



Historical Medieval Battle
International Association

HMBIA Authenticity
Committee

Arms and armor surfaces: finish and decoration

Arms and armour finish for HMB kits

Armour finishing is very important to the athlete's appearance.

Your perfect silhouette and geometry of each piece of the equipment should be reinforced by period and neat finishing.

In this document, we will introduce period techniques for finishing and decoration for both arms and armour and warn about possible issues.

Arms and armour finish for HMB kits

Period arms and armour finish and decoration techniques for the period between 1360 and the XVI century include but are not limited to:

- Matte finish
- Mirror finish
- Painting
- Plating
- Etching
- Bluing
- Gilding

Appendices:

Appendix I: Modern examples

Appendix II: Rejected items

Arms and armour finish for HMB kits

Matte finishing is the most well-spread type of armor finishing for the Western European kits starting from the age of early plate armor and throughout history.

It is **RECOMMENDED** for all types of the XIV-XV century plate armor.



Vambrace and couter,
Chalcis, 14c
Metropolitan museum



Visored bascinet, 1375-1400
Metropolitan museum



Armour in the style of the 15 c.
Metropolitan museum

Mirror polishing of the armour

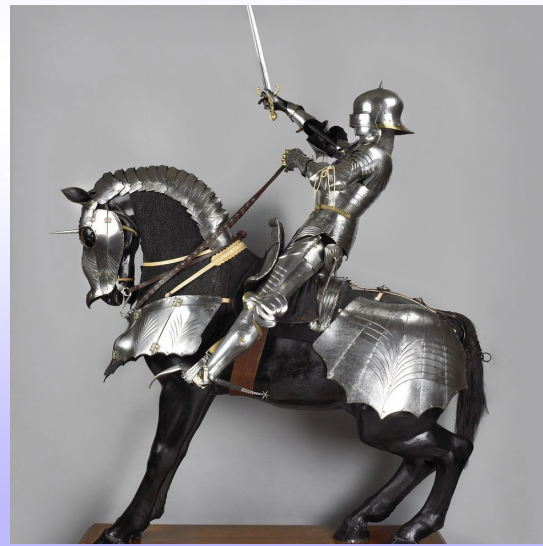
Mirror polishing for the armour was used by itself and in combination with other decoration techniques, such as etching, engraving, gilding and silvering and bluing. It is recommended for the kits **not earlier than the XV century**. A suit of arms with mirror polishing should be submitted for the approval as a full set. Separate elements cannot be approved.



1472 Montefeltro Altarpiece
by Piero della Francesca



1435 Heilspiegel Altarpiece
by Konrad Witz



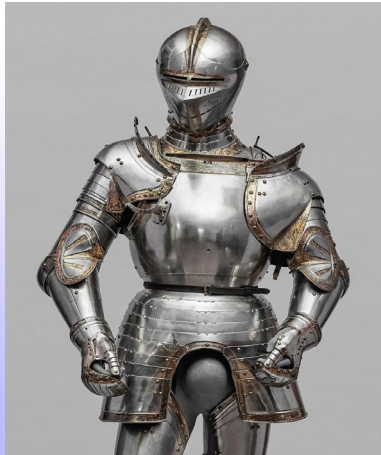
1480 Armour for man and horse,
Wallace collection

Bluing

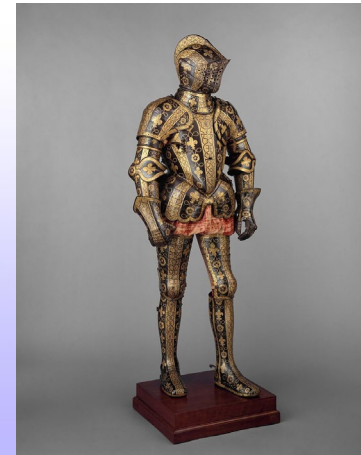
Heat patination is a heat-treating technique, which can result in a wide spectrum of colours from straw yellow to dark blue, purple and visually black. There is no evidence that it was popular in Western Europe before the XV century. It could be used in combination with all the decoration techniques mentioned in this document. The suit of armour with blued elements should be submitted for the approval as a full set.

1505-1510.
Kolman Helmschmied
Armour for Graf Andreas
von Sonnenberg-Friedberg
Neue Burg, Hofjagd- und
Rustkammer

Blued edges are covered
with gilded ornament



1510 Portrait of a Knight
By Vittore Carpaccio



1586 Armor Garniture of George Clifford
Metropolitan Museum

Armor plating

Plating as trimming in different metal is allowed if it recreates the existing artefact.



On the left
c. 1400 vambrace and
couter decorated with
ornamented brass trimming

Metropolitan Museum

On the right
1390, Hourglass gauntlet
with brass trimming

Wallace collection



Armor plating

Plating is allowed if it recreates the existing artefact.



Bacinet - The Lyle bascinet
(1371-1399)

Late 14th century bascinet
with 'houndskull' visor and
aventail

Place: Northern Italy

Armor gilding and silvering

Armour gilding (and silvering) is an exceptionally expensive technique which was used for fashionable suits of armour. It can be used in combination with all decoration techniques mentioned in this document. Gilded or silvered armour should be submitted for approval as a full set.



1608 Greenwich armory
Made for Henry Frederic
Stuart, Prince of Wales

Combines gilding, etching,
blueing, embossing
techniques and assembled
with brass rivets. The
blueing on completion gave
a peacock blue and purple
complex colour.

Wallace collection

Armor gilding and silvering

Armor gilding (and silvering) is an exceptionally expensive technique which was used for fashionable suits of armour. It can be used in combination with all the decoration techniques mentioned in this document. Gilded or silvered armor should be submitted for approval as a full set.



Armor gilding and silvering



Armour of Sir Thomas
Sackville, Lord Buckhurst
Royal Workshop, Greenwich
1587-1589
Combines acid-etching,
bluing, gilding on the grained
background

Wallace collection

Combination of bluing, etching
and silvering techniques.

North German field armour,
armoury of Julius, Duke of
Brunswick-Wolfenbüttel,
Brunswick, 1560-1565



Painting

Painting is permitted only for the replicas of existing painted helmets with the application of period technique or its imitation. Spray painting will be rejected.



Left: 1500, sallet. Germany.
The Wallace collection

Below: 1490, sallet.
Germany. Royal Armouries



Painting

Painting is permitted only for the replicas of existing painted **helmets** with the application of period technique or its imitation. Spray painting will be rejected.



HELM: GROSSE SCHALLE
um 1490 – 1500

Kunst Historische
Museum, Wien

Acid-etching for armour

It is allowed to use etching which reproduces the existing artefact in decoration alignment and pattern. It can be used in combination with other decoration techniques.



Turban helmet
15 c.
Turkish or Iranian
Metropolitan Museum

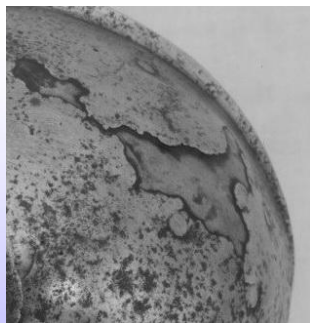


Sallet
1510-1515, Italy

Metropolitan Museum

Patches, flaws and traces of reparation

Patches riveted on the inside are allowed. All reparation should be executed in period technique, neatly finished and pose no danger to other participants and elements of their outfit. All welded seams should be grinded and polished on the outside.



Weapon decoration

It is allowed to use weapons with patterns copying historical sources. Coat of arms of the owner, club or workshop is a subject to authenticity approval and should not occupy more than 10% of the surface.

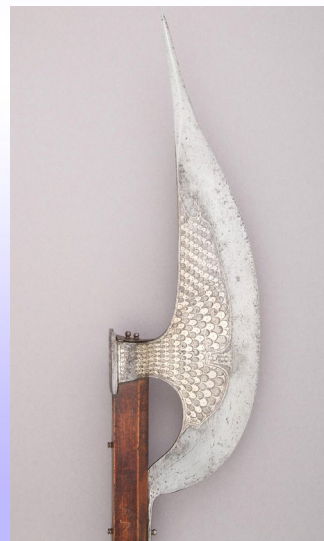


On the left:
Etching and gilding on
Horseman's Ax of Cardinal
Ippolito de' Medici (1511–
1535)

ca. 1530–35, Italy

On the right:
Etching and silvering on the
Axe (Berdiche)
14-15c. Ottoman

Metropolitan Museum



Blade patterns, stamps, inscriptions

- Blade of the weapon should be clean and polished
- Small coats of arms, stamps and war cry inscriptions should follow the historical source and be located close to the guard
- Blades with decorative patterns should match the style of the suit of armour.



On the left:
Sword
1365-1432

Royal Armouries, Leeds

On the right:
Sword
13 c.

British Museum



Blade patterns

- Blade of the weapon should be clean and polished
- Small coats of arms, stamps and war cry inscriptions should follow the historical source and be situated close to the guard
- Blades with decorative patterns should match the style of the suit of armour.



Arms and armor finish for HMB kits

Decoration techniques not listed in this document including but not limited to the use of damask steel, embossing, inlay, enamelling and decoration with non-ferrous wire **can be allowed** but at all times are **subject to authenticity approval**. Elaborated decoration can be assessed only for the whole suit of armour (and weapon if decorated).

Please consider the possibility to provide a primary source for your kit.

Welding, rust and other fixable flaws of the surface should be taken care of prior to submission of the armour for the authenticity check.

List of references

- Blair, C. (1958). *European Armour, 1066 to 1700*.
- Williams, A. (2002). *The knight and the blast furnace: a history of the metallurgy of armour in the Middle Ages & the early modern period*. Brill.
- Fashion in European Armor https://www.metmuseum.org/toah/hd/afas/hd_afas.htm
- Techniques of decoration on arms and armour https://www.metmuseum.org/toah/hd/dect/hd_dect.htm
- The decoration of European armour https://www.metmuseum.org/toah/hd/deca/hd_deca.htm
- Royal Armouries collection <https://collections.royalarmouries.org/>
- The Wallace Collection <https://wallacelive.wallacecollection.org/eMP/eMuseumPlus>
- The Met Collection <https://www.metmuseum.org/art/collection/>
- Kunsthistorisches Museum Wien <https://www.khm.at/en/objectdb/>



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Appendix I: Modern examples (allowed)

Matte finish

Modern examples (full suits)



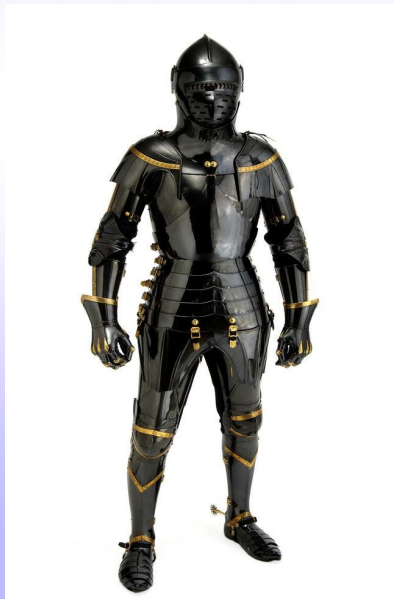
Matte finish

Modern examples (elements of equipment)



Bluing

Modern examples



Mirror polishing of the armour

Modern examples



Mirror polishing of the armour

Modern examples:



Gilding, silvering, embossing, plating, graining

Modern examples:



Slight forging marks

Parts of armor with **slight traces of forging** will be **allowed** at the tournaments.





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Appendix II: Modern examples (rejected)

Rust

Kits or elements of armour or weapon covered in rust are **not allowed** at the tournaments. The only exception is the rust appeared during the event after or during the 1st day of competitions.



Welding and welded seams

Unprocessed and not smoothed welded seams and spatters on the visible elements of the kits are **not allowed**.



Armor finish

No polishing



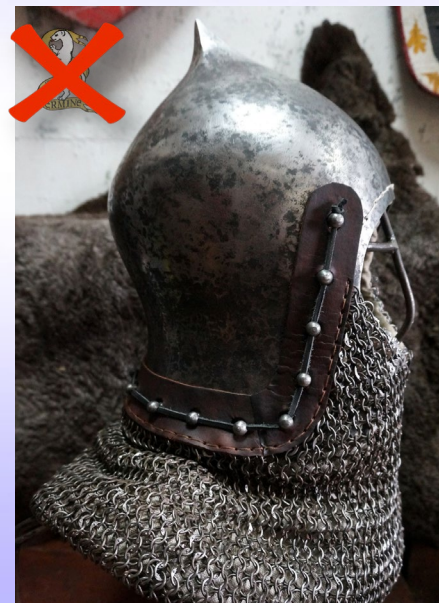
Armor finish

No polishing



Partial finish

Finish does not comply with the AC regulation



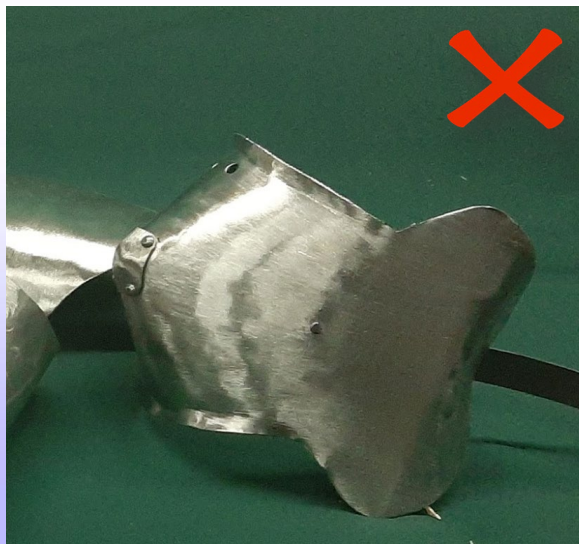
Partial finish

Partial finish does not comply with the authenticity regulations



Rough polishing and disc grinder marks

All armor elements **should not have** marks of the modern instruments surface treatment (grinding machines, angle grinders...). Grinding wheels and wire brush marks **must be polished** properly.



Patches, flaws and traces of reparation

Patches riveted on the inside are allowed. All reparation should be executed in period technique, neatly finished and pose no danger to other participants and elements of their outfit.



Helmet engraving

No source for ornamentation position and pattern



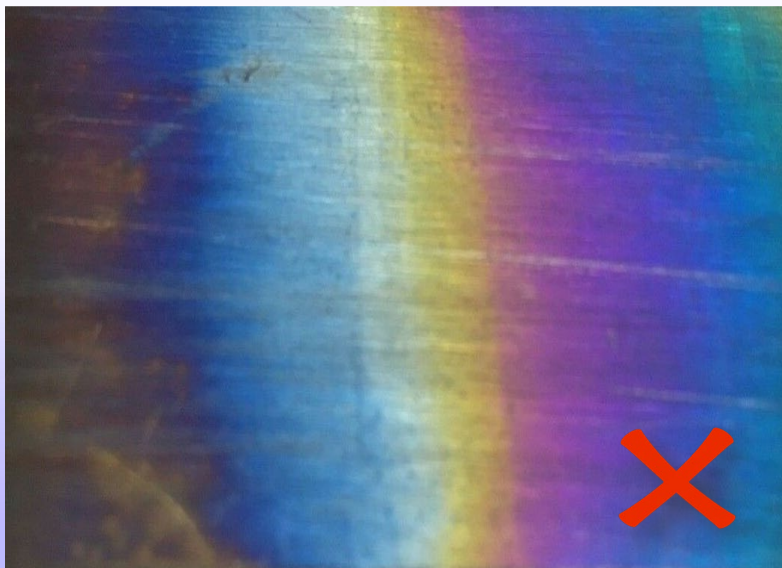
Weapon decoration



Modern etching pattern without plausible historical source

Annealing

Annealing is an oxide layer created on ferrous metals (iron, steel, high-grade steel) and titanium through localized heating. Generally, the oxide layer is black, but it can also have other annealing colours (such as yellow, red and green). The colour depends on the temperature of the heated layers. Annealing of any kind is **not allowed**.



Blade patterns

Offensive, hate speech captions, fully dyed, modern, fantasy patterns and illicit symbols are **not allowed**.



Painting

Painting is permitted only for the replicas of existing helmets

