rim is emphasized and turned-out, the neck short and cylindrical, and the body square in section. The ribbon handle is ribbed and attached below the rim at a right angle.

Published:
Wiewegh 2003: 58, 85, Pl. XXXIII: 1

Analogies:
Gregl 1989
Lazar 2003: p. 150, form 6.3.2.
Gregl, Lazar 2008: p. 116, cat. no. 5, Pl. 8: 5

I. B.

89.

JUG

Karlobag
Second half of the 1st – 2nd centuries
Technique: mould-blown, free-blown
Height 10.3 cm; diameter of the body 5.7 cm; diameter of the rim 2.9 cm
Archaeological Museum in Zagreb; A-11813

A jug of blue-green transparent glass made in a technique of blowing and pressing the formed sides and base. The square body has rounded edges, rounded shoulders, and gradually extends into a cylindrical neck. The rim of the vessel is turned outwards and framed by a ringed edge. The handle of blue-green glass joins the body and rim of the vessel, and is bent at a right angle by the rim of the vessel. In contrast to the rest of the vessel, the surface of the handle is decorated with relief bands. The varied treatment of the glass achieved a dynamic contrast between the smooth, fragile walls of the jug and the rough textured relief elements of the handle. The handle was formed separately and applied to the body of the vessel. The base of the vessel is slightly indented and covered with relief concentric circles.

Published:
Brunšmid 1898: p. 168, fig. 72

Analogies:
Morin – Jean 1922-1923: p. 62, fig. 41
Isings 1957: p. 63-66, form 50a
Hayes 1975: p.76 -77, cat. no. 273, Pl. 19
Damevski 1976: p. 80, Pl. VIII: 1
Veličković 1976: p. 169, 170, fig. 13, 14
Goethert-Polaschek 1977: F.C: 114
Cermanović-Kuzmanović 1987: p. 17, fig. 37
Barkóczi 1988: p. 172, Pl. XXXVII: 404
Ravagnan 1994: p. 139, cat. no. 268-271;
Fadić 1997: p. 87, 156, cat. no. 118
Kunina 1997: p.133, 287, cat. no. 166, 167, fig. 100
Lazar 2003: p. 151, 153, fig. 444: 6.3.4
Fadić 2006: p. 50-52, form 8b, cat. no. 57-61

K. F.

90.

FLASK

Surduk
2nd-3rd centuries
Technique: mould-blown
Height 9.6 cm; diameter of the rim 3 cm; dim. of the base 4 × 2.5 cm
Archaeological Museum in Zagreb; A-11368

The flask was made of green transparent glass in a mould. The body is square, the rim broad, curled inwards and flattened. The base is indented in the centre. Two smooth handles join the neck and the shoulder of the vessel.

Published:
Brunšmid 1895: 181
Šaranović Svetek 1986: 21, Pl. VIII/2

Analogies:
Isings 1957: 108, form 90
Calvi 1968: 85, cat. no. 206, Pl. 13/2
Bulat 1976: 89, cat. no. 4, 5, Pl. III/2, Pl. III/1
Von Boeselager 1989: 34, fig. 17
Gregl, Lazar 2008: 118, cat. no. 12

M. L.

91.

FOOTED GOBLET WITH TWO HANDLES

Gornja Vas, grave 36
Middle of the 2nd century
Technique: free-blown
Height 9.9 cm; diameter of the base 4 cm; diameter of the rim 7.4 cm
Archaeological Museum in Zagreb; AMZ A-16705

A footed goblet made of pale green glass, while the small foot is darker green. The two small handles are cut and placed horizontally on the rim. The standing surface is circular.

Published:
Gregl 2009: p. 58, Pl. 32:2
Gregl 2009a: p. 433-435, Pl. 1:2

Analogies:
Hoffiller 1904: p. 173, Fig. 68:3
Ravagnan 1994: p. 204, cat. 402
Girardi-Jurkić, Džin 2003: p. 140, cat. 112

Z. G.

90.

91.

92.

ROUNDED VESSEL IN THE SHAPE OF AN *OLLA*

Gornja Vas, grave 36
Middle of the 2nd century
Technique: free-blown
Height 15 cm; diameter of the base 8.4 cm; diameter of the rim 11.4 cm
Archaeological Museum in Zagreb; AMZ A-16704.

A rounded vessel made of pale green glass. The rim is slanted outwards, the base has an annular everted foot.

Published:
Fadić 1997: p. 228, cat. 264
Gregl 2003: 469-474, Pl. 2:1
Gregl 2007, p. 221-273, Pl. 32:2

Analogies:
Lazar 2003 – Ptuj

Z. G.

93.

FOOTED GOBLET WITH TWO HANDLES

Medulin, Burle
Second half of the 1st – first half of the 2nd centuries
Technique: free-blown
Height 11.4 cm, diameter of the rim 9.4 cm, width with handles 12.4 cm, height of the handles 4.3 cm
Archaeological Museum of Istria, Pula; AMI-A-300130

A transparent green glass cantharos on a low unthickened foot with a widened circular base and two thin upright handles ending directly below the everted rim. The handles are bent twice beneath the rim. The rim is separated from the body by an annular thickening.

Published:
Girardi Jurkić 2003: 109-170, 140, no. 112
Gregl 2009: 433-438, fig. 2

Analogies:
Fadić 1997: 200, no. 209
Isings 1957: 53-54, form 38
Gregl 2009: 434-435

A. S.

94.

SMALL FLASK WITH TWO HANDLES

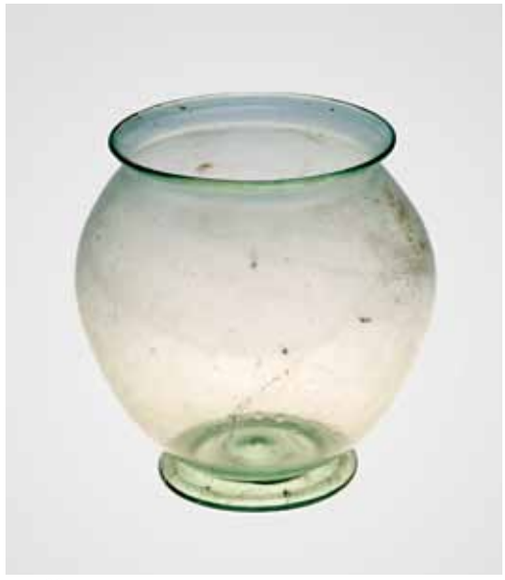
Unknown circumstances of discovery
First half of the 3rd century
Technique: free-blown
Height 8.2 cm; diameter of the base 3.5 cm; diameter of the rim 3.2 cm
Museum of Arts and Crafts; 18889

A small flask of transparent slightly coloured glass. The base is circular and flat. The oval body is rounded, with two small handles. The short cylindrical necks ends in a flat wide rim. The surface of the body is undecorated, but the body is highly iridescent and gives the impression of amalgam (luster) glass.

Unpublished.

Analogies:
Barkóczi 1988: 162, cat. no. 372

S. K. T.
M. L.



92.

93.

94.

95.

96.

95.

FLASK WITH TWO HANDLES

Köln (Cologne)
3rd century
Technique: free-blown
Height 8.5 cm; diameter of the body 8.4 cm; diameter of the rim 5.4 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1449

The small flask of transparent, pale green glass was made by blowing. The surface is covered with iridescence. The broad round body with a flat base was covered in the lower section with an applied trail of green glass creating an irregular zigzag motif. The central part is spirally wound about with an even thinner glass trail. The body extends into a wide cylindrical neck, gently widened towards the rim, where a glass trail was applied. Two applied oppositely placed handles extend from the upper part of the body to the very edge of the rim. They are widened at the juncture with the body, while they curve in a wavy fashion at the juncture with the rim.

Published:
Ratković-Bukovčan: 2004: p. 37, 63, 113, cat. no. 95

Analogies: unknown.

L. R. B.

96.

BOTTLE

Vinkovci – Kaufland
First half of the 4th century
Technique: free-blown, wheel-cut
Height 30.5 cm; diameter of the base 9.8 cm; diameter of the neck 1.9 cm; diameter of the rim 8.4 cm
Municipal Museum Vinkovci; A5909

A glass bottle with two handles. The rim of the bottle is everted and moulded. The ribbon handles are undecorated, extending between the neck beneath the rim and the shoulder. The neck is cylindrical, as is the wider body. The body of the bottle is decorated with a row of slanted lines below the shoulder and above the base, while the central section is decorated with three rows of wheel-cut decoration. All the decorations are separated by two concentric incised lines. In the central section the decorations are located in specially incised fields. The base is irregular with a concave indentation in one part. The bottle is damaged in the central section.

Unpublished.

Analogies:
Goethert Polaschek 1985: Fig. 29/5
Barkóczi 1988: 203, Pl. LIX/505
Kunina 1997: 216, cat. no. 190

H. V.
M. L.

97.

98.

99.

100.

101.

97.

BALSAMARIUM

Skradin-Đardin
1st century
Technique: free-blown
Height 11.7 cm; diameter 5.5 cm
Municipal Museum of Šibenik, AO 11263

The balsamarium made of green glass is preserved without damage. The conical body is rounded, with a long cylindrical neck, and an emphasized annular rim. The base is flat.

Unpublished.

Analogies:
Isings 1957: form 28b
Facchini 1999: p. 227, cat. no. 542.

T. B.

98.

BALSAMARIUM

Skradin-Maraguša
1st-2nd centuries
Technique: free-blown
Height 14.3 cm; diameter 8.3 cm
Municipal Museum of Šibenik, 11848

The balsamarium was made of almost colourless glass. The conical body is somewhat uneven, with a flat base. The neck is cylindrical and slightly depressed in the middle, while the rim is ring-shaped and out-turned.

Published:
Pedišić 1998: 27, no. 18.

Analogies: unknown.

T. B.

99.

FLASK

Skradin
1st-2nd centuries
Technique: free-blown
Height 12.5 cm; diameter 6.3 cm
Municipal Museum of Šibenik, 11878

The flask made of almost colourless glass was completely preserved. The body is rounded, and the base slightly indented. The neck is cylindrical, while the rim is ring-shaped and out-turned.

Unpublished.

Analogies: unknown.

T. B.

100.

FLASK

Skradin-Maraguša
1st-2nd centuries
Technique: free-blown
Height 16.5 cm; diameter 9.2 cm
Municipal Museum of Šibenik, 11800

The flask is made of blue glass, with a rounded conical body and a long cylindrical neck that narrows towards the top. The rim is ring-shaped and out-turned, while the base is flat.

Published:
Pedišić 1998: p. 26, no. 1

Analogies: unknown.

T. B.

101.

BALSAMARIUM

Skradin-Đardin, grave 8
End of the 1st – 2nd centuries
Technique: free-blown
Height 9.5 cm; diameter 3.7 cm
Municipal Museum of Šibenik, AO 10999

A completely preserved balsamarium made of whitish thick glass. As it was originally discovered with the original balsam fill, the glass seems to have a brown colour. The body is bell-shaped, with a long cylindrical neck. The base is slightly indented and the uneven rim is everted.

Published:
Fadić 2001: 103, cat. no. 28
Pedišić 2001: 35-36

Analogies:
Buljević 2002: 430-433, cat. no. 211-232
Buljević 2002a: 197, 205

T. B.

102.

BALSAMARIUM

Sisak, southwestern necropolis
1st – beginning of the 2nd centuries
Technique: free-blown
Height 6.3 cm; diameter of the body 2.2 cm; diameter of the rim 1.9 cm
Municipal Museum Sisak; 510:SIK 843
AZA

A balsamarium of intensive blue glass, with an everted, slanted, funnel-shaped rim, a cylindrical neck, and an elongated body, slightly widened towards the base. Type Isings 8a.

Unpublished.

Analogies:
Isings 1957: p. 24, form 8a
Istenič 2000: Pl. 107, grave 511; Pl. 157, grave 692

I. B.

103.

BALSAMARIUM

Sisak, southwestern necropolis
1st-3rd centuries
Technique: free-blown
Height 7.9 cm; diameter of the body 3 cm; diameter of the rim 2.1 cm
Municipal Museum Sisak; 510:SIK 850
AZA

A balsamarium of various shades of green glass, with a turned-out rim, cylindrical neck, and oval body.

Unpublished.

Analogies:
Isings 1957: p. 24, form 8
Fadić 1997: p. 102, cat. no. 26

I. B.

104.

BICONICAL FLASK

Pannonian workshop
2nd-3rd centuries
Technique: free-blown
Height 11.8 cm; diameter of the body 3 cm; diameter of the rim 3 cm
Archaeological Museum Zadar A5862

A biconical flask of colorless glass. The cylindrical neck ends in an everted rim.

Published:
Fadić 1997: 82, 114, no. 50
Fadić 2001: 123, no. 121

Analogies:
Isings 1957: 90-91, form 72
Barkóczi 1988: 135, no. 279
Tommaso 1990: 75, type 56
Ravagnan 1994: 156-157, no. 305, 307

S. G.

105.

PSEUDO MERCURY FLASK

Sveti Juraj – Senj
End of the 2nd – beginning of the 4th centuries
Technique: mould-blown, free-blown
Height 11.2 cm; diameter of the body 3 cm; diameter of the rim 2.2 cm
Archaeological Museum in Zagreb; A-1610

A pseudo Mercury flask with a hexagonal body. The narrow elongated neck with a flattened turned out rim extends from the prominent shoulders of the flask. An image of the god Mercury can be seen on the base, which is common on classic Mercury flasks with a square body.

Published:
Damevski 1976: p. 65,79, Pl. VII:4

Analogies:
Morin-Jean 1922-1923: p. 69, form 19, fig. 54
Isings 1957: p. 100-101, form 84
Fadić 1997: p. 81, cat. no. 54
Fadić 2006: p. 58, form 10, cat. no. 75
Fadić 2011: p. 344-347, inv. no. 12-26
Fadić, Štefanac 2012: p. 26-29, cat. no. 245-275, Pl. XLIII

K. F.

102.

103.

104.

105.

106.

107.

106.

MERCURY FLASK

Pula, 1904
2nd–3rd century
Technique: mould and free-blown
Height 21.5 cm, width 7 × 5 cm
Archaeological Museum of Istria, Pula; AMI-A-4889

A Mercury flask made of transparent greenish glass with the neck broken off. The body is hexagonal. In the centre of the base is a relief depiction of Mercury, and in four corners of the hexagonal base are the initials in relief: M G H R.

Published:
Gnirs 1904: 131-146, 144-145, Fig. 25-26
Fadić 1997: p. 149, cat. no. 105
Fadić 2005: p. 205-211

Analogies:
Isings 1957: p. 100, form 84

A. S.

107.

BOTTLE WITH A DISCOIDAL BODY

Epetion
Late 2nd – 3rd centuries
Technique: free-blown
Height 9.7 cm; diameter of the base 5.1 cm; diameter of the rim 3.15 cm
Archaeological Museum in Split; G-988

A bottle with a discoidal body of transparent greenish free blown glass, with a row of nine horizontal indentations along the sides. A glass trail was applied at the transition from the body to the funnel-shaped neck. One trail was also applied halfway up the neck, which ends in a rim turned inwards. The foot is annular.

Published:
Von Saldern 1964: p. 45, no. 8
Damevski 1976: p. 66, Pl. XIII. 1
Fadić 1997: p. 82, cat. no. 60

Analogies:
Doppelfeld 1966: p. 52, Pl. 98, 99

J. J.

108.

109.

108.

FLASK

Sisak, southwestern necropolis
1st–2nd centuries
Technique: free-blown
Height 15.2 cm; diameter of the body 8.8 cm; diameter of the rim 3.1 cm
Municipal Museum Sisak; 510:SIK 931
AZA

A flask (balsamarium?) made of pale green glass with a turned-out rim, a straight cylindrical neck, a pear-shaped body, and a flat base.

Unpublished.

Analogies: unknown.

I. B.

109.

BOTTLE

Unknown site (Zadar region)
2nd century
Technique: mould-blown
Height 24.5 cm; width 7.9 cm
Museum of Ancient Glass, A10076

A bottle with an egg-shaped body of yellowish-green glass, a long cylindrical neck, and a curled annular rim. The body has wheel-cut decoration of thick and thin horizontal lines.

Published:
Fadić 1997, 141, cat. no. 94.

Analogies: unknown.

I. F.
B. Š.
A. E. B.
A. Š.

110.

110.

BALSAMARIUM

Skradin-Đardin
2nd century
Technique: free-blown
Height 12.9 cm; width 8.1 cm
Municipal Museum of Šibenik, AO 11264

The balsamarium was made of almost colourless glass. The conical body is somewhat uneven, with a concave base. The neck is cylindrical and narrows towards the top. The rim is ring-shaped and out-turned.

Unpublished.

Analogies:
Isings 1957: form 82 A2

T. B.

111.

111.

BOTTLE

Zmajevac – Grave 86
4th century
Technique: free-blown
Height 25.2 cm; diameter of the rim 9 cm
Museum of Slavonia, Osijek; AA20687

The bottle was made of blown transparent blue glass. The globular body continues into a tall and narrow cylindrical neck. The rim is thickened into a ring and everted. The surface of the bottle is not decorated. The base is indented.

Published:
Filipović 2010: 64, cat. no. 72

Analogies:
Burger 1966: 205, fig. 98/G. 59, 212, Fig. 105/G. 161-1
Ružić 1994: 14, Pl. V/1
Ceselin 2003: 79, cat. no. 47

S. F.
M. L.
K. F.

112.

112.

BOTTLE

Štrbinci
4th century
Technique: free-blown
Height 13.5 cm
Museum of Slavonia, Osijek; MSO 4629

The bottle was blown from pale green glass. The body is globular, with a long neck that narrows towards the rim. The rim is wide, funnel-shaped, with the edge curved inwards. The base has an indentation in the centre.

Published:
Migotti 2001: 117, 118, Pl. XIX/2, 3

Analogies:
Isings 1957: 161, form 133
Cermanović Kuzmanović 1968: 46, cat. no. 60, Pl. II/4
Barkóczi 1988: 138, Pl. XXIII/289

M. L.

113.

113.

BOTTLE

Salona
4th century
Technique: mould-blown and free-blown
Height 13.4 cm; diameter of the base 6 cm; body dia. 10.2 cm; rim dia. 7.8 cm
Archaeological Museum in Split; G-1768

A bottle with a globular body of transparent greenish glass created through a combination of blowing into a mould, followed by free blowing. The transition to the cylindrical neck is emphasized, which ends in a widening in the form of a highly moulded funnel with a rounded rim. The body is decorated with spiral ribs. The base is slightly concave.

Published:
Damevski 1976: p. 66, Pl. XIII. 4
Buljević 1994: p. 259, cat. no. 6
Fadić 1997: p. 85, cat. no. 100

Analogies:
Israeli 2003: p. 167, cat. no. 177
Arveiller-Dulong, Nenna 2005: p. 359, cat. no. 1056

J. J.

114.

FLASK

Osijek, Donji grad/Lower Town, find from a sarcophagus
4th century
Technique: free-blown
Height 13.5 cm; diameter of the rim 4 cm; diameter of the base 3.5 cm
Museum of Slavonia, Osijek; MSO 9000

The flask was free blown from pale green glass. The body is globular, the neck funnel-shaped, the mouth wide with a straight rim, and the base is indented in the centre. The body of the flask is decorated with three rows of drops in the same colour as the vessel.

Published:
Bulat 1976: 90, 91, no. 25, Pl. II/1, Pl. VII/2
Šaranović Svetek 1986: 63, no. 85, Pl. X/1
Fadić 1997: 146, cat. no. 1
Göricke Lukić 2000: 87, 88, Pl. XXII/1

Analogies:
Isings 1957: 124, form 104b
Goethert Polaschek 1977: Pl. C/101b
Thomas 1980: 103, T. XXIV, grave 63/2
Šaranović Svetek 1986: Pl. IX/3
Barkóczi 1988: 144, Pl. XXVI, 308a.
Ružić 1994: Pl. IV/4

M. L.

115.

FLASK

Syria
4th century
Technique: blown into a relief mould and free-blown
Height 22.5 cm; diameter of the body 11.2 cm; diameter of the mouth 5.3 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1374

The flask of transparent pale green glass was made by blowing into a relief mould. The surface of the flask is partially covered by iridescence. The wide globular body with a concave base is covered entirely with slight hollows similar to the small openings of a net. The body of the flask continues into a very tall neck that except in the lower section is exceptionally wide. The upper part of the neck is covered by a spirally wound thin green glass trail. The rim of the wide mouth is smooth and rounded.

Published:
Ratković-Bukovčan 2004: p. 27, 55, 87, cat. no. 37

Analogies:
Hayes 1975: p. 112, no. 421
Glass at the Fitzwilliam Museum 1978: p. 48, no. 92c; p. 55, no. 110b
Kunina 1997: p. 332, no. 402
Whitehouse 2001: p. 179, no. 314

L. R. B.

114.

115.

116.

117.

118.

116.

FLASK WITH A FLATTENED GLOBULAR BODY

Unknown site
1st century
Technique: free-blown
Height 8.3 cm; diameter of the body 6.1 cm; diameter of the rim 1.6 cm
Archaeological Museum in Split; G-1792

A small flask with a flattened globular body of transparent free blown green glass decorated with opaque white glass speckles. The cylindrical neck ends in a rim turned inwards. The flask cannot stand upright on the rounded base.

Published:
Fadić 1997: p. 84, cat. no. 62

Analogies:
Israeli 2003: p. 268, cat. no. 356
Arveiller-Dulong, Nenna 2005: p. 360, cat. no. 1065, 1066

J. J.

117.

BOTTLE

Unknown site
First half of the 4th century
Technique: mould and free-blown
Height 15.5 cm; diameter of the base 6 cm; diameter of the rim 4.6 cm
Archaeological Museum of Istria, Pula; AMI-A-2512

A globular bottle with a rounded spirally ribbed body and a tall bell-shaped neck, made of transparent greenish glass. The base indented.

Published:
Fadić 1997: p. 144, cat. no. 101.

Analogies:
Isings 1957: p. 123, form 104b
Mandruzzato, Mareante 2005: p. 78-79, cat. 122-131

A. S.

118.

BOTTLE WITH A DIAPHRAGM

Unknown site
3rd century
Technique: mould and free-blown-blown
Height 9 cm; diameter of the base 3.5 cm; diameter of the rim 6.2cm
Archaeological Museum in Zagreb; A-17763

A bottle of greenish-brown semi-transparent glass made by blowing into a mould, with a globular body, a short neck, and a flat out-turned rim, thickened annularly on the edge. In the interior, at the transition from the neck to the body is a diaphragm that served to control the amount of liquid poured. Syrian-Palestinian workshop.

Published:
Ožanić-Roguljić 2004: p. 17, cat. no.122

Analogies:
Hayes 1975: cat. no. 282

I. O. R.

119.

BOTTLE

Unknown site
3rd-4th centuries
Technique: free-blown
Height 14.7 cm; diameter of the base 4 cm; diameter of the rim 5.7 cm
Archaeological Museum in Zagreb; A-17764

A bottle made of greenish-brown glass, with a globular body and a funnel-shaped neck. The rim is cut straight. Made in a Syrian-Palestinian workshop.

Published:
Ožanić-Roguljić 2004: p. 17, cat. no. 126

Analogies:
Thomas 1962: pp. 97-111
Roffia 1993
Lazar 2003: p. 146

I. O. R.

120.

FLASK

Zadar, Roman cemetery, excavations in 1989, inhumation grave 90
Second half of the 2nd – beginning of the 3rd centuries
Technique: mould-blown
Height 16.0 cm; width 9.0 cm; diameter of the rim 3.4 cm
Museum of Ancient Glass; A7837

A bell-shaped bottle made of colorless glass with thin walls. The long tubular neck ends in a horizontally everted rim with an annular rim. The base is slightly indented.

Unpublished.

Analogies: unknown.

I. F.
B. Š.
A. E. B.
A. Š.

121.

CONICAL BEAKER WITH ONE HANDLE (*MODIOLUS* OR MEASURING CUP)

Zagreb – Stenjevec, grave 54, excavations in 1896
Second half of the 1st – beginning of the 2nd centuries
Technique: free-blown
Height 10.2 cm; diameter of the base 11 cm; diameter of the rim 14 cm
Archaeological Museum in Zagreb; A-11725

A conical beaker made from blue-green glass with one handle. The neck is slanted outwards, the handle is moulded, the base with an everted ringed foot is indented.

Published:
Hoffiller 1904: p. 173, Fig. 68/13
Damevski 1976: p. 64, Pl. VI/2
Gregl 1989: p. 22, Pl. 12/1
Fadić 1997: p. 88, 180.

Analogies:
Isings 1957: form 37
Czurda-Ruth 1979: p. 51-52, Pl. 2:474
Lazar 2003, p. 106-107, fig. 33

Z. G.

119.

120.

121.

122.
URN

Dubrovnik
1st-2nd centuries
Technique: free-blown
Height 25 cm
Archaeological Museum in Zagreb;
A-11957

An urn (olla) of blue transparent glass made by free blowing. The body of the urn is rounded. The rim of the urn is widened, turned upwards, and framed by a ringed edge. Two H-shaped handles were formed separately and attached to the upper edge of the body.

Published:
Muzeopis... 1846 – 1996, 1996: p. 118, cat. no. 138
Gregl 2009: cat. no. 10

Analogies:
Isings 1957: p. 83, form 64
Damevski 1976: p. 64, 77, Pl. 5:1
Ravagnan 1994: p. 205-206, cat. no. 417-429
Fadić 1997: p. 219, cat. no. 244
Arveiller-Dulong, Nenna 2005: p. 32, cat. 469, Pl. 33

K. F.

123.
URN

Salona
1st-2nd centuries
Technique: free-blown
Height 24 cm
Archaeological Museum in Zagreb;
A-11233

An urn of blue-green transparent glass made in the free blown technique. The rounded body ends in an out-turned ringed rim. Two specially formed "omega" handles were applied subsequently to the body of the vessel.

Published:
Gregl 2009: cat. no. 1

Analogies:
Isings 1957: p. 83, form 64
Damevski 1976: Pl. VI:1
Fadić 1997: p. 91, cat. no. 244
Perović 2010: p. 44, cat. no. 12
Ravagnan 1994: p. 205-206, cat. no. 417– 429

K. F.

124.
URN WITH A LID

Starigrad
1st-2nd centuries
Technique: free-blown
Height 27.5 cm
Archaeological Museum in Zagreb;
A-11849, A-11850

An urn (olla) made by free blowing blue glass. The oval urn has two handles and a lid and stands on a ringed base. The broadened rim of the urn with a ringed edge is turned upwards. Two H-shaped handles are applied to the upper part of the body. The lid is bell-shaped with a round knob handle on the top.

Published:
Damevski 1976: p. 64, Pl. 5:1
Gregl 2009: cat. no. 7

Analogies:
Isings 1957: p. 83, form 64
Ravagnan 1994: p. 205-206, cat. no. 415-416
Whitehouse I. 2005: p. 172, 173, cat. no. 302, 303, Pl. 353:302, 303

Lid:
Isings 1957: p. 85, form 66a
Goethert-Polaschek 1977: F.C:153
Sternini 1 1990: cat. 70, Pl. 16, 52
Ravagnan 1994: p. 219-220, cat. no. 441-444;

K. F.

125.
URN

Gornja Vas, grave 27
1st-2nd centuries
Technique: free-blown
Height 19.5 cm; diameter of the base 9.9 cm; diameter of the rim 17.7 cm
Archaeological Museum in Zagreb;
A-16654.

A completely preserved *olla* of bluish glass. The rim is horizontal, the body a combination of globular and conical, and the base is indented in the centre.

Published:
Gregl 2007: 244, Pl. 25:1
Gregl 2009: cat. 11

Analogies:
Barkoczi 1988: 207-208, Pl. LXI: 527
Lazar 2003: p. 163-164, type 7. 2. 3.

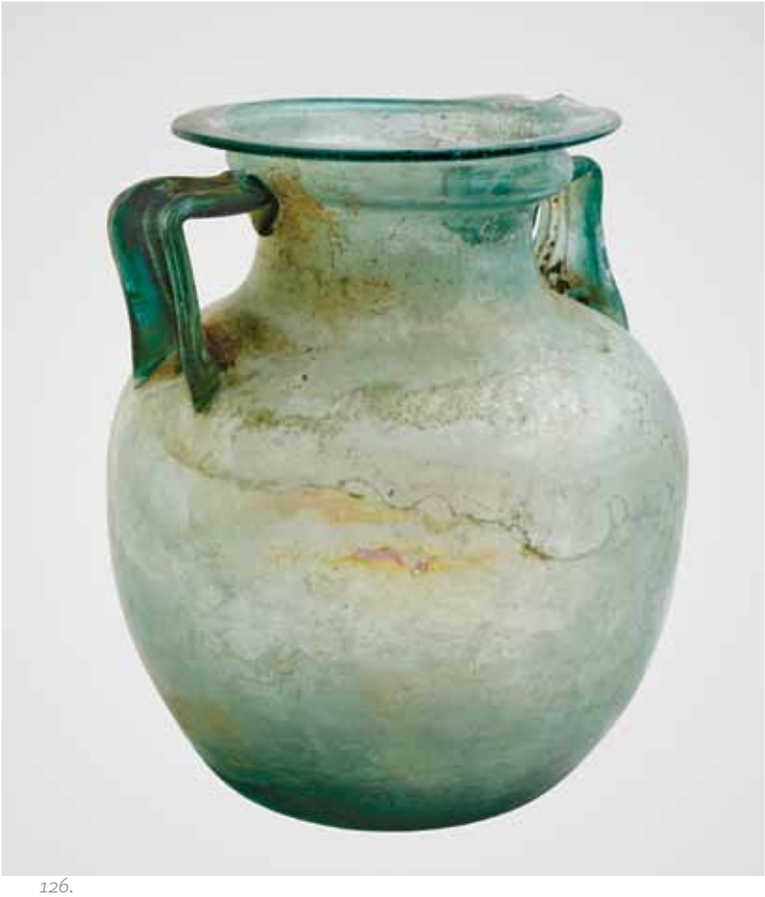
Z. G.


123.


124.


125.

122.



126.

127.

126.

URN

Skradin-Đardin, grave 8
1st-2nd centuries
Technique: free-blown
Height 26.8 cm; diameter 22.5 cm
Municipal Museum of Šibenik, AO 10998

An urn (*olla*) made of blue-green glass. The body is globular. Two ribbon handles are applied between the shoulder and the upper part of the neck, before its annular widening. The base is flat and the rim out-turned and emphasized.

Published:
Pedišić 2001: p. 16, 69.

Analogies:
Fadić 2002: p. 271, Fig. 5

T. B.

127.

URN

Skradin-Đardin, grave 2
1st-2nd centuries
Technique: free-blown
Height 27 cm; diameter 25 cm
Municipal Museum of Šibenik, AO 10910

An urn (*olla*) made of blue glass. The conical body narrows towards the flat base. The shoulder is emphasized with two applied H-shaped handles. The short neck extends into an emphasized annular rim.

Published:
Pedišić 2001: p. 69

Analogies:
Fadić 2002: p. 270, Fig. 2.

T. B.

128.

128.

RECTANGULAR BOTTLE

Bakar
1st century
Technique: mould and free-blown
Height 11.2 cm; diameter of the base 3.6 cm; diameter of the rim 2.8 cm
Archaeological Museum in Zagreb, A- 11064

A bottle with a rectangular body. The flattened rim is out-turned and bent inwards. The flat base has four relief dots in the corners and motifs of a bird and cock in the center. The handle is moulded.

Published:
Ljubić 1882: p. 51, B-13
Gregl, Lazar 2008: p. 117, cat. no. 9, Pl. 9:3
Fadić, Štefanec 2012: p. 18, 105, cat. no. 195

Analogies:
Isings 1957: p. 66, form 50b
Biaggio Simona 1991: Pl. 35: 134.2.048
Lazar 2003: 150, form 6.3.2
Amrein 2006: CH 30

I. L.

129.

129.

RECTANGULAR BOTTLE

Bakar
2nd-3rd centuries
Technique: mould and free-blown
Height 16 cm; diameter of the base 6.4 cm; diameter of the edge 4.5 cm
Archaeological Museum in Zagreb, A-11004

The bottle has a rectangular body with rounded shoulders. The wide flattened rim is turned out and then inwards. The base has relief decoration and letters: three concentric circles and four relief protrusions on the edges of the base, along with the letters LA-EM-IBL-ASI. (Lucius Aemilius Blastus). The handle is moulded.

Published:
Ljubić 1882: p. 51, no. 9
Fadić 2000: p. 555, fig. 15, 38
Gregl, Lazar 2008: p. 118, cat. no. 11
Fadić 2010: p. 130
Nenna 2011: p. 198, CRO 52
Fadić, Štefanec 2012: p. 18, 111, cat. no. 214

Analogies:
Isings 1957: p. 66, form 50b
Lazar 2003: 150, form 6.3.2
Rottloff 2006: 146

I. L.

130.

130.

SQUARE BOTTLE

Bakar
2nd-3rd centuries
Technique: mould and free-blown
Height 16 cm; diameter of the base 6 cm; diameter of the rim 4.5 cm
Archaeological Museum in Zagreb, A-11068

A bottle with a rectangular body. The flattened rim is turned outwards and then inwards. The workshop stamp can be seen on the base, consisting of three concentric circles in the centre, and one heart-shaped leaf in each corner, with the letters C SS R (Gaius Salvius Gratus). The handle is wide and combed.

Published:
Ljubić 1882: p. 51, B-12
Lazar, Gregl 2008: p. 118, cat. no. 9, Pl. 9:6
Nenna 2011: p. 198, CRO 51
Fadić, Štefanec 2012: p. 18, 113, cat. no. 218

Analogies:
Isings 1957: p. 66, form 50b
Lazar 2003: 150, form 6.3.2
Mandruzzato, Marcante 2005: p. 126, no. 88
Rottloff 2006: 164, D-RA 2, 51, 158, 192

I. L.

131.

131.

CYLINDRICAL BOTTLE

Bakar
End of the 1st – first half of the 2nd centuries
Technique: free-blown
Height 40.5 cm; diameter of the base 10.5 cm; diameter of the rim 8.6 cm
Archaeological Museum in Zagreb, A-11377

A large bottle with two moulded handles of transparent green glass. The rim is bent downwards and then up. The body narrows towards the base, decorated with rows of horizontal wheel-cut lines. The lower part of the body is formed into a base.

Published:
Ljubić 1882: p. 50, E-a
Gregl, Lazar 2008: p. 120, cat. no. 18, Pl. 11:2

Analogies:
Sorokina 1993: p. 59

I. L.

132.

132.

PLATE

Bakar
Middle – second half of the 1st century
Technique: free-blown
Height 2.6 cm; diameter of the base 16 cm; diameter of the rim 18.3 cm
Archaeological Museum in Zagreb, A- 11859

A shallow plate of cobalt blue glass with vertical walls. The rim is out-turned and tubularly curved downwards. The flat base is slightly indented.

Published:
Ljubić 1882: p. 49, B-9
Arte et cultura in Croazia 1993: cat. 171
Gregl, Lazar 2008: p. 102, cat. no. 1, Pl. 1:1

Analogies:
Gregl 1989: p. 22, Pl. 12:2
Biaggio Simona 1991: Pl. 1
Ravagnan 1994, p. 227, no. 456-460
Bonomi 1996: p. 191, no. 434-435
Fadić 1997: p. 187, no. 183
Buljević 2002: p. 211, no. 5-7
Mandruzzato, Marcante 2005: p. 147, no. 311-313

I. L.

133.

134.

133.

BALSAMARIUM

Bakar
1st century
Technique: free-blown
Height 8.4 cm; diameter of the base 2.4 cm; diameter of the rim 2.1 cm
Archaeological Museum in Zagreb, A-11087

A balsamarium of thick, opaque dark blue glass with a pear-shaped body, and a short cylindrical neck. The rim is thickened and horizontally drawn out. The base is flat. Horizontal lines on the surface are traces of finishing the balsamarium on a marver.

Published:
Damevski 1976: p. 75, Pl. 3:1
Fadić 1997: cat. 27
Gregl, Lazar 2008: p. 154, cat. no. 99, Pl. 20:7

Analogies:
Mandruzzato, Marcante 2007: p. 58, no. 15

I. L.

134.

BALSAMARIUM

Bakar
First half of the 1st century
Technique: free-blown
Height 8.2 cm; diameter of the base 2.2 cm; diameter of the rim 2 cm
Archaeological Museum in Zagreb, A-11334

A balsamarium made of transparent yellow-brown glass with a globular body and a short neck that is moulded at the transition to the body. The rim is horizontally flared outwards.

Published:
Fadić 1998: cat. no. 33
Gregl, Lazar 2008: p. 149, cat. no. 82, Pl. 19:7

Analogies:
Isings 1957:6
Lazar 2003: p. 190, form 8.6.13

I. L.

135.

135.
AMPHORISK

Budva
1st century
Technique: mould-blown
Height 7.6 cm
Archaeological Museum in Zagreb,
A-11121

The amphorisk was mould blown from brown glass, while the handles were free blown from blue glass. The oval body is decorated by horizontal ribs. The short and wide neck extends into the broad inwards turned and flattened rim. The base is small and circular. Two small handles join the neck and shoulder of the vessel.

Published:
Arte e cultura in Croazia 1993: 149, cat. no. 168
Muzeopis... 1846 – 1996, 1996: p. 118, cat. no. 142

Analogies:
Calvi 1968: 105, Pl. 16/247
Hayes 1975: 193, Pl. 7/85
Fadić 1997: 127, cat. no. 71
Whitehouse 2001: 46, 47, cat. no. 518
Larese 2004: Pl. I/cat. no. 27

M. L.

136.

136.
BALSAMARIUM

Budva
1st century
Technique: mould-blown
Height 8.6 cm
Archaeological Museum in Zagreb,
A-11119

The balsamarium was blown from purple glass into a two-part relief mould. The body is oval, with a narrow base without a standing surface. The cylindrical neck leads to a wide funnel-shaped mouth with a straight rim.

Unpublished.

Analogies:
Isings 1957: 25, form 9b
Hayes 1975: 52, cat. no. 103
Whitehouse 2001: 207, 208, cat. no. 770

M. L.

137.
AMPHORISK

Budva
1st century
Technique: mould-blown
Height 6.4 cm
Archaeological Museum in Zagreb,
A-11117

The amphorisk was mould blown from yellow glass, while the handles were made separately and added to the vessel. The oval body is decorated in relief. The short wide neck continues into a broad, irregular, inward turned and flattened rim. The base is rounded. Two small handles placed opposite one another join the neck and the body of the vessel.

Published:
Arte e cultura in Croazia 1993: 148, cat. no. 167

Partial analogies:
Ravagnan 1994: 33, cat. no. 24
Larese 2004: Pl. I/cat. no. 24

M. L.

138.
AMPHORISK

Budva
1st – beginning of the 2nd centuries
Technique: mould-blown
Height 7.1 cm
Archaeological Museum in Zagreb,
A-11120

An amphorisk mould blown of pale purple glass, the handles free blown of green glass. The oval body is decorated with ribbed and tendril motifs in relief. The short neck extends into a broad, bent inwards and flattened rim. The base is flat. The two handles join the neck and shoulder of the vessel.

Published:
Arte e cultura in Croazia 1993: 148, cat. no. 166
Muzeopis... 1846 – 1996, 1996: p. 118, cat. no. 140

Analogies:
Kunina 1997: 120, cat. no. 84
Stern 2001: 117, cat. no. 47
Whitehouse 2001; 42, 43, cat. no. 512
Larese 2004: Pl. I, cat. no. 22
Arveiller Dulog, Nenna 2005: 222, cat. no. 647

M. L.

139.
AMPHORISK

Budva
1st – beginning of the 2nd century
Technique: mould-blown
Height 7.4 cm
Archaeological Museum in Zagreb,
A-11854

The amphorisk was mould blown from blue glass, while the handles were free blown from glass of the same colour. The oval body is decorated in relief with ribbed and tendril motifs. The wide neck extends to a wide, inward turned, and flattened rim. The base is flat. Two handles on opposite sides join the shoulder and neck of the vessel.

Published:
Arte e cultura in Croazia 1993: 148, cat. no. 165
Muzeopis... 1846 – 1996, 1996: p. 118, cat. no. 139

Analogies:
Kunina 1997: 120, cat. no. 84
Stern 2001: 117, cat. no. 47
Whitehouse 2001; 42, 43, cat. no. 512
Larese 2004: Pl. I/cat. no. 22
Arveiller Dulog, Nenna 2005: 222, cat. no. 647

M. L.

140.
URN

Budva
2nd century
Technique: mould and free-blown
Height 14.6 cm
Archaeological Museum in Zagreb,
A-11346

The vessel was mould blown from green glass. The body is square with rounded shoulders and a short neck. The mouth is broad and funnel-shaped with a turned out rim. The base is flat.

Unpublished.

Analogies:
Isings 1957: 81, form 62
Ružić 1994: 54, 55, Pl. XLII/4
Lazar 2003: 158, 159, Fig. 46/7.1.2.
Mandruzzato, Marcante 2007: 106, cat. no. 306

M. L.

138.

140.

139.

137.

142.

143.

144.

141.

CYLINDRICAL BOTTLE

Budva
End of the 1st – 2nd centuries
Technique: mould-blown
Height 19.5 cm
Archaeological Museum in Zagreb, A-11855

The bottle was mould blown from pale green glass. The wide cylindrical body extends into a short wide neck, with a broad inwards turned and flattened rim. The base is flat. The very wide ribbed handle joins the neck and the shoulder of the bottle.

Unpublished.

Analogies:
Calvi 1968: 84, Pl. 14/201
Goethert Polaschek 1977: 200, Pl. 67/1232
Barkóczi 1988: 182, Pl. XLI/439
Whitehouse 1997: 184, cat. no. 324

M. L.

142.

AMPHORISK

Skradin-Maraguša
1st-2nd centuries
Technique: free-blown
Height 18 cm; diameter 7.6 cm
Municipal Museum of Šibenik; 11826

A vessel made of blue glass in the shape of an amphora. The neck is conical, narrowing towards the top, with a narrow opening of only 3 mm. It is reinforced in the middle by an annular thickening with two banded ears to which two high ribbon handles are directly attached, finishing on the shoulder of the vessel. The body consists of an oppositely place cone that narrows towards the base, creating an opening of the same diameter as on the top of the amphorisk. The vessel is slightly damaged on the shoulder below one handle, and is glued together.

Published:
Pedišić 1998: p. 19, 28
Pedišić 2001: p. 74

Analogies:
Isings 1957: form 33
Fadić 1997, cat. no. 222
Fadić 2000: p. 543-558
Tartari 2005: 138, form 34

T. B.

143.

TWO-HANDLED FLASK (AMPHORISK)

Rome, unknown circumstances of discovery
Middle of the 1st – middle of the 2nd centuries
Technique: mould and free-blown
Height 14.9 cm
Museum of Arts and Crafts; 18890

A small flask made of transparent yellow glass. The round shallow annular base extends into the conical, spindle-shaped vessel. The surface is decorated with very refined applied ribs creating a webbed design. Two very thin ribbon handles extend from the shoulder to high on the neck. The cylindrical neck ends in a low, funnel-shaped rim.

Unpublished.

Analogies:
Foy, Nenna 2001: 87, cat. 99
For form: Isings 1957: 32, 33

S. K. T.
M. L.

144.

ARYBALLOS

Osijek-Donji grad/Lower Town, by the "New School", gift of Tajčević
2nd century
Technique: free-blown
Height 7.2 cm; diameter of the rim 4.2 cm; diameter of the base 3.8 cm
Museum of Slavonia, Osijek; MSO 2565

The aryballos was free blown from green glass. The body is globular, with a short neck, a wide mouth with a funnel-shaped rim, and a broad ringed foot. Two volute-shaped handles placed on opposite sides joint the neck and the shoulder of the vessel.

Published:
Bulat 1976: 89, no. 6, Pl. II/3, Pl. VI/2
Šaranović Svetek 1986: 65, no. 113, Pl. XII/3
Fadić 1997: 134, cat. no. 84
Göricke Lukić 2000: 88, 89, 90, Pl. XXIII/7

Analogies:
Isings 1957: 78-81, form 61
Lazar 2003: 171, 172, Fig. 49/8.3.3.
Mandruzzato, Marcante 2007: 56, cat. no. 3

M. L.

145.

ARYBALLOS

Senj
1st-3rd centuries
Technique: free-blown
Height 9.8 cm; diameter of the base 3.6 cm; diameter of the body 9.5 cm; diameter of the rim 4.5 cm
Archaeological Museum in Zagreb; A-8274

An aryballos made of blue glass with a globular body and a short cylindrical neck. The circular rim is flared horizontally. Two handles in the form of stylized dolphins were coiled in a ring shape on the neck. The base of the vessel is indented in the centre. Traces of iridescence are visible.

Published:
Damevski 1976: p. 64, 79, Pl. 7:1
Fadić 1997: p. 85, 134, cat. no. 83

Analogies:
Morin-Jean 1922-1923: p. 82, form 33, fig. 84
Isings 1957: p. 78-81, form 61
Doppelfeld 1966: p. 47-48, group 3.5, fig. 69
Šaranović-Svetek 1986: p. 26, group XI, type 1, cat. no. 112, 113, Pl. XII:2, 3
Barkóczi 1988: p. 158-159, Pl. XXXIII: 355-359
Ravagnan 1994: p. 41, cat. no. 44-48, 52
Fadić 1997: p. 85, 134, cat. no. 84
Lazar 2003: p. 169, 171-172, fig. 49:8.3.3
Arveiller-Dulong, Nenna II 2005: p. 29, 271, cat. 350-352, cat. 865, Pl. 25, Pl. 62;

K. F.

145.

146.

147.

146.

ARYBALLOS

Sisak, southeastern necropolis
2nd century
Technique: free-blown
Height 7.7 cm; diameter of the body 6.9 cm; diameter of the rim 3.2 cm
Municipal Museum Sisak, 510:SIK 839
AZA

An aryballos of pale green glass with an emphasized, thickened rim, a cylindrical neck with two handles, and a globular body. The handles from neck to shoulder are bent, with a volute shape in the lower part.

Published:
Wiewegh 2003

Analogies:
Barkóczi 1988: Pl. XXXII, 355, 357

I. B.

147.

ARYBALLOS

Sisak, southeastern necropolis
2nd century
Technique: free-blown
Height 7.2 cm; diameter of the body 7 cm; diameter of the rim 3.4 cm
Municipal Museum Sisak, 510: SIK 237
AZA

An aryballos made of greenish glass with an emphasized rim, cylindrical neck, and a globular body, decorated with a spirally wound glass trail. The neck and body are joined by two small, oppositely placed handles with a volute shape in the lower section. Two large bronze circlets are looped through the handles and hung from a bronze handle with bent ends.

Published:
Wiewegh 2003: 59, 86, T. XXXV:2

Analogies:
Barkóczi 1988: Pl. XXXII, 363

I. B.

148.

149.

148.

ARYBALLOS or COSMETIC VESSEL

Unknown circumstances of discovery
4th century
Technique: mould and free-blown
Height 8.6 cm; diameter of the base 4 cm; diameter of the rim 6.4 cm
Museum of Arts and Crafts; 18891

A small vessel of transparent green glass. The base is slightly reduced, the body globular, with a short cylindrical and slightly conical neck ending in a wide straight rim. Glass strands were trailed between the shoulder and the edge of the rim, creating a very decorative zigzag band.

Unpublished.

Analogies:
Hak 1965: p. 31, Fig. 15
Hayes 1975: 111, cat. no. 417, 214, Pl. 28/417
Arveiller Dulong, Nenna 2005: 424, cat. no. 1182

S. K. T.
M. L.

149.

ARYBALLOS

Unknown site
1st century
Technique: free-blown
Height 8 cm; diameter of the base 3 cm; diameter of the rim 2.5 cm
Archaeological Museum in Zagreb; A-17767

A vessel of small dimensions made by free blowing two colours of opaque glass. The body is yellow, and the handles are blue. The body is globular, with a narrow neck, and a ring-like thickened rim. The standing surface is flat. The handles are attached just below the rim and at the height of the rim turn perpendicularly downwards. Syrian production.

Published:
Ožanić-Roguljić 2004: pp. 15-16, cat. no. 106

Analogies:
Hayes 1975: cat. no. 121 – 123

I. O. R.

150.

151.

150.

SMALL FLASK IN THE FORM OF TWO MERGED HEADS

Sidon
2nd century AD
Technique: blown into a relief mould
Height 6.4 cm; diameter of the body 4.2 cm; diameter of the mouth 2 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1370

The small flask of milk glass was made by blowing into a relief mould. The low round foot continues into the body in the form of two merged heads framed by curly lush hair. The broad lips, nose, and jawbones are emphasized in prominent relief, while the eyes are marked merely in shallow relief. The body of the flask continues into a short neck ending in a protrusive rim with an applied glass trail.

Published:
Katalog Muzeja Mimara 1987: p. 445, photo. no. 277
Vodič Muzeja Mimara 1998: p. 20, no. 7
Ratković-Bukovčan 2004: p. 26, 52, 84, cat. no. 31

Analogies:
Gläser der Antike – Sammlung Erwin Oppenländer 1974: p. 169, no. 460
Bergman 1980: p. 69, no. 62
Von Saldern 1980: p. 54, no. 47
Kunina 1997: p. 283, no. 154, no. 155
Whitehouse 2001: p. 69, no. 540

L. R. B.

151.

SMALL FLASK IN THE FORM OF TWO MERGED HEADS

Sidon
2nd century
Technique: blown into a relief mould
Height 10.5 cm; diameter of the base 4 cm; diameter of the body 6.5 cm; diameter of the rim 4.3 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1364

The small flask of transparent, brown-violet toned glass was made by blowing into a relief mould. The surface is covered with iridescence. The low round flattened foot continues into the wide globular body of the flask in the form of two merged heads with gentle relief contours. The two heads with gentle facial features are joined at the back of the heads with curly lush hair forming the rippled surface area. The body turns into a short smooth neck that ends in a bell-shaped turned-out rim. A thin glass trail was applied to the edge of the rim.

Published:
Katalog Muzeja Mimara 1987: p. 445, cat. no. 7. 28
Muzej Mimara – Vodič po zbirkama 1988: p. 12
Ratković-Bukovčan 2004: p. 26, 84, cat. no. 30

Analogies:
Gläser der Antike, Sammlung Erwin – Oppenländer 1974: p. 170, no. 464-466
Bergman 1980: p. 64, photo. no. 61
Kunina 1997: p. 283, no. 158
Whitehouse 2001: p. 70, no. 542

L. R. B.

152.

CAMEO WITH A PORTRAIT OF THE EMPRESS LIVIA

Narona (Vid near Metković), Augusteum
Second to third decade of the 1st century
Technique: casing (cast and fused)
Height 5.02 cm; width 3.58 cm; thickness 0.33-0.5 cm
Archaeological Museum Narona; 2087

An oval cameo made by fusing two layers of cast glass, imitating the appearance of blue and white chalcedony. It is slightly damaged on the right edge. The lower layer consists of a firm base of transparent blue glass, while the upper white layer is opaque and highly porous. The bust of Livia in profile is depicted in the upper layer in the style of official imperial portraiture. The figure is turned to the left, worked in relief, and the details are clearly outlined by engraving. The youthful physiognomy of the empress is emphasized by the low forehead, expressive eyes, prominent nose, small mouth with firmly pressed lips, and pointed chin. The hair is styled with the characteristic *nodus* above the forehead, braid at the crown of the head, and wavy hair above the half covered ears. Strands of hair together with the braid are gathered into a low bun at the nape of the neck, while the clothing is fastened on the left shoulder.

Published:
Buljević 2003: 181-185
Buljević 2005: 151-160
Buljević 2005: 96-97, fig. 5
Buljević 2009: 38-40, fig. 2.13

Analogies:
Furtwängler 1896: no. 11214, Pl. 68
Walters 1926: 357, cat. no. 3813, Pl. XXXIX
Vollenweider 1979: 196, cat. no. 206, Pl. 62, fig. 206, 3 and 3a

T. G.

152.

153.

153.

MEDALLION WITH A FIGURAL DEPICTION OF LUNA AND SOL

Vinkovački Banovci
3rd-5th centuries
Technique: cast
Diameter 2 cm
Municipal Museum Vinkovci; A2012

A circular medallion of yellow glass paste. The irregular triangular loop was made from an additional piece of glass. The edge of the medallion is raised, and the field between contains busts of Luna and Sol turned towards one another. The back is flat.

Unpublished.

Analogies:
Whitehouse 2003: 42, cat. no. 956

H. V.
M. L.

154.

155.

154.

BASE WITH A DEPICTION IN GOLD (Fondo d'oro)

Štrbinci, chance find
330-360 AD
Technique: mould and free-blown
Diameter 6.8 cm
Museum of the Đakovo Region, Đakovo; MĐĐ 723

The base of a vessel, most probably a bowl. It consists of two glass panels with glass foil placed between, depicting a married couple with the legend FLOP-N-TIS around and between their heads.

Published:
Šaranović Svetek 1986: 32, 33, PL. XX/1
Migotti et al. 1998: 37, cat. no. 97
Migotti 2002: 21-32

Partial analogies:
Barkóczi 1988: 216, PL. LXV/550
Migotti 2002, 30, Fig. 6

M. L

155.

BASE WITH A DEPICTION IN GOLD (Fondo d'oro)

Štrbinci
360-400 AD
Technique: mould and free-blown
Diameter 6.5 cm
Muzej Đakovštine, Đakovo; grave 45

The base of a vessel, consisting of two glass panels with glass foil placed between, depicting a family of four people with the legend 'VIVATIS FELICIS IN DEO' around and above their heads.

Published:
Migotti 2004: 171, cat. no. 18, Pl. XV
Migotti 2002: 34-52

Analogies:
Barkóczi 1988: 217, Pl. LXV/551

Partial analogy:
Migotti 2002: 47, Fig. 13

M. L.

156.

SMALL BOWL

Syria
3rd-4th century
Technique: free blown, pulled points
Height 9 cm; diameter of the rim 16 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1369

A small bowl of transparent, greenish glass made by blowing and pulling out pieces of glass. The surface of the bowl is covered with iridescence. The circular reduced foot continues into a rounded, smooth, water-lily shaped body that broadens in the upper section and ends in a broad, turned-out, star-shaped rim. The tips of the extended "arms" of the rim are rounded into a teardrop shape, and were made in the technique of pulling. The edge of the broad rim is smooth and rounded.

Published:
Katalog Muzeja Mimara 1987: p. 445, cat. no. 7. 30
Muzej Mimara – Vodič po zbirkama 1988: p. 12
Ratković-Bukovčan 2004: p. 29, 58, 92, cat. no. 47

Analogies:
Von Saldern 1980: p. 108, no. 107
Buljević 2000: p. 266-267, no. 5

L. R. B.

157.

158.

159.

160.

157.

BOTTLE

Sisak
3rd-4th centuries
Technique: free-blown
Height 26 cm; diameter of the body 9.5 cm; diameter of the neck 3.5 cm
Municipal Museum Sisak; 510: SIK 20693

A bottle of pale green glass with a narrow cylindrical neck, a cylindrical body, and two relief moulded handles on opposite sides joining the neck and shoulder. The rim is missing.

Published:
Tomaš 2007

Analogies:
Petru 1976: Pl. VIII, 4, 5

I. B.

158.

FLASK

Syria
2nd century AD
Technique: blown into a relief mould and free-blown
Height 25 cm; diameter of the body 5.6 cm; diameter of the rim 3.5 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1366

A flask of transparent, brownish glass made by blowing into a relief mould. The surface of the flask is covered with iridescence. The circular low foot, created merely by a shallow glass band, continues into a tall slender teardrop-shaped body. The central broadened section of the body is covered with vertical, slightly protruding ribs. A tall slender neck continued from the body, which broadens gently in the upper section and finishes in a smooth flat rim.

Published:
Katalog Muzeja Mimara 1987: p. 445, no. 7.26.
Vodič Muzeja Mimara 1998: p. 20, no. 6
Ratković-Bukovčan 2004: p. 27, 54, 86, cat. no. 35

Analogies: unknown.

L. R. B.

159.

VESSEL

Tekić–Treštanovačka gradina, grave 47
4th century
Technique: free-blown
Length 52.5 cm; diameter of the rim 2.7 cm; diameter of the widening 4.7 cm
Municipal Museum of Požega; A-1526

A glass vessel in the form of an elongated tube (*unguentaria*), with a widening in the centre. The rim is straight with an annular thickening. The base is rounded and thickened. The glass is transparent pale yellow and pale green with air bubbles.

Unpublished.

Analogies:
Migotti 1994: 116, cat. no 157b
Demo 1994: 120, cat. no. 167

M. P.

160.

FUNNEL

Mitrovica
1st-2nd centuries
Technique: free-blown
Height 10.3 cm; diameter of the rim 7.6 cm
Archaeological Museum in Zagreb; A-11822

The body of cylindrical form extends on the lower side into a narrow tube. The rim is broad, out-turned, and thickened. It was made by free blowing yellow glass.

Published:
Damevski 1976: 65, Pl. VIII/3
Šaranović Svetek 1986: 24, 25, Pl. XI/4
Ružić 1994: 54, Pl. XLII/1

Analogies:
Isings 1957: 92, form 74
Sternini 1990: 183, cat. 770
Ravagnan 1994: 201, cat. no. 397
Fadić 2006: 126

M. L.

161.

BASKET

Salona
2nd-3rd centuries
Technique: free-blown
Height 7 cm; length 13 cm; width 9 cm; handle length 4.75 cm; handle width 1.55 cm
Archaeological Museum in Split; G-45

A basket of transparent greenish-blue free-blown glass with spirally applies white glass trails. In the middle of the rounded and thickened rim was a rectangular sectioned handle with an applied white glass trail. The base is flat.

Published:
Von Saldern 1964: p. 44, fig. 7
Prvi međunarodni kongres za starokršćansku arheologiju Split-Solin 1894 1994: p. 1-11
Fadić 1997: p. 90, cat. no. 220

Analogies:
Catalogue of the Constable-Maxwell Collection of Ancient Glass 1979: p. 68, cat. no. 108

J. J.

161.

162.

163.

164.

162.

GUTTUS

Osijek, unknown site
1st-3rd centuries
Technique: free-blown
Height 8.7 cm; diameter of the rim 4 cm; diameter of the base 4 × 3 cm
Museum of Slavonia, Osijek; MSO *2575*

The walls of the vessel (dropper flask, sprinkler) are in the form of a bird. The body is oval and ends in a stylized tail that serves as a dropper. The neck is short. The mouth is wide with a tubular shaped flat edge. The base is slightly indented in the centre. The guttus was made of free-blown green glass.

Published:
Bulat 1976: 89, 90, no. 10, Pl. IV/3, Pl. V/3
Šaranović Svetek 1986: 25, Pl. XI/6
Fadić 1997: 205, cat. no. 214

Analogies:
Barkóczi 1988: 127, Pl. XX, LXXXI
Lazar 2003: 204, fig. 53/10.2.1.
Štefanec 2009: 138, cat. no. 6

S. F.
M. L.

163.

BEAKER

Dalj
2nd-3rd centuries
Technique: free-blown, the lion's heads made in a mould
Height 6.2 cm; diameter of the base 6.1 cm; diameter of the rim 8.3 cm
Archaeological Museum in Zagreb; A-11860

The beaker was free-blown from pale green glass. The body is cylindrical, with a wide straight rim and a flat base. Two glass handles in the form of lion's heads were placed opposite each other approximately in the middle of the body. The lion's heads were made in a mould and were then added to the vessel.

Published:
Šaranović Svetek 1986: 14, Pl. II/10
Fadić 1997: 88, cat. no. 172

Analogies:
For the lion masks: Whitehouse 2001: 233, 234, cat. no. 814, 815, 816
Arveiller Dulong, Nenna 2005: 439, cat. no. 1223, 1224, 1225, 1226

M. L.

164.

ENNION CUP

Narona (Vid near Metković), Augusteum
Second quarter of the 1st century
Technique: mould-blown
Preserved height 7.5 cm; diameter of the rim 14.2 cm; thickness of the walls 0.16-0.46 cm
Archaeological Museum Narona; 2046

A partially reconstructed cup of transparent dark blue glass, joined together from thirty fragments. The upper part is preserved of the cylindrical body of the cup with a handle. The base is missing, and two bands bordered by horizontal ribs are located below the partly preserved rim. Geometric and floral motifs in shallow relief are depicted within the bands. The upper band consists of four framed fields, two of them containing legends in Greek: ENN[I]/ΩNEΠ/OIHCE/N (*Ennion epoiesen* – Ennion made me) and MNHΘH/OAΓO/PAZΩ/N (*Mnethe ho agorazon* – Let the buyer be remembered). The other two fields are decorated with palmettes, star-shaped and circular motifs, and stylized fluted columns. The lower band contains only vertical grooves with rounded ends. The rim with a cut edge is upright and turned outwards.

Published:
Buljević 2004: 188, cat. no. 7
Buljević 2005: 114-115, cat. no. 7
Buljević 2005: 95, fig. 2
Buljević 2007: 167-168, fig. 5
Buljević 2009: 35-36, fig. 1.1
Buljević 2012: 3-6, fig. 1, 1a

Analogies:
Harden 1935: 165, AIIa and AIIb
Price 1974: 69, fig. 1.1, cat. no. 3
McClellan 1983: 75, no. 31
Vidrih Perko 2004: 86-87, fig. 1
Lazar 2004: 53, cat. no. 17
Borzić 2008: 92, 93-94, fig. 1-2
Buljević 2009: 35-36, fig. 1.2a-e

T. G.

165.

JUG

Köln (Cologne)
2nd century
Technique: blown into a relief mould and free-blown
Height 27 cm; diameter of the body 14.5 cm; dia. of the rim 2 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1481

The jug of blue transparent glass was made by blowing into a relief mould. The conical body with a flattened base is decorated in the upper section with vertical, only very slightly protruding ribs. An extremely tall and slender neck continues from the body, covered with a slanted, slightly embossed web motif. The neck ends in a turned-out rim.
The thin, tall, and slender handle was applied to the upper section of the body of the jug and extends almost to the very top of the neck. A long and wavy decorative band was applied vertically to the surface below the juncture of the handle with the body.

Published:
Katalog Muzeja Mimara 1987: p. 278, 447, cat. no. 7.57.
Muzej Mimara – Vodič po zbirkama 1988: p. 14
Ratković-Bukovčan 2004: p. 35, 61, 108, cat. no. 82
Vodič Muzeja Mimara 2007: p. 21, photo. no. 10

Analogies:
Klein 1999: p. 55, no. 8

L. R. B.

165.

Medieval period

166.
SMALL FLASK

Frankish Kingdom
5th-6th centuries
Technique: free-blown
Height 10 cm; diameter of the body 8.4 cm; diameter of the rim 4.3 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1451

The small bottle of blue transparent glass was made by blowing. The entire surface of the pear-shaped body with a flat base is covered with drops (clumps) of yellow glass and thick bands and layers of grey, blue, and milk glass marvered (pressed into) the surface. The small flask extends in the upper section into a short, broad neck. The rim is smooth and straight.

Published:
Katalog Muzeja Mimara 1987: p. 448, cat. no. 7. 66

Analogies: unknown.

L. R. B.

167.
CHALICE

Western Europe
6th century
Technique: free-blown and pulled
Height 13.6 cm; diameter of the base 5 cm; diameter of the rim 10.5 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1450

The chalice of transparent, slightly greenish matte glass was made by blowing. The wide, circular, conical base continues into a thin stem. The broad cup of the chalice with an undecorated surface is shaped like a lotus flower. The final rim band of the cup (height 2 cm) is broadened and straight. Two slender S-shaped handles extend from the middle of the body to the beginning of the broadened rim. The rim is smooth and straight.

Published:
Katalog Muzeja Mimara 1987: p. 284, 446, cat. no. 7. 64

Analogies:
Frühchristliche und Koptische Kunst 1964: p. 103, 288, photo. no. 71

L. R. B.

168.
BEAKER WITH A ROUNDED BASE (TUMMLER)

Rhine region
6th-7th centuries
Technique: blown into a relief mould
Height 6.9 cm; diameter of the rim 9.3 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1454

The beaker (*tummler)* of transparent green glass was made by blowing into a relief mould. The wide, conical body

166.

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169.

with a rounded base dominated by a protruding cross is decorated in the lower and central sections by vertical slightly raised ribs. The band below the rim, 1 cm in height, is smooth. The edge of the rim is rounded.

Published:
Katalog Muzeja Mimara 1987: p. 448, cat. no. 7. 69.
Muzej Mimara – Vodič po zbirkama 1988: p. 15
Vodič Muzeja Mimara 2007: p. 22, photo. no. 11

Analogies:
Klesse 1973: p. 90, cat. no. 122, 123
Historic Glass from Collections in North West England 1979: p. 29, photo. no. B3 (a and b); p. 33, photo. no. B10
Europäisches und Aussereuropäisches Glas 1980: p. 98, cat. no. 204

L. R. B.

169.

VESSEL FOR HOLY WATER

Rhine region
Second third of the 9th century
Technique: free-blown
Height 8.3 cm; diameter of the rim 14.7 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1772

The vessel of transparent purple glass was made by blowing and painting with white enamel. The circular, slightly reduced base continues into a cylindrical body (with a slanted lower section) that on the top widens into a bell shape and ends in a turned-out rim. Three medallions separated by curled leafy tendrils are painted on the central part of the body. The two side medallions each depict in simple strokes a male figure holding a single vessel. The names of the rivers of paradise are written by the figures – the legend "PbiSon" is written by the right-hand figure, and "EVP ratez" by the left-hand. The central medallion contains a standing angel holding an upside-down chalice from which liquid flows. The outer edge of the vessel is encircled by a band consisting of a row of white dots enclosed by two threads of enamel.

Published:
Katalog Muzeja Mimara 1987: p. 284, 285, 448, 449, cat. no. 7. 70
Muzej Mimara – Vodič po zbirkama 1988: p. 15
Vodič Muzeja Mimara 2007: p. 22, photo. no. 12

Analogies: unknown.

L. R. B.

170.

170.

RELIQUARY

Winchester
End of the 10th century
Technique: free-blown
Height 27 cm; diameter of the rim 14 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1777

The reliquary is made of transparent brown-green glass and is richly decorated in multicoloured enamel and gilt. The circular, slightly reduced base, with a three-leaved clover painted in white enamel on the outside, continues into a tall, massive, cylindrical body. It narrows in the upper section and ends in a bell-shaped turned-out rim. The surface is completely (other than the sections by the base and the rim) painted in multicoloured enamel (green, orange, yellow, white) and gilt. While in the lower section, stylized leaves "hang" from a band of gilt enclosed in two thin treads of white enamel, in the center the body is enclosed by a white braided band. Three parallel rows of stylized floral motifs are repeated in the upper section, interrupted by three uniformly spaced medallions each containing a stylized braided rosette. A braided band encircles the body at the transition point to the neck.

Published:
Katalog Muzeja Mimara 1987: p. 286, 287, 449, cat. no. 7.71
Muzej Mimara – Vodič po zbirkama 1988: p.15
Vodič Muzeja Mimara 2007: p. 23, photo. no. 13.

Analogies: unknown.

L. R. B.

171.

SMALL VESSEL

Egypt
9th-10th centuries
Technique: free-blown, wheel-cut
Height 4.3 cm; diameter of the body 5.5 cm; diameter of the rim 1.5 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1422

The small vessel of transparent colourless matte glass was made by blowing and decorated by grinding. The surface is covered by iridescence. The globular body with a rounded base is decorated with six groups of elevated concentric circles arranged in a horizontal row. The edge of the rim of the vase is very sharp, and the sharpness indicates the possibility that a neck had subsequently been cut off.

Published:
Katalog Muzeja Mimara 1987: p. 449, cat. no. 7.72
Muzej Mimara – Vodič po zbirkama 1988: p. 17
Ratković-Bukovčan 2006: p. 10, 24, photo. no. 3

Analogies:
Von Saldern 1980: p. 162, no. 157
Charleston 1990: p. 66
Carboni 2001: p. 110, no. 2.6a, 2.6b, 2.6.c, p. 111, no. 2.6d

L. R. B.

172.

SMALL FLASK

Egypt
9th-10th centuries
Technique: free-blown and ground
Height 8.8 cm; diameter of the body 2.6 cm; diameter of the rim 1.7 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1423

The small glass of green matte glass was made by blowing and decorated by grinding. The surface is covered in places with iridescence. The high, cylindrical body is divided by four grooves into four fields each decorated in the middle with an incised ellipse. The grooves join and cross on the base of the flask. The body continues into a tall conical neck encircles by wide grooves. The band by the rim is smooth. The rim is rounded.

Published:
Katalog Muzeja Mimara 1987: p. 449, cat. no. 7.73.
Muzej Mimara – Vodič po zbirkama 1988: p. 17
Ratković-Bukovčan 2006: p. 11, 25, photo. no. 4

Analogies:
Historic Glass from Collections in North West England 1979: p. 34, no. C2(a), p. 35, no. C2(c)
Carboni 2001: p. 99, no. 27c; p. 120, no. 2.20b; p. 121, no. 2.22a; p. 124, no. 28j, no. 28n

L. R. B.

171.

172.

173.

SMALL FLASK

Egypt
9th-10th centuries
Technique: free-blown and facet-cut
Height 6 cm; diameter of the body 2.2 cm; diameter of the rim 0.5 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1425

The small flask of dark red transparent glass was made by blowing and grinding. The tall body with a circular basis and a flat base was polygonally cut into regular, narrow flat fields that in the upper and lower sections end in slanted facets. The body continues into a short, narrow neck with a wide rim. The rim is sharp and straight.

Published:
Katalog Muzeja Mimara 1987: p. 449, cat. no. 7.75
Muzej Mimara – Vodič po zbirkama 1988: p. 17
Ratković-Bukovčan 2006: p. 12, 25, photo. no. 5

Analogies:
Von Saldern 1980: p. 164, no. 160
Carboni 2001: p. 101, no. 28a; p. 131, no. 2.34 a, b

L. R. B.

174.

SMALL FLASK

Egypt
9th-10th centuries
Technique: free-blown and relief-cut
Height 6.2 cm; diameter of the body 2.1 cm; diameter of the rim 1.2 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1427

The small flask of transparent/opaque colourless glass with a matte surface was made by blowing and relief cutting. The surface is covered with iridescence. Four small triangular feet extend into cut rhombs that clearly stand out in relief on the polygonal surface of the body. The body continues into a wide tall neck that in the lower section is encircled by a sharply cut ring-like protrusion. The rim is straight.

Published:
Katalog Muzeja Mimara 1987: p. 449, cat. no. 7.77
Muzej Mimara – Vodič po zbirkama 1988: p. 17
Ratković-Bukovčan 2006: p. 8, 9, 24, photo. no. 2

Analogies:
Carboni 2001: p. 98, no. 27a, no. 27b; p. 124, no. 2.28a – 2.28p
Historic Glass from Collections in North West England 1979: p. 34, no. C2 (a); p. 35, no. C2 (b)

L. R. B.

173.

175.

175.

SMALL FLASK

Egypt
9th-10th centuries
Technique: free-blown and relief-cut
Height 5.6 cm; diameter of the body 2.2 cm; diameter of the rim 1 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1426

The small flask of transparent/opaque colourless glass with a matte surface was made by blowing and relief cutting. The surface is covered with iridescence. Four small triangular feet extend into cut rhombs that clearly stand out in relief on the polygonal surface of the body. The body continues into a wide tall neck that in the lower section is encircled by a sharply cut ring-like protrusion. The rim is straight.

Published:
Katalog Muzeja Mimara 1987: p. 449, cat. no. 7.76
Muzej Mimara – Vodič po zbirkama 1988: p. 17
Ratković-Bukovčan 2006: p. 8, 24, photo. no. 1
Vodič Muzeja Mimara 2007: p. 24, photo. no. 14

Analogies:
Carboni 2001: p. 98, no. 27a, no. 27b; p. 124, no. 2.28a – 2.28p
Historic Glass from Collections in North West England 1979: p. 34, no. C2 (a); p. 35, no. C2 (b)

L. R. B.

174.

Islamic period

176.
BEAKER

Syria
12th-13th centuries
Technique:
Height 10.3 cm; diameter of the rim 8.7 cm
Museum of Arts and Crafts; 18909

A bell-shaped beaker of transparent colourless glass with a slight yellow nuance. The ringed foot is circular. The body is conical with a rounded rim. It is decorated in the lower third with a row of six golden fish. Each fish is painted with two pairs of fins, an eye, mouth, several slanted lines on the body, and a forked tail. The details and outline on the fishes were painted with a thin red line. The upper zone is decorated with a horizontal band filled with a legend in Arabic script. The band is bordered on the upper and lower sides by golden stripes drawn in red and with arched decoration.

Unpublished.

Analogies:
Glassammlung Helfried Krug 1973: cat. 448
Liepmann 1982: cat. no. 159
Vorsicht Glas! 2010: cat. no. 49

S. K. T.

177.
FLASK

Syria
Mid-13th century
Technique: free-blown, enamel painted
Height 23.4 cm; diameter of the body 13.5 cm; diameter of the rim 4.1 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1431

The flask is made of transparent colourless glass and is richly decorated with blue, green, red, yellow, and white enamel. The circular base and very short foot continue into a wide, rounded body with a slanted surface. The central part of the body, bounded by two horizontal double trails of enamel, is painted with three uniformly arranged circles filled with floral motifs. Between them are written texts from the Quran interlaced with tendrils. On the upper slanted part of the body the motif of circles continues, and in place of texts, the surface is completely covered by floral motifs.
The tall cylindrical neck, slightly conical towards the top, is also decorated in the lower and rim sections with floral motifs. The central part of the neck is not decorated.

Published:
Katalog Muzeja Mimara 1987: p. 449, cat. no. 7.79
Muzej Mimara – Vodič po zbirkama 1988: p. 18
Ratković-Bukovčan 2006: p. 15-17, 25, photo. no. 7, photo. no. 7a.

Analogies:
Schlosser 1956: p. 59, photo. no. 45
Jenkins 1981: p. 130
Glass 1997: p. 31, photo. 31

L. R. B.

176.

177.

178.

178.
GOBLET

Syria
14th century
Technique: free-blown, enamel and gilt painting
Height 20.3 cm; diameter of the base 14 cm; diameter of the rim 18.3 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1436

The goblet is made of transparent green glass and silver gilt, and is richly decorated with enamel and gilt. The wide circular silver base extends into a conical short foot topped by a silver studded glass nodule. The cup of the goblet, with a circular form, rounded base, and bell-shaped widened and turned-out upper section, is painted with blue, red, yellow, and green enamel and gilt. The lower and the final rim sections are decorated with bands filled with stylized interlaced wings of birds, while the central section is filled with text from the Quran, placed between three medallions in which three goblets are depicted. The rim of the goblet cup is rounded, smooth, and decorated with a thin band of gilding.

Published:
Katalog Muzeja Mimara 1987: p. 289, 449, cat. no. 7.80
Muzej Mimara – Vodič po zbirkama 1988: p. 16, 18
Ratković-Bukovčan 2006: p. 18 – 20, 25, photo. no. 8, photo. no. 8a.
Vodič Muzeja Mimara 2007: p. 25, photo. no. 16

Analogies:
Schmidt 1912: p. 48, photo. no. 26
Klesse 1973: p. 62, no. 44

L. R. B.

179.
MOSQUE LAMP

Syria
Beginning of the 14th century
Technique: free-blown
Height 38.3 cm; diameter of the base 12.5 cm; diameter of the rim 24.6 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1435

The mosque lamp is made of transparent only very slightly brown toned glass and is richly decorated primarily with blue enamel. The circular base, covered in dots and medallions, continues into a broad high foot that gently narrows towards the top. The irregularly oval body is covered by a text from the Quran and floral motifs, whose outlines are drawn with red enamel. Six tiny handles are applied at regular spacing around the central part of the body.
The body continues into a wide, funnel-shaped neck. While the lower section is decorated with several large green and red enamel dots, in the upper section the densely written text was placed between three medallions. A fragment from the Quran is also written in the centre of the medallions.

Published:
Vodič kroz dio zbirke Ante Topića Mimare 1983: p. 160, cat. no. 258
Katalog Muzeja Mimara 1987: p. 450, cat. no. 7.87
Muzej Mimara – Vodič po zbirkama 1988: p. 17
Ratković-Bukovčan 2006: p. 21 – 23, 26, photo. no. 10
Vodič Muzeja Mimara 2007: p. 25, photo. no. 15

Analogies:
Klesse 1973: p. 63, no. 47
Charleston 1980: p. 82, 83, no. 33
Higgott 2011: p. 38-45, photo. no. 1

L. R. B.

180.
MOSQUE LAMP

Syria
Mid-14th century
Technique: free-blown
Height 29.4 cm; diameter of the base 13 cm; diameter of the rim 22.1 cm
Mimara Museum (The Art Collection of Ante and Wiltrud Topić Mimara – Mimara Museum); ATM 1429

The lamp is made from transparent, brownish glass and is richly decorated with red, blue, yellow, and white enamel and gilt. The circular base and very short foot continue into a wide, rounded body slanted in the upper and lower parts of its surface. While the lower and upper bands of the body are painted with circular medallions with a wavy edge containing a stylized geometric motif, the central section is covered by text from the Quran. The three small handles applied in this section of the body are surrounded by fields of a single colour.
The body extends into a broad, funnel-shaped neck also painted with a citation from the Quran, bounded on the lower and rim sections by horizontal bands filled with a stylized floral motif.

Published:
Katalog Muzeja Mimara 1987: p. 450, cat. no. 7. 88
Muzej Mimara – Vodič po zbirkama 1988: p. 17
Ratković-Bukovčan 2006: p. 21, 25, 26, photo. no. 9

Analogies:
Phillips 1948: p. 12, photo. 1.7
Jaffé 1978: p. 62, 63, no. 133
Glass 1997: p. 31, photo. 31; p. 35, photo. 36
Higgott 2011: p. 38 – 45, photo. no. 1

L. R. B.

179.

180.

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