

INTERNATIONAL ASSOCIATION OF PAPER HISTORIANS

**INTERNATIONAL STANDARD FOR THE REGISTRATION OF
PAPERS WITH OR WITHOUT WATERMARKS**

VERSION 2.1 (2012)



INTERNATIONAL ASSOCIATION OF PAPER HISTORIANS

INTERNATIONAL STANDARD FOR THE REGISTRATION OF PAPERS WITH OR WITHOUT WATERMARKS

VERSION 2.1 (2012)

INTERNATIONAL STANDARD FOR THE REGISTRATION OF PAPERS WITH OR WITHOUT WATERMARKS

1 Introduction

Since Version 2.0 was published in 1997, computer science has made a tremendous progress. The web and PC performances, exceeding the power of the former giant computers, have become routine. In the same time, the interest in historical paper analysis has grown world-wide, together with a demand for more accurate results. Therefore, the IPH standard had to be revised.

Many of the new watermark collections, especially in Europe, use criteria of their own and different digitalizing systems. All the more, a normalization of the criteria becomes a must, especially in view of a scholarly standard of the data to be obtained, and the IPH is aiming at an international recognition of its Registration Standard. Up to now, potential users were preferring two negative arguments: the Standard, in their view, contained many criteria which did not refer to the specifications of their own collections, and on the other hand its watermark classification scheme would be too general, not allowing any distinction of specific sub-types.

In view of those arguments, IPH makes the following statement:

The IPH Registration Standard ensures the registration of all historical and modern papers and paper items, with or without watermarks. Therefore some criteria are defined which apply to single paper types only.

The IPH Registration Standard is both, a technical standard of normalized criteria as well as a standard defining criteria and paper or watermark types, fixing their name and specification in the most important languages, in order to ensure the international compatibility of the paper data.

Practical use of the IPH Registration Standard

The comparability of paper data is ensured even if only a few, incomplete data are available. In other words: *Nothing but those data should be registered which are unmistakable and assignable; all other criteria may be omitted, i.e. the corresponding labels should remain void.* The Standard prescribes, for basic registration, only data which serve to identify an item and the corresponding data file. This will minimize the registration time involved.

2 Function of the Standard

2.1 Identification of papers

Historians, archivists, librarians, art historians, even criminologists make use of paper history, especially watermark analysis, in order to identify and date paper found in documents, books, manuscripts, prints, drawings, maps etc.

Strictly speaking, however, an identification of this kind is only possible if the registration of papers is carried out everywhere according to the same criteria and as comprehensively as possible.

It is assumed that the registration of papers is possible on small EDP units such as personal computers without storage of image data, in addition to the traditional card index.

This standard is intended to be a technical standard for data recording. The exchange of data and the development of corresponding software should be based upon the recommendations of IPH (see Appendices II,1 and II,2). Compared with the former versions (1.0 / 1992; 2.0 / 1997), the version 2.1 / 2012 offers more precise selection possibilities and contains the criteria needed to register papers from Far East and from Arab countries without watermarks as well as the entire illustrated index of watermark classes and subclasses.

2.2 Basis of the Standard

This standard is based on the following conditions:

- Watermark is understood to be any mark which appears in the sheet of paper where there is a difference in sheet thickness regardless of how it is produced or of the grade of paper or depression (wire or other elevation on the mould, impression on the wet or dry sheet of paper, hand- or machine-made paper).
- With handmade paper in particular, the watermark provides information about the chronological order in the production of the sheets primarily by comparing the small differences between the individual watermarks. Together with known dates of use or production this results in dating sequences which can be used to draw other conclusions.
- In order to prepare such dating sequences it is necessary to record the information on each watermark as comprehensively as possible, including technical data and information on its use.
- The unique paper sheet is the starting point of every registration. Its data lead to conclusions concerning the basic production unit, the mould.
- All data not collected on a complete sheet or half-sheet have to be mentioned sub 3.0.9 as 'fragment', even if the sheet (e.g. in a book) could be reconstructed. The descriptions of original moulds have to be stored in a separate file.
- A considerable help in preparing such registration is the determination of the position of the mark in the pair of moulds used for handmade paper and the changes of screen or dandy roll or molettes for machine-made paper. Distinct differences between watermarks from a single or pair of moulds generally come from faults in the wire profile, the mould cover or the machine wire or the dandy roll as a result of continued wear during production.
- A short description of the object is compulsory; the bibliographical and codicological description of the object has, as complete as possible, to be stored in a separate data file.
- The source must be given sub 3.0.6 for any information taken from existing literature; such data have to be earmarked by a following #.
- The more complete the registration of the information about the paper sheet, the more valuable it is for comparison with similar sheets.

3 Data to be registered

*The data marked * must be recorded with first priority as a basic registration.*

3.0 Data of the sheet

Section, Code, Description, Subcodes (underlined)

3.0.0* IDEN

Entry number of the database (or card index)

3.0.1* DREV

Date of entry or updating (formatted DD.MM.YYYY)

3.0.2* INST

Whereabouts; institution operating the watermark database (in abbreviated form, e.g. FPBN = Paris, Bibliothèque Nationale).

IPH will keep a compulsory list of sub-codes (abbreviations) of all institutions operating a watermark database.

3.0.3* SIGN

Identification of the original sheet: inventory or accession number

e.g. Ms. Gr. 0219

3.0.4* SUBS

Number/subunit of the original sheet

e.g. fol. 96

3.0.5 BIBL

References from a Bibliography: abbreviation of the bibliography + number of the reference quoted

If there are several references, they are separated by a numeral following the code: BIBL1, BIBL2, etc.

3.0.6 REFE

Literature references, mentioning author (with first name), title, year, volume, page

If there are several references, they are separated by a numeral following the code, e.g. REFE1, REFE2, etc.

3.0.7 FUNC

Paper kind (general) in accordance with the end use

<u>art</u>	artist paper
<u>dec</u>	decorated paper ¹
<u>dr</u>	drawing or painting paper
<u>graph</u>	graphic paper
<u>min</u>	minor quality, refuse
<u>oth</u>	other kinds
<u>pr</u>	printing paper
<u>sec</u>	security paper
<u>spec</u>	special watermarked paper (portrait, commemorative, etc.)
<u>st</u>	stamped paper
<u>wr</u>	writing paper

¹ IPH will publish specifications for registration of decorated papers in a separate database.

3.0.8 USEP

End use of paper

<u>back</u>	backing paper (drawing or prints)
<u>book</u>	book (printed)
<u>doc</u>	document
<u>draw</u>	drawing
<u>end</u>	endpaper
<u>env</u>	envelope
<u>map</u>	map (geogr.)
<u>ms</u>	manuscript (letter, bound, notebook, loose note, score)
<u>mus</u>	music book, printed music
<u>obj</u>	paper object
<u>oth</u>	other end use
<u>pa</u>	paper art
<u>paint</u>	painting paper
<u>plain</u>	plain sheet
<u>print</u>	print (work of graphic art)
<u>shif</u>	shifu paper
<u>spir</u>	spirit paper (mock money)
<u>subs</u>	paper substituting other kind of ma terial
<u>tec</u>	technical paper (e.g. paper for gold beating)
<u>wrap</u>	wrapping paper

3.0.9* STAT

State of sheet

<u>H</u>	half sheet
<u>F</u>	fragment
<u>T</u>	trimmed
<u>U</u>	untrimmed

3.0.10* DIMH

Height of the sheet (in mm)

3.0.11* DIMW

Width of the sheet (in mm)

3.0.12 STAN

Allocation to a (historical/local/temporary) standard dimension with reference giving time and place of standard and the original height and width in mm (e.g. : Foolscap Folio, London 1850c., 203 x 330; cf. Labarre, Dictionary, p.259)

3.0.13 COLO

Colour of the sheet

<u>C</u>	coloured (surface dyeing or dyed coating)
<u>M</u>	marbled/decorated (all varieties)
<u>N</u>	natural (uncoloured fibres)
<u>R</u>	coloured (from dyed rags)
<u>S</u>	coloured (stock dyeing)
<u>V</u>	veined

3.0.14 INTS

Intensity of the colour

<u>D</u>	dark
<u>F</u>	faded
<u>L</u>	light (pale)

3.0.15 TONE

Shade, given in full

3.0.16 PATT

Pattern, given in full

A special, separate database for decorated papers is recommended for collections containing major lots of such papers.

3.0.17 SIDE

Position of wire side

<u>SD</u>	wire side facing down
<u>SU</u>	wire side facing up
<u>SN</u>	facing not known

It is recommended to collect data with the wire side facing down.

The following information is important especially for machine-made paper:

3.0.18 PULP

Type of raw materials used, given in full

e.g. rags of linen, linen/linters 50:50;
hardwood/softwood pulp 50:50

3.0.18 FILL

Fillers, given in full

e.g. starch; china clay

3.0.19 SIZE

Type of sizing, given in full

e.g. starch sizing; rosin sizing

3.0.20 SDEG

Degree of sizing

<u>FS</u>	full sized
<u>HS</u>	half sized
<u>NS</u>	unsized

3.0.22 COAT

Type of coating, given in full

e.g. wheat starch; latex

3.0.23 CMOD

Mode of coating

<u>A</u>	absent
<u>D</u>	double side
<u>S</u>	single side

3.0.24 DYES

Dyestuffs used, given in full; if possible, in accordance with the Colour Index

3.0.25 ASHC

Ash content (%) according to DIN 54370)

3.0.26 BEKK

Smoothness (index according to BEKK, DIN 53107)

3.0.27 WEIG

Basis weight (weight of the sheet converted to g/m²)

3.0.28 THIC

Thickness of the sheet (in µm according to DIN 53105)

3.0.29 GRAD

Paper grade, given in full (according to DIN 6730; oriental papers according to local denominations)

3.0.30 BRAN

Brand name, given in full, in its original spelling

3.0.31 MACH

Type of paper machine used for production

<u>CY</u>	Cylinder (vat) machine
<u>FO</u>	Fourdrinier machine
<u>OT</u>	other types

3.0.32 WMOD

Mechanical watermark application technique

<u>CL</u>	Wire watermark (cylinder machine)
<u>DR</u>	Dandy roll
<u>EMB</u>	embossed
<u>IMP</u>	impressed (molette)
<u>OTH</u>	other

3.1 Watermark data

The data 3.1.1 to 3.1.12 must be described separately for each watermark or part of a combined watermark contained in one sheet. Arab numerals are then placed immediately after the codes 3.1.1 to 3.1.12, e.g.

STRU1, STRU2, STRU3.

3.1.0* KIND

Kind of watermark(s) in the sheet

<u>BO</u>	border watermark (decoration)
<u>C</u>	counter watermark
<u>nCRN</u>	corner watermark (decoration) on n corners
<u>DV</u>	dividing line(s)
<u>M</u>	main watermark
<u>N</u>	without watermark

The description of several watermarks in one sheet consists of the subcodes followed by arab numerals, e.g. KIND1 M; KIND2 C.

3.1.1* STRU

Structure of watermark

<u>EMB</u>	embossed watermark
<u>LSW</u>	combined line/shadow
<u>LW</u>	line watermark
<u>MOL</u>	molette watermark (impressed)
<u>SW</u>	shadow watermark
<u>TL</u>	watermark produced by thread lines
<u>UNT</u>	false watermark (e.g. produced by printing a colourless liquid)

3.1.2 POSP

Position of the watermark in the sheet

<u>C</u>	center
<u>D</u>	lower part
<u>L</u>	left part
<u>M</u>	middle
<u>R</u>	right part
<u>U</u>	upper part

3.1.3* MOTI

Main motif of watermark, abbreviated, coded according to section 5.2 and appendix I.

e.g. D5/2 (Eagle, double-headed)

3.1.4 CLAS

Class of watermark with subclasses, coded according to section 5 with appendix I and , possibly, addendum 1.

If addendum 1 is not used, the elements of a composite watermark should be mentioned as in 3.1.3, separated by the sign - (and), preceded by the main watermark element, regardless of their position in the watermark.

Example:

D5/2 - R3/1 - M14 - R1/3 - T3/1 'Heusler'

= Eagle, double headed, with crown and sword, bearing a crozier; below is the trade-mark of the Heusler family

3.1.5* FULL

Extensive description of watermark (in full)

3.1.6* MESH

Height of the watermark in mm

(to be measured as a rectangle parallel to the vertical axis of watermark, using a rectangular sliding rule)

3.1.7* MESW

Width of watermark in mm (to be measured according to 3.1.6)

3.1.8* POSL

Smallest horizontal distance in mm between the watermark and the nearest chain line on the left

3.1.9 POSR

Smallest horizontal distance in mm between the watermark and the nearest chain line on the right

3.1.10 POSS

Smallest horizontal distance in mm between the watermark and the bottom of the sheet

3.1.11 POSH

Smallest horizontal distance in mm between the watermark and the top of the sheet

3.1.12* POSC

Number of the compartment (counted from left to right) which is touched by the furthest left point of watermark

3.1.13 INFO

Additional information on the actual watermark, in full e.g. ‘fragment’; ‘can only be registered incompletely due to the use of paper’; ‘registration difficult because stuck to a backing’; assumptions as to the position of watermark in the original sheet, etc.

3.2 Mould data

3.2.1* FABR

Paper production type

<u>H</u>	hand-made
<u>M</u>	machine-made

3.2.2* TYPE

Paper type according to mould

<u>B</u>	bamboo screen
<u>L</u>	laid, vergé (Europe)
<u>T</u>	textile screen
<u>U</u>	not identified
<u>W</u>	wove, vélin (Europe)

3.2.3* LLIN

Laid lines in the sheet

(number of laid lines over a distance of 20 mm, measured along the chain line to the left of watermark or, for papers without watermark, along one of the centre chain lines, first at the bottom of the sheet, second in the middle, third at the top, to be measured even on trimmed sheets)

3.2.4* CHFI

Order of divisions in the sheet

(Width of the chain compartments in mm in order from left to right, measured in the middle of the sheet, starting with the distance from the left borderto the first chain line; every number divided by a hyphen; to be measured even on trimmed sheets)

Example: 4-15-20-22-20-22-23-20-14-3

3.2.5 SHAD

Shadow zones

<u>BS</u>	zones below the chain lines
<u>IS</u>	irregular zones
<u>MS</u>	zones in the middle of the compartments
<u>NS</u>	without shadow zones

3.2.6 WIRE

Special characteristics of the mould, in full, e.g. faults in the wire, special traces

3.2.7 MOUL

Access number of the mould on which the sheet was formed (in a separate mould database)

3.2.8 PAIR

Access number(s) of data (in a separate mould database) of the second mould forming the pair

3.3 Bibliographical / codicological data

3.3.1 AUTH

Author or editor, if there is no author
(if necessary, with reference to a special database)

3.3.2 ARTS

Artist (if necessary, with reference to a special database)

<u>art</u>	painter, draughtsman (inv[enit], del[ineavit], pinx[it])
<u>eng</u>	engraver (sculp[sit])

3.3.3 WRIT

Writer of a manuscript

3.3.4 TITL

Title of a work of art (subject), of a manuscript or printed book

<u>CONT</u>	Summary (in full)
-------------	-------------------

3.3.5* NATU

Country of use (in full + abbreviation)

Historical name of the country where the paper was used, followed by the present name (abbreviated according to the international automobile code)

Example: Saxony (D)

3.3.6* LOCU

Place of use (printing or writing)

Name of the place where the paper was used, in local spelling or in English, followed by the historical name at the time of use (if it is different) in local or Latin spelling

Example: Séléstat (Schlettstadt)

3.3.7 PUBL

Publisher or Editor, in full

(if necessary with reference to a special database).

3.3.8 PRNT

Printer, in full

(if necessary with reference to a special database).

3.3.9* DATB

Earliest possible date of use (writing, printing, etc.) (= terminus post quem / a quo)

It is assumed that the date of use, if it is unknown, may at least be roughly estimated. Conclusions concerning the dates of use of a mould can be drawn from several sheet data and should be registered in a separate mould database relationally.

Formatted as ‘DATE’ (DD.MM.YYYY).

An exact date is recorded in 3.3.9 as well as in 3.3.10. For estimates, the 1st of January stands for the beginning of a year, the 31st of December for its end.

Example: DATB: 01.01.1776
DATE: 31.12.1799

stands for use in the 4th quarter of the 18th century.

3.3.10* DATE

Latest possible date of use (writing, printing) (= terminus ante quem)

Formatted as in 3.3.9

3.3.11* DATM

Kind of dating

<u>idat</u>	date preserved on the sheet (object) or contemporary
<u>tdat</u>	traditional date
<u>ndat</u>	without date; date is an estimate or deduced

3.4 Papermill data

These data can be replaced in 3.4.4 by a reference to the relevant data set of a papermill sub-database.

3.4.1 NATP

Country of papermill location

Formatted as in 3.3.5 (NATU).

3.4.2 LOCP

Place of papermill location

Formatted as in 3.3.6 (LOCU)

3.4.3 MILL

Name of papermill

Formatted as in 3.3.6 (LOCU)

3.4.4 IMIL

Access number of papermill in the papermill sub-database

3.5 Papermaker data

These data can be replaced in 3.5.4 by a reference to the relevant data set of a papermaker sub-database.

3.5.1 MAKE

Surname of papermaker, *in modern spelling, followed by different historical spelling(s)*

Example: Heusler (Hüsler, Heisler)

3.5.2 FNAM

First name(s) of papermaker

Formatted as in 3.5.1

3.5.3 RANK

Rank of papermaker in the producing mill

<u>F</u>	Fellow
<u>M</u>	Master, Foreman
<u>O</u>	Owner
<u>T</u>	Tenant

3.5.4 IMAK

Access number of papermaker in the papermaker sub-database

3.6 Additional criteria for the registration of far eastern and arab papers without watermarks

The criteria mentioned in sections 3.0 to 3.5 do not allow a comprehensive registration of far eastern and arab papers. The following points have to be included as a supplement.

3.6.1 ASPR

Description of the surface aspect, recto, in full

3.6.2 ASPV

Description of the surface aspect, verso, in full

3.6.3 SPEC

Peculiarities of the sheet, in full

3.6.4 ZZZZ

Zigzag mark(s) in the sheet

<u>Y</u>	existing
<u>N</u>	not existing

3.6.5 ZNUM

(if there is a zigzag mark) Number of zigzag columns

3.6.6 ZZNU

(if there is a zigzag mark) Number of zigzag elements, beginning at the top

3.6.7 ZHHH

(if there is a zigzag mark) medium height of zigzag element in mm, measured at a right angle to the upper border of the sheet

3.6.8 ZWWW

(if there is a zigzag mark) medium width of zigzag element in mm measured at a right angle to the left border of the sheet

3.6.9 ZAAA

(if there is a zigzag mark) medium angle of the oblique line of zigzag element, in degrees, measured from the lower border of the sheet

3.6.10 ZDMN

(if there is a zigzag mark) minimal depth of zigzag mark, in μ

3.6.11 ZDMX

(if there is a zigzag mark) maximal depth of zigzag mark, in μ

3.6.12 ZPSD

(if there is a zigzag mark) distance of the zigzag column(s) from the lower border of the sheet, in mm

3.6.13 ZPSU

(if there is a zigzag mark) distance of the zigzag column(s) from the upper border of the sheet, in mm

3.6.14 ZPSL

(if there is a zigzag mark) distance of the zigzag column(s) from the left border of the sheet, in mm

3.6.15 ZPSR

(if there is a zigzag mark) distance of the zigzag column(s) from the right border of the sheet, in mm

4 Information about the original watermark or sheet and its reproduction

As additional information about the object data described, it is very important to know if the data have been derived from the original or from a reproduction. Also, existing reproductions of an original have to be mentioned, indicating their type and their access numbers. Since a wrong interpretation may arise if a watermark is enlarged or reduced, even when the scale is given, the reproduction should be of original size.

4.1* ORIG

Original watermark or sheet

- | | |
|----------|----------------------------------|
| <u>Y</u> | Data derived from the original |
| <u>N</u> | Data derived from a reproduction |

4.2 TRAC

Hand-drawn tracing

Hand-drawn tracings are generally inexact and hardly ever indicate the position of the watermark in the sheet or traces of the wire fixations. In those instances where rubbing, UV photography or radiography are not allowed, or are judged impractical or dangerous to the material, for the time being a practical method of reproduction remains tracing, however inaccurate, using a protective film (e.g. KODATRACE).

4.3 PHOT

Transparency photographs

Transparency photographs often suffer because of writing or printing as well as irregularities in the sheet. To ensure the accuracy of measurement, a scale has to be photographed simultaneously. For this reason the following methods which provide satisfactory results are recommended:

4.4 RUBB

Rubbing

This method, if its application is allowed by the owner or keeper of the paper, can be used with minimum effort and virtually without any technical equipment, even if the sheet has been laminated or printed/written on.

Materials:

- pencil with a soft lead (no.2) or a carpenter's pencil or a tight, slightly blackened textile ball (heelball)
- writing paper (unlined) or typing paper, 35 - 50 g/m²

Method:

The sheet of paper being registered is placed on a hard surface, if possible with the wire side up, and the writing paper on top. Diagonal strokes are then made with the unsharpened end of the pencil or with the ball in immediate proximity to each other from upper left to bottom right over the entire surface of the suspected or visible watermark. A lightly shaded dark area is obtained in which the exact reproduction of the watermark in its original size becomes visible as pale lines. For recording sections e.g. with wire faults, separate rubbings will be necessary.

Reference: W.Haupt, Wasserzeichenwiedergabe in schwierigen Fällen, Maltechnik/Restauro 1981, 38-43

4.5 UVPH

UV-photography

Method:

The sheet is placed upon a photosensitive paper (DYLUX) and exposed to visible light (410-500 nm). Subsequently (not immediately after daylight exposure), the photosensitive paper is exposed to UV radiation (200-400 nm). For practical reasons, this order can be reversed. The UV source is a standard (portable) UV apparatus.

Reference: T.L.Gravell, "A New Method of Reproducing Watermarks for Study", Restaurator 2 (1975), 95-104

4.6 PHOS

Phosphorescence technique

Method: A phosphorescent plate is activated by UV radiation; then the sheet is placed upon this plate and irradiated by UV and IR radiation. The plate is brought to close contact with a commercial black-and-white panchromatic film which afterwards is developed as usual.

Reference:

J.Siener, Ein neues Verfahren zur Abbildung von Wasserzeichen, Gutenberg-Jahrbuch 1981, 99-102



4.7 RADI

Radiography

All radiographic recordings have a common advantage, that printing, writing and drawing inks are not shown and the watermark and the wire structure show up clearly. However, metallic illustrative colours (e.g. lead white, golden bronze or red lead) or sheet gold throw black shadows. We propose that each printroom or archive should provide facilities to make radiographs and also should consider registration of watermarks for part or for the whole of their collections, and make these available for use by scholars. In all radiographic recordings the safety regulations have to be observed carefully.

Technically there are three types of radiographs which are all suitable for reproducing watermarks:

4.7.1 SX

Soft X-ray radiography

4.7.2 BETA

Beta radiography

4.7.3 ELEC

Electron radiography

References:

- Ash, Nancy E.: Watermark research: Rembrandt prints and the development of a watermark archive, The Paper Conservator, 10 (1986), pp. 64 - 69
- Lectures of the Symposium "Zerstörungsfreie Prüfung von Kunstwerken", Berlin 1987:
- Schnitger, D., Ziesche, E.: Elektronenradiographie von Wasserzeichen, pp. 34 - 42
- van Hugten, H.: Weichstrahlradiographie z.B. bei Papier, pp. 43 - 49
- Rose, P.: Digitale Bildverarbeitung als Hilfe bei Durchstrahlungstechniken, pp. 50 - 60
- Schnitger, D., Ziesche, E.: Elektronenstrahlradiographien - Beispiele zur Datierung mit Hilfe von Wasserzeichen, IPH Yearbook 7 (1988), pp. 209-223

4.8 SURF

Digitalized non-contacting thickness measuring

This method, executed line after line of a whole sheet, reproduces the watermark accurately like rubbing, but can be used with special computerized apparatus only.

4.9 SCAN

Scanning

Digitalized scanning of the sheet in translucent mode on a specialized scanner

4.10 DIVE

Other reproduction techniques

4.11* IDNR

Access number and / or location of the reproduction

5 Classification of types of watermarks

5.1 General

Recording of the type classification of a watermark (see 3.1.3 and 3.1.4) must be carried out according to a code, to avoid misunderstandings or translation difficulties with verbal descriptions (see 3.1.5) as follows:

- the main mark determines the allocation to the main class;
- additional marks and variations are recorded in a subclass;
- watermarks combining several elements are recorded mentioning the main element code first, then - separated by hyphens - the other element codes, irrespective of their order or position in the watermark.
- parts of a whole (e.g. 'head', 'bust', 'fruit') as well as particularities of position and heraldry may be coded with suffixes and additional numbers (see appendix I, addendum 1).

In practice, searching for 10 to 12 watermarks similar to a given specimen of a collection is possible in a very few seconds, based only on the watermark measurements and the main watermark type classification code. The definite comparison has in the following to be made visually, but presents no difficulties.

The code key given in the appendix uses the proven classification according to motif keywords as used in the works by Briquet, K.Th. and W.Weiss, Piccard and others. However, it differentiates between the categories consequently according to the presentation of the watermark and not according to a form or meaning, and avoids all terms which are not object-related. Formal differences within a category are recorded as subclasses (3.1.3), if necessary with further subdivisions (3.1.4). Further differences have to be recorded in full (3.1.5) or completely coded (see Appendix I, addendum1; optional) and with a reproduction (see 4.2ss.) in every case.

The following index is deliberately open and can therefore be supplemented at any time. Suggestions for additions should be made to IPH which will publish supplemented indexes periodically.

Addendum 1 to Appendix I explains a complete code which makes it possible to describe even composite watermarks; examples are given.

Every designer of a watermark database shall feel free to define further specific sub-types in accordance with the scope of his watermark collection, on condition that the IPH watermark type codification mode be maintained.

5.2 List of the main watermark classes

A	Human figures; men; parts of the human body
B	Women
C	Mammals
D	Birds
E	Fish, reptiles, insects, molluscs
F	Mythical figures
G	Plants (general); flowers; grass
H	Trees; shrubs; creepers
J	Sky, earth, water
K	Buildings, parts of buildings
L	Transport, vehicles
M	Defence and arms
N	Tools, equipment, clothing
O	Musical instruments
P	Containers
Q	Miscellaneous objects
R	Insignia of rank, sceptre, mace, jewellery
S	Religious or magic symbols and signs
T	Heraldry, coats of arms, mason's marks, trademarks
U	Geometric figures
V	Numbers, numerals
W	Individual letters
X	Monograms, abbreviations with letters
Y	Names (in full)
Z	Unclassifiable watermarks



5.3 Index of database labels

<i>label</i>	<i>meaning</i>	<i>subcodes</i>	<i>section</i>
* = basic registration			
ARTS	artist	art engr	3.3.2
ASHC	ash content		3.0.25
ASPR	aspect of surface, recto, in full		3.6.1
ASPV	aspect of surface, verso, in full		3.6.2
AUTH	author/editor		3.3.1
BEKK	smoothness		3.0.26
BIBL	reference to bibliography		3.0.5
BRAN	brand name		3.0.30
CHFI*	order of divisions in the sheet (chain line compartments)		3.2.4
CLAS	class of watermark (coded)		3.1.4 sect.5, appendix I
CMOD	type of coating	A D S	3.0.23
COAT	coating		3.0.22
COLO	colour of the sheet	C M N R S V	3.0.13
CONT	content, in full		3.3.12
DATB*	earliest possible date of use		3.3.9
DATE*	latest possible date of use		3.3.10
DATM*	kind of datation	idat ndat tdat	3.3.11
DIMH*	height of the sheet		3.0.10
DIMW*	width of the sheet		3.0.11
DIVE	other reproduction technique		4.10
DREV*	date of entry or revision		3.0.1
DYES	dyestuffs		3.0.24
FABR*	production mode	H M	3.2.1
FILL	fillers		3.0.19
FNAM	first name(s) of papermaker		3.5.2
FULL*	complete description of watermark, in full		3.1.5
FUNC	paper kind (general, according to the end use intended)	art dec dr graph min oth pr sec spec st wr	3.0.7
GRAD	paper grade		3.0.29
IDEN*	entry (access) number		3.0.0
IDNR*	access number / location of reproduction		4.11
IMAK	access number of papermaker in a sub-database		3.5.4
11/73			



label *meaning*
** = basic registration*

subcodes *section*

IMIL	access number of papermill in a sub-database		3.4.4
INFO	additional information on watermark		3.1.13
INST*	whereabouts of the original		3.0.2
INTS	colour intensity	D F L BO C nCRN DV M N	3.0.14
KIND*	kind of watermark(s)		3.1.0
LLIN*	laid lines in the sheet		3.2.3
LOCP	place of origin		3.4.2
LOCU*	place of use		3.3.6
MACH	type of paper machine	CY FO OT	3.0.31
MAKE	family name of papermaker		3.5.1
MESH*	height of watermark		3.1.6
MESW*	width of watermark		3.1.7
MILL	name of papermill		3.4.3
MOTI*	watermark motif (main code)		3.1.3; appendix I
MOUL	access number of the mould in a sub-database		3.2.7
NATP	country of origin		3.4.1
NATU*	country of use		3.3.5
ORIG*	original	N Y	4.1
PAIR	information on pair of moulds		3.2.8
PHOS	phosphorence technique		4.6
PHOT	transparency photograph		4.3
POSB	distance of the watermark from the bottom of the sheet		3.1.10
POSC*	number of the compartment with the furthest left end of wm.		3.1.12
POSH	distance of watermark from the top of the sheet		3.1.11
POSL*	distance of watermark from left chain line		3.1.8
POSP	position of watermark in the sheet	C D L M R U	3.1.2
POSR	distance of watermark from right chain line		3.1.9
PRNT	printer		3.3.8
PUBL	publisher		3.3.7
PULP	type of fibres used in the pulp		3.0.18
RADI	radiography	BETA ELEC SX F M O T	4.7
RANK	rank of papermaker		4.7.2 4.7.3 4.7.1 3.5.3



label *meaning*
** = basic registration*

<i>label</i>	<i>meaning</i>	<i>subcodes</i>	<i>section</i>
REFE	literature reference		3.0.6
RUBB	rubbing		4.4
SCAN	scanning		4.9
SDEG	degree of sizing	FS HS NS	3.0.21
SHAD	shadows	BS IS MS NS	3.2.5
SIDE*	position of the wire side	SD SN SU	3.0.17
SIZE	type of sizing		3.0.20
STAN	standard dimension		3.0.12
STAT*	state of the sheet	F H T U	3.0.9
STRU*	structure of watermark	EMB LW LSW MOL SW TL UNT	3.1.1
SUBS*	sub-signature (additional to SIGN)		3.0.4
SURF	digitalized non-contact thickness measuring		4.8
THIC	thickness of the sheet		3.1.28
TITL	title		3.3.4
TONE	shade		3.0.15
TRAC	tracing		4.2
TYPE*	type of paper	B L T U W	3.2.2
USEP	end use of paper	back book doc draw end env map ms mus obj oth pa paint plain print shif spir subs tec wrap	3.0.8



label *meaning*
* = basic registration

subcodes *section*

UVPH	UV-photography	4.5
WEIG	weight of paper	3.0.27
WIRE	special wire characteristics	3.2.6
WMOD	mechanical watermark application technique	3.0.32
	CL	
	DR	
	EMB	
	IMP	
	OTH	
WRIT	writer	3.3.3
ZAAA	medium angle of zigzag oblique line	3.6.9
ZDMN	minimal depth of zigzag impression	3.6.10
ZDMX	maximal depth of zigzag impression	3.6.11
ZHHH	medium height of zigzag element	3.6.7
ZPSD	distance of zigzag column from bottom of the sheet	3.6.12
ZPSL	distance of zigzag column from left border of the sheet	3.6.14
ZPSR	distance of zigzag column from right border of the sheet	3.6.13
ZPSU	distance of zigzag column from top of the sheet	3.6.15
ZNUM	number of zigzag columns	3.6.5
ZWWW	medium width of zigzag column	3.6.8
ZZNU	number of zigzag elements in column from top	3.6.6
ZZZZ	zigzag mark(s) existing	Y N
		3.6.4



ADDENDUM 1: The alphanumerical code

The alphanumerical code comprises:

- I the main class in the form of a capital letter, directly followed by the subclass in Arabic numerals and a slash (to separate);
- any further classifications in the form of Arabic numerals and a slash (to separate).

If addendum 1 is not used, the elements of a composite watermark should be mentioned as in 3.1.4 CLAS, separated by the sign - (and), preceded by the main watermark element, regardless of their position in the watermark.

Example:

D5/2 - R3/1 - M14 - R1/3 - T3/1 'Heusler'

= Eagle, double headed, with crown and sword, bearing a crozier; below is the trade-mark of the Heusler family

- II information on additional figures or accessory marks and their position with respect to the main watermark, using the descriptive codes as follows (optional).

DESCRIPTIVE CODES

code sign	meaning	Example
/	subclass	L4/1 rowing boat
" "	beginning and end of literally quoted letters	"Crossen" =
[]	or numbers	surnarne Crossen
-	subordinate (= with)	D5/1 [R3/1] = eagle with crown
-	coordinate (= and)	D5/1 [R3/1-R7] = eagle with crown and sceptre
=	equal (= synonymous)	Crow's foot = Griffin's claw
(n*)	n times (multiplication)	(3* (U1)) = three circles
(x:)	crossing	(2* (x:M14)) = two crossing swords
(i:)	italics	
(g:)	gothic	
↑	vertical	
→	horizontal	

CONNEXIONS

{c:}	overlaid	D5/1 {c: „JANSON“} = eagle, with the surname „Janson“ overlaid
{t: }	at the top; above	
{b: }	at the bottom; below	
{r: }	at the right	
{l: }	at the left	
{p, q, s, u + numeral:}	<i>see below s.v. affixes</i>	
<f>	within an edging / cartouche	
<w>	within a wreath	
<t: >	on a table / base	
<d: >	with a decoration (edgings)	
<e: >	with decorating corners	



AFFIXES

<i>p Parts of the body (man; animal)</i>	<i>q position</i>	<i>s Heraldry</i>
p01 leg	q0. = lateral	s0. = undivided
p02 foot	q01 lat.upright	s01 coat of arms without escutcheon
p03 arm	q02 lat.walking	s02 oval escutcheon
p04 wing	q03 lat.sitting	s03 esc. U-shaped
p05 hand/paw	q04 lat.lying	s04 esc. inflected
p06 claw	q1. = facing	s1.= horiz.divided
p07 trunk	q11 = fac.upright etc.	s11 = coat of arms without escutcheon, horiz.divided etc.
p08 protoma, bust		s2. = vertically divided
p09 heart		s22 oval esc., vertically divided
p10 head		s3. = diagonally divided
p11 hair		s33 U-shaped escutcheon, vertic.divided
p12 antlers		s4. = divided into four parts
p13 tooth		s5. = other division
p14 tail		

u parts of plant

u01	root
u02	stem/rod
u03	stalk
u04	branch
u05	leaf
u06	flower
u07	fruit, crop

A EXAMPLE OF A SIMPLE WATERMARK

Description in full (according to 3.1.5):

below a crown, capital italics CLK

Completely coded description (according to 3.1.4 and appendix I):

R3/I - {b: (i: X „CLK“)}
CROWN AND BELOW ITALICS ABBREV. CLK

B EXAMPLE OF A COMPLEX WATERMARK

Description in full (according to 3.1.5):

Eagle, crowned, overlaid with italic capitals FWR, holding sceptre and sword in the left claw, an orb in the right claw, at the top the name „G W Loeschge“, at the bottom „in Ansbach“

Completely coded description (according to 3.1.4 and appendix I):

D5/I [R3/I - {c: (i: X „FWR“) -
EAGLE WITH CROWN AND OVERLAID WITH ITALICS ABBREV. FWR AND

C1: p06 [R7 - M14 - {r: p06 [
LEFT CLAW WITH SCEPTRE AND SWORD AND RIGHT CLAW WITH

R4 - {t: → Y „G W LOESCHGE“ - {b:
ORB AND TOP HORIZONTAL NAME G W LOESCHGE AND BOTTOM

→ Y „IN ANSBACH“ }]
HORIZONTAL NAME IN ANSBACH



Addendum 2: International Automobile Code

Afghanistan	AFG	Germany	D
Albania	ALB	Ghana	GH
Alderney	GBA	Gibraltar	GBZ
Algeria	DZ	Greece	GR
Andorra	AND	Grenada	WG
Antilles (Netherlands)	NA	Guatemala	GCA
Argentina	RA	Guernsey	GBG
Australia	AUS	Guinea	GN
Austria	A	Guniea-Bissau	GNB
Azerbeidschan	AZ	Guyana	GUY
Bahamas	BS	Haiti	RH
Bahrain	BRN	Honduras	HN
Barbados	BDS	Hong Kong	HK
Belgium	B	Hungary	H
Belize	BH	India	IND
Benin	DY	Indonesia	RI
Bhutan	BTN	Iran	IR
Bolivia	BOL	Iraq	IRQ
Bosnia/Herzegowina	BiH	Irland	IRL
Botswana	RB	Island	IS
Brazil	BR	Israel	IL
British Guyana	BRG	Italy	I
Brunei	BRU	Ivory Coast	CI
Bulgaria	BG	Jamaica	JA
Burkina Faso	BF	Japan	J
Burundi	BI	Jersey	GBJ
Cameroon	CMR	Jordan	JOR
Canada	CDN	Kambodja	K
Cabo Verde	CV	Kazachstan	KAZ
Central African Republic	RCA	Kenya	EAK
Chad	TCD	Kirgizistan	KGZ
Chile	RCH	Kiribati	KIR
China (Taiwan)	RC	Korea (North)	DVRK
China (Beijing)	VRC	Korea (South)	ROK
Columbia	CO	Kuwait	KWT
Comores	CO	Laos	LAO
Congo	RCB	Latvia	LV
Costa Rica	CR	Lebanon	RL
Cuba	C	Lesotho	LS
Cyprus	CY	Liberia	LBR
Czechia	CZ	Libya	LBY
Slovakia	SK	Liechtenstein	FL
Denmark	DK	Lithuania	LT
Djibouti	DJI	Luxembourg	L
Dominica (Island)	WD	Macedonia	MK
Dominican Republic	DOM	Madagascar	RM
Ecuador	EC	Malawi	MW
Egypt	ET	Malaysia	MAL
El Salvador	ES	Maledives	MV
England	GB	Mali	RMM
Eritrea	ER	Malta	M
Estonia	EW	Marshall Islands	MH
Ethiopia	ETH	Man	GBM
Fidji	FJI	Mauretania	RIM
Finland	SF	Mauritius	MS
France	F	Mexico	MEX
Gabun	GAB	Micronesia	FSM
Gambia	WAG		
Georgia	GE		

Moldavia	MD	SierraLeone	WAL
Monaco	MC	Singapore	SGP
Mongolia	MNG	Solomon Islands	SLB
Morocco	MA	Somalia	SP
Mozambique	MOC	South Africa	ZA
Myanmar (Burma)	MYA	Spain	E
Namibia	SWA	Sri Lanka (Ceylon)	CL
Nauru	NRU	St.Kitts and Nevis	KN
Nepal	NEP	St.Lucia	WL
Netherlands	NL	St.Vincent/Grenada	WV
Newfoundland	NF	Sudan	SUD
New Zealand	NZ	Suriname	SME
Nicaragua	NIC	Swaziland	SD
Niger	RN	Sweden	S
Nigeria	WAN	Switzerland	CH
Norway	N	Syria	SYR
Oman	OM	Tadzhikistan	TD
Pakistan	PAK	Tansania	EAT
Palau	PAL	Thailand	THA
Panama	PA	Togo	RT
Papua-New Guinea	PNG	Tonga	TO
Paraguay	PY	Trinidad/Tobago	TT
Peru	PE	Tunisia	TN
Philippines	RP	Turkey	TR
Poland	PL	Turkmenistan	TMN
Portugal	P	Tuvalu	TUV
Qatar	Q	Uganda	EAU
Romania	RO	United States	USA
Russia	RUS	Uruguay	ROU
Rwanda	RWA	Vatican City	V
Sahara	DARS	Venezuela	YV
Saint Lucia	WL	Vietnam	VN
Saint Vincent	WV	White Russia (Bjelorussia)	BY
Samoa (West)	WS	Yemen	YE
San Marino	RSM	Yugoslavia	YU
São Tomé	STP	Zaire (Democratic Republic of Congo)	CGO
Sarawak	SK	Zambia	Z
Saudi Arabia	SA	Zanzibar	EAZ
Senegal	SN	Zimbabwe	RSR
Seychelles	SY		

Appendix II: Recommendations for Structuring a Watermark Database-Convention for Data Exchange

II. 1: Establishing and structuring a watermark database

The following criteria have to be considered when establishing a new watermark database and choosing software:

- 1 Relational structure of the database with unlimited number of files open at the same time
- 2 Unlimited length of data sets and database
- 3 Fields permitting insertion of flowing text of unlimited length
- 4 Unrestricted copying of fields during input
- 5 SQL compatible retrieving language
- 6 Menu-driven user surface
- 7 Adaptability of all segments (file and field structures, menus, screens, access authorization, data import and export, layout etc.) by integrated programming language
- 8 Input possibilities for special characters (especially non sorting signs, description signs, jokers)
- 9 Calculable fields for dates (all centuries)
- 10 Interactive duplication and reference control during input
- 11 Programmable plausibility control
- 12 Query by example.

The complete database should contain at least five main masterfiles and two stock masterfiles.

- Main:
- Sheet parameter file
 - Watermark parameter file
 - Mould parameter file (mould data compiled per conclusion from sheet parameters)
 - Mould file (data of original moulds preserved in a collection)
 - Codicological / bibliographical file
 - Marbled (decorated) paper file (*optional*)
 - Papermaker masterfile
 - Papermill masterfile
 - Other masterfiles (e.g. of printers, publishers, artists) (*optional*)

This structure is based upon the fact that one sheet forms the smallest unit to be described. All data describing one individual sheet are stored in the sheet parameter file. In part, these data are identical for sev-

eral sheets, i. e. for all sheets formed by the same mould. These data are stored only once in the mould parameter file, and all data sets belonging to one mould in the sheet parameter file will contain the same reference to the one data set in the mould parameter file.

Every sheet may bear a different number of watermarks of which each individual description may be of interest. These descriptions are stored in the watermark parameter file. References in the sheet parameter file connect these descriptions with the paper sheet data set.

Bibliographical and codicological data are identical for all sheets or parts of sheets originating from the same copybook or book. So there will be only one data set for each book stored in the bibliographical and codicological file. References in the sheet parameter file connect it with the relevant sheet data sets.

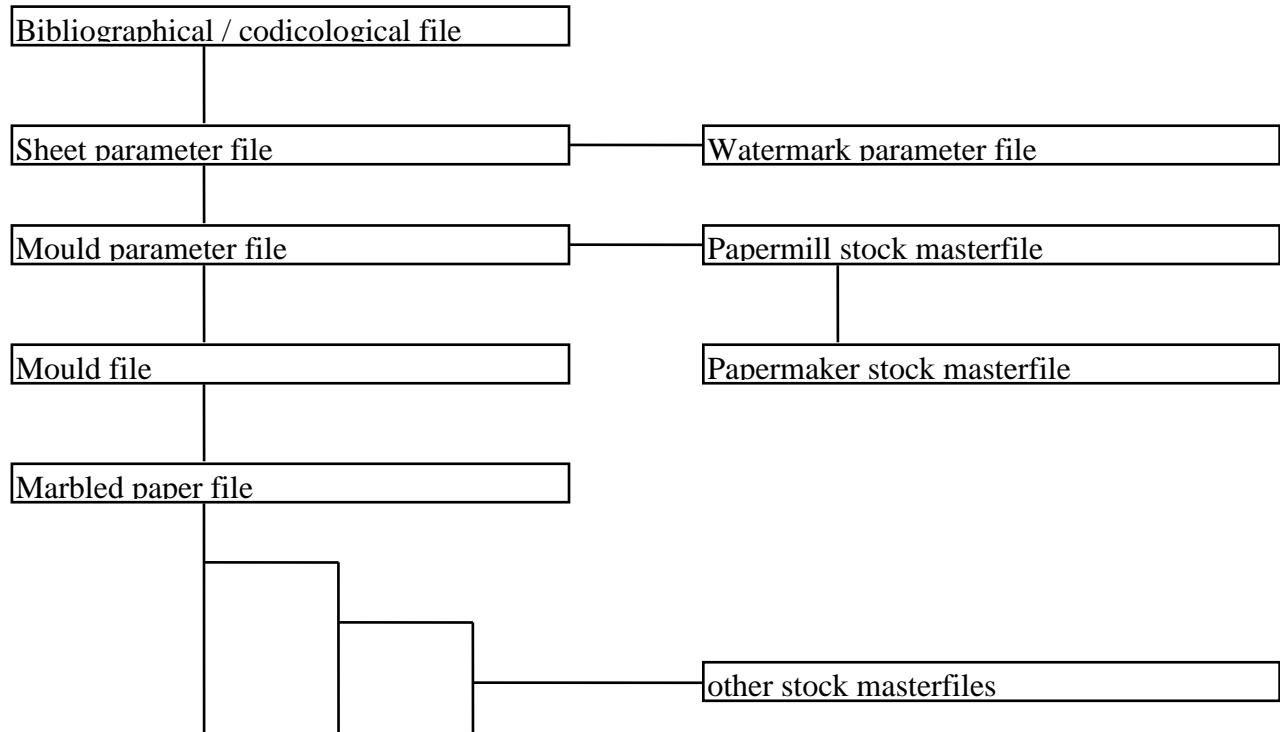
The data of the papermill producing sheets are identical for a large number of sheets, i. e. all sheets produced by the same mill. Each papermill is registered only once and references in the mould parameter file connect it with the moulds used in this mill.

The same applies to the individual papermaker of which only one data set exists in the papermaker masterfile. If one papermaker worked in more than one mill, references to the papermaker masterfile will connect it in the papermill masterfile.

Other special masterfiles, e.g. for printers, publishers, artists, will be connected in the same way.

The structure shown below is necessary for installing the databases with reference possibilities as mentioned above. Only this structure permits minimal redundancies and (at least for the era of hand papermakers) the

accurate reproduction of the relations between papermaker, papermill, mould, sheet and end user's product.



II.2.: Field names, field contents, signs to be used

As basic rules, the following conventions for data exchange are fixed:

- II.2.1 The machine readable data consist only of signs forming the enlarged ASCII character set
- II.2.2 As field names the fixed CODE abbreviations have to be used (cf. sect. 3)
- II.2.3 As field contents, the fixed SUBCODE abbreviations have to be used (cf. sect. 3); free text may be used in the language of the user.
- II.2.4 All fields marked * in the IPH standard have to be registered with first priority.
- II.2.5 All data not derived from the sheets own description but by quotations from existing descriptions or by exchange from another database have to be marked by the sign # at the end of the field.

II.3: Concordance of the most important terms of watermark and paper history used in on-line data exchanges

IPH refers to the concordance lists published in the Bernstein portal.

http://www.memoryofpaper.eu:8080/BernsteinPortal/appl_start.disp



APPENDIX I

INDEX OF WATERMARK CLASSES AND SUBCLASSES ALPHABETICALLY SORTED ACCORDING TO THE ENGLISH CLASS DENOTATION

Class, Subclass subclassifications
Klasse, Unterklasse Untergruppen
Classe, sous-classe sous-groupements
Clase, subclase, subgrupos

A5/2/8	Abbot	Abt	Abbé	Abad
H3/1	Acorn	Ahorn	Erable	Arce
C19/3	Agnus Dei	Lamm Gottes	Agneau de Dieu	Agnus Dei
L1	Aircraft	Luftfahrt	Transport aérien	Transporto aereo
L1/1	Aircraft	Flugzeug	Avion, aéroplane	Aereoplano, avión
L1/2	Airship	Luftschiff	Aérostat	Aereostato
L4/4/1	Anchor	Anker	Ancre	Ancla
L4/4/1/2	Anchor (bent)	Anker (gekrümmt)	Ancre (courbé)	Ancla curva
L4/4/1/1	Anchor (flat)	Anker (flach)	Ancre (plat)	Ancla plana
A5/2/3	Angel	Engel	Ange	Angel
N1	Anvil	Amboss	Enclume	Yunque
C1	Ape	Affe	Singe	Mono
A5/2/4	Apostle; Saint	Apostel, Heiliger	Apôtre; Saint	Apostol; Santo
H3/2	Apple-tree	Apfelbaum	Pommier	Manzano
V2	Arabic numbers/numerals (in order of increasing values)	Arabische Ziffern (nach aufsteigenden Zahlwerten)	Chiffres arabes (par ordre montant)	Números arábes en orden ascendente
A7/4	Arm	Arm	Bras	Brazo
M1	Arrow	Pfeil	Flèche	Flecha
N2	Axe, hatchet	Axt, Beil	Hache	Hacha
O7	Bagpipe	Dudelsack	Cornemuse	Cornemusa
Q1	Bale of goods	Warenballen	Ballot	Fardo
L1/3	Balloon	Ballon	Ballon, Montgolfière	Globo (Montgolfière)
G3/1	Barley	Gerste	Orge	Cebada
P1	Barrel	Fass	Tonneau	Tonel
P1/1	Barrel	Fass	Tonneau	Tonel
F2/2	Basilisc	Basilisk	Basilic	Basilisco
P2	Basket	Korb	Corbeille	Cesto
R1/3	Basle crozier	Baselstab	Crosse de Bâle	Cayado de Basilea
M2	Battle axe	Streitaxt	Hache d'armes	Hacha
P3	Beaker, chalice, monstrance	Becher, Kelch, Monstranz	Coupe, gobelet, ostensorio	Cubilete, copa, ostensorio
C2	Bear	Bär	Ours	Oso
C3	Beaver	Biber	Castor	Castor
E3/2	Bee	Biene	Abeille	Abeja
P9	Bee-hive	Bienenkorb	Ruche	Colmena
H3/3	Beech-tree	Buche	Hêtre	Haya
O2	Bell	Glocke	Cloche	Campana
O2/1	Bell, outline and clapper formed with a single piece of wire	Glocke, Rand/Schwengel aus einem Drahtstück gebildet	Cloche, bord et battant formés d'une seule pièce de fil	Campana, borde y badajo formado por único hilo
O2/2	Bell, outline and clapper formed with two or more pieces of wire	Glocke, Rand/Schwengel aus mehreren Drahtstücken gebildet	Cloche, bord et battant formés de plusieurs pièces de fil	Campana, borde y badajo formado por varias piezas
N3	Bellows	Blasebalg	Soufflet	Fuelle
D12	Bird (unidentified)	Vogel (nicht näher bestimbar)	Oiseau (non identifiable)	Pájaro (no identifiable)
<u>D</u>	<u>Birds</u>	<u>Vögel</u>	<u>Oiseaux</u>	<u>Ave</u>
A5/2/7	Bishop	Bischof	Evêque	Obispo
R1/2	Bishop's crozier	Krümme	Crosse (courbe)	Cayado curvo
A4/2	Blacksmith	Schmied	Forgeron	Herrero
N4	Boot	Stiefel	Botte	Bota
P4	Bottle	Flasche	Bouteille	Botella
M3	Bow	Bogen	Arc	Arco
N5	Bow-drill	Drillbohrer	Drille	Soldado
K1	Bridge	Brücke	Pont	Puente
P5	Bucket, vessel	Kessel, Kübel	Cuve, sceau	Tina, sello
N6	Buckle	Gürtelschnalle	Boucle	Hebillia
<u>K</u>	<u>Buildings; parts of buildings</u>	<u>Gebäude; Gebäudeteile</u>	<u>Bâtiments; parts de bâtiments</u>	<u>Edificios; partes del edificio</u>

	C4/2	Bull's head	Ochsenkopf	Boeuf, tête	Buey, cabeza
	C4/2/1	Bull's head, type I: simple contour	Ochsenkopf, Typ I: grober Umriss	Boeuf, tête, type I: contour simple	Buey, cabeza, tipo I: contorno simple
	C4/2/2	Bull's head, type II: contour with horns	Ochsenkopf, Typ II: Umriss mit Hörnern	Boeuf, tête, type II: contour avec cornes	Buey, cabeza, tipo II: contorno con astas
	C4/2/3	Bull's head, type III: head with eyes and nostrils	Ochsenkopf, Typ III: Kopf mit Augen und Nüstern	Boeuf, tête, type III: tête avec yeux et narines	Buey, cabeza, tipo III: con ojos y ollares
	C4/2/4	Bull's head, type IV: others	Ochsenkopf, Typ IV: andere	Boeuf, tête, type IV: autres	Buey, cabeza, tipo IV: otras
	C4/3	Bull with wings (ox of St.Luke)	Ochse mit Flügeln (Ochse des Lukas)	Boeuf avec ailes (boeuf de St.Luc)	Buey con alas (buey de San Lucas)
C4		Bull, ox, cow	Stier, Ochse, Kuh	Taureau, boeuf, vache	Buey, toro; vaca
	C4/1	Bull, ox, cow whole animal or bust	Stier, Ochse, Kuh ganze oder Teil-Figur	Taureau, boeuf, vache figure entière	Buey, figura entera o busto
	E3/3	Butterfly	Schmetterling	Papillon	Mariposa
	X2/2	C	C	C	C
C5		Camel; dromedary	Kamel; Dromedar	Chameau; dromadaire	Camello; dromedario
N7		Candlestick, candelabra	Kerzenhalter, Kandelaber	Porte-bougie, chandelier	Palmatoria, candelabro
M4		Cannon	Kanone	Canon	Cañón
L2		Car	Automobil	Automobile	Automovil
	A5/2/6	Cardinal	Kardinal	Cardinal	Cardenal
R2		Cardinal's hat	Kardinalshut	Chapeau de cardinal	Capelo cardenalicio
G2		Carnation	Nelke	Oeillet	Clavel
C6		Cat	Katze	Chat	Gato
	E3/4	Caterpillar	Raupe	Chenille	Oruga
	G3/3	Cereal, unidentified	Getreide, nicht näher bestimmbar	Céréale, non identifiable	Cereales, no identificables
G3		Cereals	Getreide	Céréales	Cereales
	H3/4	Cherry-tree	Kirschbaum	Cerisier	Cerezo
D1/3		Chicken	Küken	Poussin	Pollita
A2		Child	Kind	Enfant	Niño
	A2/1	Child (not specific)	Kind (nicht weiter definierbar)	Enfant (généralisé)	Niño (general)
N8		Chopper	Wiegemesser	Hachoir	Tajo
U1		Circle	Kreis	Cercle	Círculo
	N32/2	Clog	Holzschuh	Sabot	Zueco
	H3/5	Clove	Nelkenbaum	Giroflier	Clavero
G4		Clover	Klee	Trèfle	Trebol
M5		Club	Keule	Masse d'armes	Maza
	L5/1	Coach	Kutsche	Coche	Coche
T1		Coat of arms	Wappen	Armoires	Escudos
	T1/2	Coat of arms (identified; in alphabetical order accord- ing to countries, towns and families)	Wappen (bestimmt; in alphabetischer Reihenfolge nach Ländern, Städten und Geschlechtern)	Armoires (identifiées; par ordre alphabétique selon pays, villes et familles)	Escudos identificables, por orden alfabetico sgún paises, ciudades y familias
	T1/1	Coat of arms (non identi- fied)	Wappen (unbestimmt)	Armoires (non identifiées)	Escudos (no identificables)
	D1/1	Cockerel	Hahn	Coq	Gallo
	K2/2	Column with capital	Säule mit Kapitell	Colonne avec chapiteau	Columna con capitel
	K2/1	Column without capital	Säule ohne Kapitell	Colonne sans chapiteau	Columna sin capitel
K2		Column(s)	Säule(n)	Colonne(s)	Columna
	K2/3	Column, twisted	Säule, gewunden	Colonne, tordue	Columna salomónica
J1		Comet	Komet	Comète	Cometa
H2		Conifers	Nadelbäume	Conifères	Conífera
P		<u>Containers</u>	<u>Gefässe</u>	<u>Vases, emballages</u>	<u>Vasos, recipientes</u>
A3		Couple (man and woman)	Menschenpaar (Mann und Frau)	Couple (homme et femme)	Pareja (hombre y mujer)
	A4/4/2	Courier	Postreiter	Courrier	Correo
	N14/2	Cowl	Kapuze	Capuchon	Capucha
E1		Crab	Krebs, Krabbe	Ecrevisse, crabe	Congrejo
D2		Crane	Kranich	Grue	Grulla
	J2/1	Crescent	Mondsichel	Croissant	Cuarto de luna
R1		Crook, bishop's crosier	Bischofsstab	Crosse	Cayado
S1		Cross	Kreuz	Croix	Cruz
M6		Crossbow	Armbrust	Arbalète	Ballesta
D8		Crow	Rabe	Corbeau	Cuervo
R3		Crown	Krone	Couronne	Corona
	R3/2	Crown with arches, tall	Krone mit Bügel, schmal	Couronne avec arches, étroite	Corona con arcos, forma estrecha
	R3/3	Crown with arches, wide	Krone mit Bügel, weit	Couronne avec arches, large	Corona con arcos, forma ancha
	R3/1	Crown without arches	Krone ohne Bügel	Couronne sans arches	Corona sin arcos
N9		Currycomb	Striegel	Etrille	Almohaza, rascadera

M7	Dagger	Dolch	Poignard	Puñal
A5/2/11	David, king	David, König	David, roi	David, rey
H3	Deciduous trees	Laubbäume	Arbres à feuilles	Árboles con hojas
<u>M</u>	<u>Defence and arms</u>	<u>Wehr und Waffen</u>	<u>Défense et armes</u>	<u>Defensa y armas</u>
B3/1/1	Diana/Artemis	Diana/Artemis	Diane/Artémis	Diana/Artemisa
N10	Dividers, compass	Zirkel	Compas	Compás
C7	Dog	Hund	Chien	Perro
C8	Dolphin	Dolphin	Dolphin	Delfín
C9	Donkey, mule	Esel, Maultier	Ane, mullet	Asno; mula
X2/3	Double C	Doppel-C	C double	C doble
D3	Dove	Taube	Pigeon	Pichón
F1	Dragon (wyvern)	Drache	Dragon	Dragón
E3/5	Dragon-fly	Libelle	Libellule	Libélula
A4/4/3	Dragoon, hussar, etc.	Dragoner, Husar, etc.	Dragon, hussard, etc.	Dragones, Husar
D4	Duck	Ente	Canard	Pato
D5	Eagle	Adler	Aigle	Aguila
D5/3	Eagle of St.John	Johannesadler	Aigle de St.Jean	Aguila de San Juan
D5/2	Eagle, double-headed	Doppeladler	Aigle, tête double	Aguila, doble cabeza
D5/1	Eagle, single-headed	Adler, mit einem Kopf	Aigle, une seule tête	Aguila, de una cabeza
J4/3	Earth, globe	Erdkugel (Globus)	Terre (globe)	Globo (tierra)
S1/1	Egyptian cross (Ankh)	Henkelkreuz (ägypt.Kreuz, Anch)	Croix égyptienne (ankh)	Cruz egipcia
C10	Elephant	Elefant	Eléphant	Elefante
A6/1	Emperor; king	Kaiser; König	Empereur; roi	Emperador, Rey
B4/1	Empress; queen	Kaiserin; Königin	Impératrice; reine	Emperatriz, Reina
D6	Falcon	Falke	Faucon	Alcón
K3	Fence	Zaun	Barrière	Barrera
H2/1	Fir-tree	Tanne	Sapin	Abeto
E2	Fish	Fisch	Poisson	Pez
<u>E</u>	<u>Fish, reptiles, insects, molluscs</u>	<u>Fische, Reptilien, Insekten, Mollusken</u>	<u>Poissons, reptiles, insectes, mollusques</u>	<u>Peces, reptiles, insectos, moluscos</u>
T2	Flag	Fahne	Drapeau	Banderas
T2/1	Flag (empty)	Fahne (leer)	Drapeau (vide)	Bandera (vacia)
T2/3	Flag (identified; in alphabetical order according to countries, towns and families)	Fahne (bestimmt; in alphabeticischer Reihenfolge nach Ländern, Städten und Geschlechtern)	Drapeau (identifié; par ordre alphabétique selon pays, villes et familles)	Bandera identificable, por orden alfabetico según paises, ciudades y familias
T2/2	Flag (non identified)	Fahne (unbestimmt)	Drapeau (non identifié)	Bandera (no identifiable)
P8	Flower-pot	Blumenvase, Blumentopf	Pot de fleurs	Pote de flores
E3/6	Fly	Fliege	Mouche	Mosca
A4/7	Fool	Narr	Fou	Loco
A4/7/1	Fool (general)	Narr (allgemein)	Fou (général)	Loco (general)
A7/1/3	Foolscap	Narrenkappe	Fou, tête	Cabeza de loco
A7/6	Foot	Fuss	Pied	Pie
N11	Fork	Gabel	Fourche	Horquilla
S1/2	Forked cross	Schächerkreuz	Croix fourchée (pairle)	Cruz ahorquillada
B4/3/6	Fortuna	Fortuna	Fortune	Fortuna
K4	Fountain	Brunnen (Röhrenbrunnen)	Fontaine	Fuente
C11	Fox	Fuchs	Renard	Zorro
X2/5	FR	FR	FR	FR
S7	Freemasonry's signs	Freimaurersymbole	Signes de la Franc-maçonnerie	Signos masónicos
X2/6	FWR	FWR	FWR	FWR
D1	Gallinaceous bird	Hühnervogel	Gallinacée	Ave gallinaceo
K5	Gate	Tor, Stadttor	Porte (aussi: de ville)	Puerta (tambien de ciudad)
<u>U</u>	<u>Geometrical figures</u>	<u>Geometrische Zeichen</u>	<u>Figures géométriques</u>	<u>Figuras geométricas</u>
N42	Glove	Handschuh	Gant	Guante
C12	Goat	Ziege	Chèvre	Cabra
D7	Goose	Gans	Oie	Oca
W2	Gothic letter P	Fraktur-P	Lettre P gothique	Letra P gótica
W2/3	Gothic letter P with forked stem, turned inwards	Fraktur-P mit Gabelfuss, nach innen gekrümmmt	Lettre P gothique avec tige fourchée, tournée vers l'intérieur	Letra P gótica con pie bifurcado, curvo hacia el interior
W2/2	Gothic letter P with forked stem, turned outwards	Fraktur-P mit Gabelfuss, nach aussen gespreizt	Lettre P gothique avec tige fourchée, tournée à l'extérieur	Letra P gótica con pie bifurcado, curvo hacia el exterior
W2/1	Gothic letter P without forked stem	Fraktur-P ohne Gabelfuss	Lettre P gothique sans tige fourchée	Letra P gótica sin pie bifurcado
X2/4	GR (Royal cipher)	GR	GR	GR
H4/2/3	Grape	Traube	Raisin	Uva
H4/2	Grapevine	Rebe	Vigne	Viña
H4/2/2	Grapevine (leaf)	Rebe (Blatt)	Vigne (feuille)	Viña (hoja)
H4/2/1	Grapevine (plant)	Rebe (Pflanze)	Vigne (plante)	Viña (planta)
G5	Grass	Gras	Herbe	Hierba
E3/7	Grasshopper	Heuschrecke	Sauterelle	Saltamontes



S1/3	Greek cross	Griechisches Kreuz	Croix grecque	Cruz griega
S1/4	Greek wide-edged (clover-leaf, anchor, crook) cross	Griechisches, breitrandiges (Kleeblatt-, Anker-, Krücken-) Kreuz	Croix tréflée, potencée, ancrée	Cruz trilobulada, potenciada, anclada
F2	Griffin	Greif	Griffon	Grifo
F2/1	Griffin (general)	Greif (allgemein)	Griffon (général)	Grifo (general)
M8	Halberd	Hellebarde	Hallebarde	Alabarda
N12	Hammer	Hammer	Marteau	Martillo
N12/2	Hammer (cooper's)	Küferhammer	Marteau (tonnelier)	Martillo de tonelero
N12/1	Hammer (general)	Hammer (allg.)	Marteau (général)	Martillo (general)
N12/3	Hammer (mining)	Bergmannshammer	Marteau (mineur)	Martillo de minero
A7/2	Hand	Hand	Main	Mano
A7/2/1	Hand (general)	Hand (allgemein)	Main (général)	Mano (general)
A7/2/2	Hand (swearing)	Schwurhand	Main (en serment)	Mano (jurando)
N13	Harrow	Egge	Herse	Rastrillo
N14	Hat	Hut	Chapeau	Sombrero
N14/1	Hat (general)	Hut (allgemein)	Chapeau (général)	Sombrero (general)
A7/1	Head	Kopf	Tête	Cabeza
A7/3	Heart	Herz	Coeur	Corazón
C13	Hedgehog	Igel	Hérisson	Erizo
M9	Helmet	Helm	Casque	Casco
D1/2	Hen	Huhn	Poule	Gallina
T	<u>Heraldry; Coat of arms; mason's marks; merchant's marks</u>	<u>Heraldik; Wappen; Steinmetzzeichen; Handelsmarken</u>	<u>Héraldique; armoiries; marques de tailleurs de pierre ou de commerce</u>	<u>Heráldica, escudos, marcas de talladores de piedra o comercio</u>
S3	Hermes cross (single; in compositions: see trademarks)	Hermesvier (allein; in Zusammensetzungen siehe Handelsmarken)	Chiffre hermétique (quatre) seul (en compositions cf. marques de commerce)	Cifra hermética (cuatro), sola (en composición, cf. marcas de comercio)
S4	Hexagram, Star of David (see also 'Star')	Davidsstern, Hexagramm (siehe auch 'Stern')	Hexagramme, Etoile de David (cf. aussi 'Etoile')	Hexagrama (estrella de David) (cf. tambien „estrella“)
Z1	High, narrow forms	Hohe, schmale Formen	Forme haute, étroite	Forma alta, estrecha
B4/3/4	Hollandia	Hollandia	Hollandia	Hollandia
O3	Horn	Horn	Cor	Cuerno
O3/2	Horn with baldric	Horn mit Kordel	Cor avec cordelette	Cuerno con cuerda
O3/2/4	Horn, with baldric, and accessory sign(s)	Horn, mit Kordel und Beizeichen	Cor, avec cordelette et signe(s) accésori(e)s	Cuerno con cuerda y signo(s) accesorio(s)
O3/2/1	Horn, with baldric, flat opening	Horn, mit Kordel, einfache Mündung	Cor, avec cordelette, bouche simple	Cuerno con cuerda, boca simple
O3/2/3	Horn, with baldric, oval opening	Horn, mit Kordel, ovale Mündung	Cor, avec cordelette, bouche ovale	Cuerno con cuerda, boca ovalada
O3/2/2	Horn, with baldric, round opening	Horn, mit Kordel, Kreismündung	Cor, avec cordelette, bouche ronde	Cuerno con cuerda, boca redonda
O3/1	Horn, without baldric	Horn, ohne Kordel	Cor, sans cordelette	Cuerno sin cuerda
C14	Horse	Pferd	Cheval	Caballo
A4/4	Horseman	Reiter	Cavalier	Jinete
A4/4/1	Horseman (general)	Reiter (allgemein)	Cavalier (général)	Jinete (general)
N15	Horseshoe	Hufeisen	Fer à cheval	Herradura
N15/2	Horseshoe (half)	Hufeisen (halb)	Fer à cheval (moitié)	Herradura media
N15/1	Horseshoe (whole)	Hufeisen (ganz)	Fer à cheval (entier)	Herradura entera
K6	House	Haus	Maison	Casa
A	<u>Human figures; men; parts of the human body</u>	<u>Menschen; Männer; menschl. Körperteile</u>	<u>Figures humaines; hommes; parts du corps humain</u>	<u>Figuras humanas; hombres; partes del cuerpo humano</u>
A1	Human figure (not specific)	Mensch (nicht weiter definierbar)	Figure humaine (généralisée)	Figura humana (general)
C15	A4/5	Hunter	Jäger	Cazador
	Ibex	Steinbock	Bouquetin	Cabra montés
R4	X2/1	IHS	IHS	IHS
W	Imperial orb	Reichsapfel	Globe impérial	Globo Imperial
E3	<u>Individual letters</u>	<u>Einzel-Lettern</u>	<u>Lettres isolées</u>	<u>Letras aisladas</u>
R	E3/1	Insect	Insekt	Insecto
	Insect, unidentified	Insekt, unbestimmbare	Insecte, non identifiable	Insecto (no identifiable)
	<u>Insignia of rank, mace, sceptre, jewellery</u>	<u>Rangabzeichen, Stäbe, Schmuck</u>	<u>Insignes de rang, batons, bijoux</u>	<u>Insignia de rango, cetro, joya</u>
	H4/3	Ivy	Efeu	Hiedra
	A2/2	Jesus (child)	Jesuskind	Niño Jesús
	A5/2/1	Jesus Christ	Jesus Christus	Jesús
	A5/2/2	Jesus crucified	Jesus am Kreuz	Crucificado
P6	Jug, pot, vase, jar	Krug, Kanne, Vase	Pot, channe, vase	Pote, jarro, vaso
	A5/1/1	Jupiter/Zeus	Jupiter/Zeus	Jupiter/Zeus
	B4/3/1	Justice	Justitia	Justicia

	P1/2	Keg, with cord	Lägel, mit Seil	Baril, avec corde	barril, con cuerda
N16	Key	Schlüssel	Clef	Llave	
N17	Knife	Messer	Couteau	Cuchillo	
S2	Knot	Knoten	Noeud	Nudo	
	S2/1	Knot in a rope/string	Knoten in Seil/Schnur	Noeud dans une corde/ficelle	Nudo en una cuerda
N18	Ladder	Leiter	Echelle	Escalera	
N19	Lamp	Lampe	Lampe	Lámpara	
M10	Lance	Lanze	Lance	Lanza	
N20	Lantern	Laterne	Lanterne	Linterna	
	S1/5	Latin cross	Passionskreuz	Croix latine	Cruz latina
H3/6	Laurel	Lorbeer	Laurier	Laurel	
A7/5	Leg	Bein	Jambe	Pierna	
C16	Leopard, panther	Leopard, Panther	Léopard, panthère	Leopardo	
W1	Letters - except gothic P - in alphabetical order; first capitals, then lower case	Einzel-Letter, ausser Fraktur-P - in alphabetischer Reihenfolge; erst Versalien, dann Kleinbuchstaben	Lettres isolées, sauf lettre P gothique, par ordre alphabétique; en premier les majuscules, puis les minuscules	Letras - excepto la P gótica - en orden alfabetico primero mayúsculas, despues minúsculas	
	B4/3/2	Liberty	Libertas, Freiheit	Liberté	Liberdad
G6	Lily	Lilie	Fleur de Lys	Flor de Lis	
	G6/1	Lily (flower)	Lilie (Blume)	Fleur de Lys (fleur)	Flor de Lis (flor)
	G6/2	Lily (heraldry)	Lilie (Heraldik)	Fleur de Lys (héraldique)	Flor de Lis (heráldica)
	H3/7	Lime-tree	Linde	Tilleul	Tilo
C17	Lion	Löwe	Lion	León	
	C17/1	Lion (general)	Löwe (allgemein)	Lion (général)	León (general)
	C17/3	Lion of St. Mark	Markuslöwe	Lion de St.Marc	León de San Marcos
	C17/2	Lion, Dutch (holding arrows)	Löwe von Geldern (mit Pfeilbündel)	Lion des Pays-Bas (avec flèches)	León de los Paises Bajos (con flechas)
E4	Lizard	Eidechse	Lézard	Lagarto	
	L3/2	Locomotive (diesel)	Lokomotive (Diesel)	Locomotive (diesel)	Locomotora diesel
	L3/1	Locomotive (electric traction)	Lokomotive (Elektro-Antrieb)	Locomotive (électrique)	Locomotora eléctrica
	L3/3	Locomotive (steam)	Lokomotive (Dampf)	Locomotive (vapeur)	Locomotora vapor
	S1/6	Lorraine cross	Lothringerkreuz	Croix de Lorraine	Cruz lorena
N21	Mallet	Schlegel	Maillet	Mazo	
<u>C</u>	<u>Mammals</u>	<u>Säugetiere</u>	<u>Mammifères</u>	<u>Mamíferos</u>	
A4	Man	Mann	Homme	Hombre	
	A4/1	Man (general)	Mann (allgemein)	Homme (général)	Hombre (general)
	A5/1/2	Mars/Ares	Mars/Ares	Mars/Ares	Marte/Ares
T3	Mason's or merchant's marks	Steinmetzzeichen, Handelsmarke	Marques de tailleurs de pierre ou de marchands	Marcas de talladores de piedra o de comercio	Marcas de talladores de piedra o comercio
	T3/2	Mason's or merchant's marks with Hermes cross	Steinmetzzeichen, Handelsmarke mit Hermesvier	Marques de tailleurs de pierre ou de marchands avec chiffre hermétique (quatre)	Marcas de talladores de piedra o comercio con cifra hermética (cuatro)
	T3/1	Mason's or merchant's marks without Hermes cross	Steinmetzzeichen, Handelsmarke ohne Hermesvier	Marques de tailleurs de pierre ou de marchands sans chiffre hermétique (quatre)	Marcas de talladores de piedra o comercio sin cifra hermética (cuatro)
	A5/2	Men (Christianity)	Männer (Christentum)	Hommes (Christianisme)	Hombres (Cristianismo)
	A5/1	Men (Classical antiquity)	Männer (Antike)	Hommes (Antiquité classique)	Hombres (Antigüedad clásica)
A6	Men (ranks, politics)	Men (Rang; Politik)	Hommes (rang; politique)	Hommes (rango, político)	
A5	Men (religion)	Männer (Religion)	Hommes (religion)	Hommes (religión)	
	A5/1/3	Mercury/Hermes	Merkur/Hermes	Mercure/Hermès	Mercurio/Hermes
F3	Mermaid	Meerjungfrau	Sirène	Sirena	
	F3/2	Mermaid, double tail	Meerjungfrau, mit Doppelschwanz	Sirène, avec queue double	Sirena con cola de pez doble
	F3/1	Mermaid, single tail	Meerjungfrau, mit einfachem Schwanz	Sirène, avec queue simple	Sirena con cola de pez simple
	A4/3	Messenger, traveller	Bote, Wanderer	Messager, voyageur	Mensajero; hombre caminando
	A4/8	Miner	Bergmann	Mineur	Minero
<u>Q</u>	<u>Miscellaneous objects</u>	<u>Vermischte Gegenstände</u>	<u>Objets divers</u>	<u>Objetos diversos</u>	
R5	Mitre (bishop's or abbot's hat)	Mitra (Bischofs- oder Abtsmütze)	Mitre (d'évêque ou abbé)	Mitra	
	A5/2/10	Monk	Mönch	Moine	Monje
X1	Monograms, abbreviations with letters in alphabetical order according to the first letter occurring; first capitals, then lower case	Monogramme und Abkürzungen in alphabetischer Reihenfolge der ersten Letter; erst Versalien, dann Kleinbuchstaben	Monogrammes et abréviations par lettres, par ordre alphabétique de la première lettre; en premier les majuscules, puis les minuscules	Monogramas por orden alfabetico de la primera letra, primera las mayúsculas, despues las minúsculas	
<u>X</u>	<u>Monograms; abbreviations with letters</u>	<u>Monogramme;</u> <u>Abkürzungen mit Lettern</u>	<u>Monogrammes; abréviations par lettres</u>	<u>Monogramas, abreviaturas con letras</u>	



J2	Moon	Mond	Lune	Luna
J2/2	Moon face (round)	Mondgesicht (rund)	Pleine lune (ronde)	Luna (cara)
P7	Mortar	Mörser	Mortier	Mortero
L4/3	Motor ship	Motorschiff	Bateau à moteur	Barco con motor
J3	Mountain(s)	Berg(e)	Montagne(s)	Montañas (colinas)
J3/1	Mountain, hill (one)	Berg, Hügel (einer)	Montagne, colline (une)	Montaña (colina), una
J3/4	Mountains, hills (more than three)	Berge, Hügel (mehr als drei)	Montagnes, collines (plus que trois)	Montañas, cuatro o más
J3/2	Mountains, hills (two)	Berge, Hügel (zwei)	Montagnes, collines (deux)	Montañas (colinas), dos
O	<u>Musical instruments</u>	<u>Musikinstrumente</u>	<u>Instruments de musique</u>	<u>Instrumentos musicales</u>
F	<u>Mythical figures</u>	<u>Fabelwesen</u>	<u>Monstres fabuleux</u>	<u>Figuras mitológicas</u>
N22	Nail	Nagel	Clou	Clavo
Y	<u>Names; words</u>	<u>Namen; Wörter</u>	<u>Noms; mots</u>	<u>Nombres, palabras</u>
	in full; in alphabetical order	ausgeschrieben; in alphabetischer Reihenfolge	en complet; par ordre alphabétique du premier	completas, por orden alfabetico
	according to the way the name is written beginning with the first part; first capitals, then lower case	des ersten Namens/Wortes; erst Versalien, dann Kleinbuchstaben	nom/mot; en premier les majuscules, puis les minuscules	del primer nombre, primero las mayúsculas, despues las minúsculas
A4/6	Negro	Mohr	Noir	Negro
A4/6/1	Negro (general)	Mohr (allgemein)	Noir (général)	Negro (general)
A7/1/2	Negro, head of	Mohrenhaupt	Noir, tête	Cabeza de negro
A5/1/4	Neptune/Poseidon	Neptun/Poseidon	Neptune/Poseidon	Neptuno/Poseidón
G7	Nettle	Nessel	Ortille	Ortiga
S6	Nimbus	Nimbus ('Heiligschein')	Nimbe, auréole	Nimbo, aureola
V	B4/2	Noblewoman; lady	Edelfrau	Dama noble
	<u>Numbers; Numerals</u>	<u>Zahlen; Ziffern</u>	<u>Nombres; chiffres</u>	<u>Números, cifras</u>
N23	B3/2/3	Nun	Klosterfrau, Nonne	Religiosa
	Nutcracker	Nussknacker	Casse-noix	Cascanueces
H3/8	Oak	Eiche	Chêne	Roble
O4	Oboe	Oboe	Hautbois	Oboe
H3/9	Olive-tree	Ölbaum	Olivier	Olivo
S1/7	Papal cross	Papstkreuz	Croix papale	Cruz papal
L4/4	Part(s) of ship	Schiffsteil(e)	Pièces d'un bateau	Partes de un barco
A7	Parts of human body	Körperteile (Mensch)	Parts du corps humain	Partes del cuerpo humano
B4/3/3	Patria	Patria	Patrie	Patria
B4/3/3/2	Patria (others)	Patria (andere)	Patria (otras)	Patria (otras)
D9	Peacock	Pfau	Paon	Pavo
H3/10	Pear-tree	Birnbaum	Poirier	Peral
S5	Pentagram (see also 'Star')	Pentagramm, Drudenfuss (siehe auch 'Stern')	Pentagramme (cf. aussi 'Etoile')	Pentagrama (cf. tambien „estrella“)
C18	Pig, wild boar	Schwein, Eber	Cochon, sanglier	Cerdo; jabalí
H2/2	Pine	Fichte	Pin	Pino
N24	Plane	Hobel	Rabot	Cepillo
J4/2	Planet sphere	Planetensphäre	Sphère des planètes	Esfera de planetas
G1	Plant (unidentified)	Pflanze (nicht näher bestimmbar)	Plante (non identifiable)	Planta (no identifiable)
G	<u>Plants (general); flowers; grass</u>	<u>Pflanzen (allg.); Blumen; Gräser</u>	<u>Plantes (général); fleurs; herbes</u>	<u>Plantas (general); flores; hierba</u>
N25	Pliers	Zange	Tenailles	Tenazas
N26	Plough	Pflug	Charrue	Arado
A5/1/5	Pluto/Hades	Pluto/Hades	Pluton/Hades	Plutón
H3/11	Pomegranate-tree	Granatapfelbaum	Grenadier	Granado
A5/2/5	Pope	Papst	Pape	Papa
A7/1/4	Portrait, bust of a man (name in full; in alphabetical order)	Porträt, Brustbild eines Mannes (Name in Volltext; alphabetisch)	Portrait, buste d'un homme (nom sans abréviation; par ordre alphabétique)	Retrato, busto de un hombre (nombre sin abreviatura, por orden alfabetico)
B4/4	Portrait, bust of a woman (name in full; in alphabetical order)	Porträt, Brustbild einer Frau (Name in Volltext; alphabetisch)	Portrait, buste d'une femme (nom sans abréviation; par ordre alphabétique)	Retrato, busto de una mujer (nombre sin abreviatura, por orden alfabetico)
P6/2	Pot, with one handle	Krug, mit einem Henkel	Pot, avec une anse	Pote con un ansa
P6/3	Pot, with two handles	Krug, zweihenklig	Pot, avec deux anses	Pote con dos ansas
P6/1	Pot, without handle	Krug, ohne Henkel	Pot, sans anse	Pote sin ansa
A5/2/9	Priest	Priester	Prêtre	Sacerdote
A6/2	Prince; nobleman	Fürst; Edelmann	Prince; noble	Príncipe, noble
B4/3/3/1	Pro Patria	Pro Patria	Pro Patria	Pro Patria
C23	Quadruped, unidentified	Vierbeiner (nicht näher bestimmbar)	Quadrupède (non identifiable)	Cuadrúpedo (no identifiable)
S2/2	Quatrefoil knot	Vierpassknoten	Noeud quadrifolié	Nudo cuadrifolio
N43	Quill	Federkiel	Plume	Pluma
L3	Railway	Eisenbahn	Chemin de fer	Tren

	C19/1	Ram	Widder	Bélier	Carnero
C19		Ram, sheep, lamb	Widder, Schaf, Lamm	Bélier, mouton , agneau	Carnero, cordero
U2		Rectangle	Rechteck	Rectangle	Rectángulo
S		<u>Religious or magic symbols and signs</u>	<u>Religiöse oder magische Symbole und Zeichen</u>	<u>Signes religieux ou magiques</u>	<u>Signos religiosos o mágicos</u>
U3		Rhomb	Rhombus	Losange	Rombo
M11		Rifle, musket	Gewehr, Muskete	Fusil, mosqueton	Fusil, mosquetón
R6		Ring	Ring	Anneau, bague	Anillo
Q2		Rod, whip	Rute	Verge	Vara
V1		Roman numerals (in order of increasing values)	Römische Ziffern (nach aufsteigenden Zahlwerten)	Chiffres romains (par ordre montant)	Números romanos en orden ascendente
G8		Rose	Rose	Rose	Rosa
L4/4/2		Rudder	Ruder	Rame	Remos
L4/1		Rudder ship	Ruderboot	Barque à rames	Barco de remos
M12		Sabre	Säbel	Sabre	Sable
M12/1		Sabre, straight	Säbel, gerade	Sabre, droit	Sable recto
L4/2		Sailing ship	Segelschiff	Voilier	Velero
A5/2/4/1		Saint (general)	Heiliger (allgemein)	Saint (général)	Santo (general)
B3/2/2		Saint women	Heilige Frauen	Saintes	Santas
B3/2/2/3		Saints, other women	Heilige, andere	Saintes, autres	Santas (otras)
A4/9		Savage man	Wilder Mann	Sauvage	Salvaje
N27		Saw	Säge	Scie	Sierra
N28		Scales	Waage	Balance	Balanza
		N28/2 Scales, beam type, with circular pans	Balkenwaage mit runden Waagschalen	Balance, bassins ronds	Balanza, platillos redondos
		N28/1 Scales, beam type, with triangular pans	Balkenwaage mit Dreiecks-Waagschale	Balance, bassins triangulaires	Balanza, platillos triangulares
		N28/3 Scales, other beam type	Balkenwaage, andere Typen	Balance, autres types	Balanza, otro tipo
R7		Sceptre	Szepter	Sceptre	Cetro
M12/2		Scimitar	Krummsäbel	Sabre, courbé	Sable curvo
N29		Scissors	Schere	Ciseaux	Cincel
N29/2		Scissors (with hinge)	Klappschere	Ciseaux (paire)	Tijeras
E6		Scorpion	Skorpion	Scorpion	Escorpión
N30		Scraper	Schaber	Racle	Rasqueta
N31		Scythe	Sense	Faux	Guadaña
N29/1		Shears (with spring)	Feder-Schere	Forces, tondeuse	Cortadora
C19/2		Sheep, lamb (general)	Schaf, Lamm (allgemein)	Mouton, agneau (général)	Cordero (general)
E5		Shell, mushel	Muschel	Coquillage	Concha
R1/1		Shepherd's crook (whole)	Krummstab (ganz)	Crosse (entièbre)	Cayado entero
M13		Shield	Schild	Bouclier	Adarga
L4		Ship	Schiff	Bateau	Barco
N32		Shoe	Schuh	Soulier	Zapato
N32/1		Shoe (leather)	Lederschuh	Soulier de cuir	Zapato de cuero
H4		H4/1 Shrub (indefinite)	Strauch (unbestimbar)	Arbuste (non identifiable)	Arbusto (indefinido)
N33		Shrub; creeper	Strauch; Schlingpflanze	Arbuste; plantes grimpante	Arbustos; plantas trepadoras
J		Sickle	Sichel	Faucille	Hoz
E7		Sky; earth; water	Himmel; Erde; Wasser	Ciel; terre; eau	Cielo, tierra, agua
E8		Snail	Schnecke	Escargot	Caracol
E8/1		Snake	Schlange	Serpent	Serpiente
E8/2		Snake (general)	Schlange (allgemein)	Serpent (général)	Serpiente (general)
E8/2		Snake on a shaft (Aesculapian; medicine)	Schlange an Stab/Kreuz (Aeskulap; medizinisch)	Serpent sur bâton/croix (d'Esculape; médecine)	Serpiente sobre bastón (Esculapio; medicina)
E8/3		Snake on a shaft (Mercury; commercial)	Schlange an Stab (Merkur; Handel)	Serpent sur bâton (de Mercure; commerce)	Serpiente sobre bnastón (Mercurio; comercio)
N32/3		Sole	Sohle	Semelle	Suela
N34		Spade	Spaten	Bêche	Azadón
X2		Special monograms / ciphers	Spezielle Monogramme und Letternverbindungen	Monogrammes et chiffres spéciaux	Monogramas y cifras especiales
N35		Spectacles	Brille	Lunettes	Gafas
J4/1		Sphere	Sphäre	Sphère	Esfera
J4		Sphere (see also 'orb')	Sphäre (siehe auch 'Reichsapfel')	Sphère (cf. aussi 'globe impérial')	Esfera (ver también „Globo Imperial“)
O1		Spherical bell	Schelle	Grelot	Cascabel
N36		Spiral drill	Spiralbohrer	Foret	Barrena
N37		Spur	Sporn	Eperon	Espuela
N38		Square	Winkelmaß	Equerre	Escuadra
U4		Square	Quadrat	Carré	Cuadrado
S2/3		Square knot	Quadratknoten	Noeud carré	Nudo cuadrado



S1/8	St.Andrew's cross	Andreaskreuz	Croix de St.André	Cruz San Andrés
S1/9	St.Anthony's cross (Tau)	Antoniuskreuz (Tau)	Croix de St.Antoine (en Tau)	Cruz en Tau (de San Antonio)
B3/2/2/ 2	St.Catherine	St.Katharina	St.Catherine	Santa Catalina
A5/2/4/ 2	St.George	St.Georg	St.George	San Jorge
B3/2/2/ 1	St.Hildegard	St.Hildegard	St.Hildegard	Santa Hildegard
A5/2/4/ 3	St.John	St.Johannes	St.Jean	San Juán
A5/2/4/ 4	St.Lawrence	St.Lorenz	St.Laurent	San Lorenzo
A5/2/4/ 5	St.Martin	St.Martin	St.Martin	San Martín
B3/2/1	St.Mary, the Virgin	Maria, Gottesmutter	Vierge Marie	Virgen, La
A5/2/4/ 6	St.Nepomuk	St.Nepomuk	St.Nepomuk	San Nepomuc
A5/2/4/ 7	St.Nicholas	St.Niklaus	St.Nicolas	San Nicolás
A5/2/4/ 8	St.Peter	St.Peter	St.Pierre	San Pedro
A5/2/4/ 9	St.Sebastian	St.Sebastian	St.Sébastien	San Sebastián
A5/2/4/ 10	St.Stephen	St.Stephan	St.Etienne	San Estebán
A5/2/4/ 11	St.Vitus	St.Veit	St.Vith	San Vito
C20	Stag	Hirsch	Cerf	Ciervo
C20/1	Stag, full size	Hirsch, ganzes Bild	Cerf, figure entière	Ciervo (figura entera)
C20/2	Stag, half length portrait	Hirsch, Brustbild	Cerf, buste	Ciervo (busto)
J5/6	Star (eight radii)	Stern (achtstrahlig)	Etoile (huit rayons)	Estrella (ocho rayos)
J5/3	Star (five radii)	Stern (fünfstrahlig)	Etoile (cinq rayons)	Estrella (conco rayos)
J5/2	Star (four radii)	Stern (vierstrahlig)	Etoile (quatre rayons)	Estrella (cuatro rayos)
J5/7	Star (irregular or more than 8 radii)	Stern (unregelmässig oder mehr als 8 Strahlen)	Etoile (irrégulière ou plus que 8 rayons)	Estrella (más de ocho rayos o irregular)
J5/5	Star (seven radii)	Stern (siebenstrahlig)	Etoile (sept rayons)	Estrella (siete rayos)
J5/4	Star (six radii)	Stern (sechsstrahlig)	Etoile (six rayons)	Estrella (seis rayos)
J5/1	Star (three radii)	Stern (dreistrahlig)	Etoile (trois rayons)	Estrella (tres rayos)
J5	Star(s)	Stern(e)	Etoile(s)	Estrella(s)
L4/3/2	Steamer (screw-driven)	Dampfschiff (mit Schraubenantrieb)	Vapeur (à hélice)	Vapor (a élice)
L4/3/1	Steamer (with paddle wheel)	Dampfschiff (mit Schaufelrad)	Vapeur (avec roue à aubes)	Vapor (con rueda)
N28/4	Steelyard	Schnellwaage	Balance romaine	Balanza romana
N28/5	Steelyard weight	Schiebegewicht	Contrepoids	Pesa
D10	Stork	Storch	Cigogne	Cigüeña
J6	Sun	Sonne	Soleil	Sol
J6/1/2	Sun (disk with face)	Sonne (Scheibe mit Gesicht)	Soleil (disque avec face)	Sol (disco con cara)
J6/2/2	Sun (disk with radii and face)	Sonne (mit Strahlen und Gesicht)	Soleil (avec rayons et face)	Sol (con rayos y cara)
J6/2/1	Sun (disk with radii with- out face)	Sonne (mit Strahlen, ohne Gesicht)	Soleil (avec rayons, sans face)	Sol (con rayos, sin cara)
J6/2	Sun (disk with radii)	Sonne (mit Strahlen)	Soleil (disque avec rayons)	Sol (disco con rayos)
J6/1/1	Sun (disk without face)	Sonne (Scheibe ohne Gesicht)	Soleil (disque sans face)	Sol (disco sin cara)
D11	J6/1	Sun (disk)	Soleil (disque)	Sol (disco)
S1/10	Swan	Schwan	Cygne	Cisne
M14	Swastika	Hakenkreuz	Croix gammée	Cruz gammada
Q3	Sword	Schwert	Epée	Espada
G6/3	Tassel	Troddel	Houppé	Borla
A5/2/12	Three lilies (heraldry)	Drei Lilien (Heraldik)	Trois fleurs de lys (héraudique)	Flores de Lis, tres (heráldica)
J3/3	Three Magi	Drei Könige	Rois mages	Tres Reyes
R8	Three mountains (hills)	Dreiberg	Triple montagne (colline)	Montañas (colinas), tres
N	Tiara (papal)	Papstkrone, Tiara	Tiare (pape)	Tiara
N39	Tools; equipment; clothing	Werkzeug; Gerät; Kleidung	Outils; équipement; habillement	Utensilios, equipamiento, ropa
K7	Torch	Fackel	Torche	Antorcha
K7/2	Tower	Turm	Tour	Torre
K7/3	Tower with annexe	Turm mit Aufbau	Tour avec annexe	Torre con anexos
K7/4	Tower with gate	Turm mit Tor	Tour avec porte	Torre con puerta
K7/1	Tower, single	Turm (allein)	Tour (seule)	Torre, sola
K7/4	Towers (two) with gate	Türme (zwei) mit Tor	Tours (deux) avec porte	Torres, dos, con puerta

<u>L</u>	L3/4	Train <u>Transport, vehicles</u>	Eisenbahnzug <u>Transportwesen, Fahrzeuge</u>	Train <u>Transports; véhicules</u>	Tren <u>Transportes; vehiculos</u>
H1		Tree (indefinite)	Baum (nicht näher bestimmt)	Arbre (non identifiable)	Arbol (indefinido)
<u>H</u>		<u>Trees; shrubs; creepers</u>	<u>Bäume; Sträucher;</u> <u>Schlingpflanzen</u>	<u>Arbres; arbustes; plantes</u> <u>grimpantes</u>	<u>Árboles; arbustos; plantas</u> <u>trepadoras</u>
U5		Triangle	Dreieck	Triangle	Triangulo
M15		Trident	Dreizack	Trident	Tridente
O5		Trumpet	Trompete	Trompette	Trompeta
G9		Tulip	Tulpe	Tulipe	Tulipán
	O3/3	Two horns	Doppelhorn	Double cor	Cuernos, dos
Z		<u>Unclassifiable watermarks</u>	<u>Wasserzeichen, nicht klassifizierbar</u>	<u>Filigranes non classifiables</u>	<u>Filigranas inclasificables</u>
F4		Unicorn	Einhorn	Licorne	Unicornio
F4/2		Unicorn, bust	Einhorn, Brustbild	Licorne, buste	Unicornio (busto)
F4/1		Unicorn, full size	Einhorn, ganze Figur	Licorne, figure entière	Unicornio (figura entera)
B3/1/2		Venus/Aphrodite	Venus/Aphrodite	Vénus/Aphrodite	Venus/Afrodita
B4/3/5		Victory	Viktoria	Victoire	Victoria
O6		Violin	Violine, Geige, Fiedel	Violon	Violin
L3/5		Wagon	Eisenbahnwagen	Wagon	Vagón
L5/3		Wagon (four wheels)	Wagen (vierrädrig)	Char (quatre roues)	Carro (cuatro ruedas)
L5/2		Wagon (two wheels)	Wagen (zweirädrig)	Char (deux roues)	Carro (dos ruedas)
L5		Wagon, chart	Wagen	Wagon, char	Carro, vagón
K8		Wall	Mauer (Stadtmauer)	Mur (enceinte)	Muralla
	H3/12	Walnut-tree	Nussbaum	Noyer	Nogal
K9		Waterwheel	Wasserrad	Roue à aubes	Rueda de paletas
K10		Well	Ziehbrunnen	Puits	Pozo
C21		Whale	Wal	Baleine	Ballena
G3/2		Wheat	Weizen	Froment	Trigo
L5/4		Wheel, spoke-.wheel	Rad, Speichenrad	Roue, roue à rayons	Rueda, rueda de radios
N40		Whip	Peitsche	Fouet	Látigo
Z2		Wide, low forms	Breite, niedere Formen	Forme basse, large	Forma baja, ancha
Z4		Wire lines, curved	Drahtlinien, gebogen	Lignes courbées	Lineas curvas
Z3		Wire lines, straight	Drahtlinien, gerade	Lignes droites	Lineas derechas
C22		Wolf	Wolf	Loup	Lobo
B2		Woman	Frau	Femme	Mujer
B3/2		Woman (Christianity)	Frau (Christentum)	Femme (Christianisme)	Mujer (Cristianismo)
B3/1		Woman (Classical antiquity)	Frau (Antike)	Femme (Antiquité classique)	Mujer (Antigüedad clásica)
B2/1		Woman (general)	Frau (allgemein)	Femme (général)	Mujer (genérico)
B2/2		Woman (in fashion or national dress)	Frau (modisch oder in Nationaltracht)	Femme (habillée à la mode ou en costume national)	Mujer (con traje de moda o popular)
B1		Woman (not specific)	Frau (nicht weiter definierbar)	Femme (non spécifique)	Mujer (no específico)
B4		Woman (rank; politics)	Frau (Rang; Politik)	Femme (rang; politique)	Mujeres (rangos, política)
B3		Woman (religion)	Frau (Religion)	Femme (religion)	Mujeres (religión)
	B4/3	Woman, allegorical	Frau, allegorisch	Femme, allégories	Alegoria
<u>B</u>		<u>Women</u>	<u>Frauen</u>	<u>Femmes</u>	<u>Mujeres</u>
E9		Worm	Wurm	Ver	Gusano
R9		Wreath, garland	Kranz	Couronne, guirlande	Corona, ghirnalda
N41		Yoke	Joch	Joug	Yugo



APPENDIX IA

INDEX OF WATERMARK CLASSES AND SUBCLASSES, ILLUSTRATED WASSERZEICHEN-TYPENINDEX NACH KLASSEN/UNTERKLASSEN, ILLUSTRIERT INDEX DES FILIGRANES SELON CLASSES ET SOUS-CLASSES, ILLUSTRÉ INDICE DE FILIGRANAS SEGÚN CLASES Y SUBCLASES, ILUSTRADO

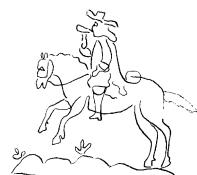
Class, Subclass subclassifications
Klasse, Unterklasse Untergruppen
Classe, sous-classe sous-groupements
Clase, subclase, subgrupos

A	<u>Human figures; men; parts of the human body</u> <u>Menschen; Männer; menschl. Körperteile</u>	<u>Figures humaines; hommes; parts du corps humain</u> <u>Figuras humanas; hombres;</u> <u>partes del cuerpo humano</u>
A1	Human figure (not specific) Mensch (nicht weiter definierbar)	Figure humaine (généralisée) Figura humana (general)
A2	Child Kind	Enfant Niño
A2/1	Child (not specific) Kind (nicht weiter definierbar)	Enfant (généralisé) Niño (general)
A2/2	Jesus (child) Jesuskind Enfant Jésus Niño Jesús	
A3	Two men Zwei Menschen	Deux hommes Dos hombres
A3/1	Couple (man and woman) Menschenpaar (Mann und Frau) Couple (homme et femme) Pareja (hombre y mujer)	
A3/2	Twins Zwillinge Jumeaux Gemelos	
A4	Man Mann	Homme Hombre
A4/1	Man (general) Mann (allgemein)	Homme (en général) Hombre (general)
A4/2	Blacksmith Schmied Forgeron Herrero	
A4/3	Messenger, traveller Bote, Wanderer Messager, voyageur Mensajero, caminante	
A4/4	Horseman Reiter	Cavalier Jinete

A4/4/1 Horseman (general)
 Reiter (allgemein)
 Cavalier (en général)
 Jinete (general)



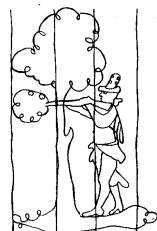
A4/4/2 Courier
 Postreiter
 Courrier
 Correo



A4/4/3 Dragoon, hussar, picador etc.
 Dragoner, Husar, Picador etc.
 Dragon, hussard, picador etc.
 Dragones, Husar, Picador, etc.



A4/5 Hunter
 Jäger
 Chasseur
 Cazador



A4/6 Negro
 Mohr

Noir
 Negro

A4/6/1 Negro (general)
 Mohr (allgemein)

Noir (général)
 Negro (general)

A4/7 Fool
 Narr

Fou
 Loco

A4/7/1 Fool (general)
 Narr (allgemein)
 Fou (en général)
 Loco (general)

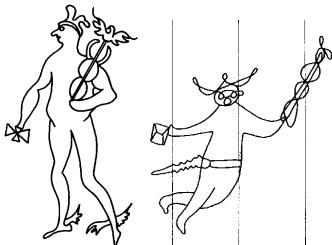


A4/8 Miner
 Bergmann
 Mineur
 Minero



A4/9 Savage man
 Wilder Mann
 Sauvage
 Salvaje



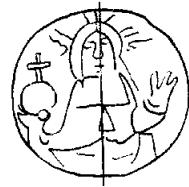
A4/10	Bear and tamer Bärenführer Meneur d'ours Oso y domador	
A5	Men (religion) Männer (Religion)	Hommes (religion) Hombres (religión)
A5/1	Men (Classical antiquity) Männer (Antike)	Hommes (Antiquité classique) Hombres (antigüedad clásica)
A5/1/1	Jupiter/Zeus Jupiter/Zeus Jupiter/Zeus Jupiter/Zeus	
A5/1/2	Mars/Ares Mars/Ares Mars/Ares Marte/Ares	
A5/1/3	Mercury/Hermes Merkur/Hermes Mercure/Hermès Mercurio/Hermes	
A5/1/4	Neptune/Poseidon Neptun/Poseidon Neptune/Poseidon Neptuno/Poseidón	
A5/1/5	Pluto/Hades Pluto/Hades Pluton/Hades Plutón	



A5/2 Men (Christianity)
Männer (Christentum)

Hommes (Christianisme)
Hombres (cristianismo)

A5/2/1 Jesus Christ
Jesus Christus
Jésus Christ
Jesús



A5/2/2 Jesus crucified
Jesus am Kreuz
Jésus crucifié
Crucificado



A5/2/3 Angel
Engel
Ange
Angel



A5/2/3/
1 Archangel (Michael)
Erzengel (Michael)
Archange (Michel)
Arcángel (Miguel)



A5/2/4 Apostle; Saint
Apostel, Heiliger

Apôtre; Saint
Apostol; Santo

A5/2/4/
1 Saint (general)
Heiliger (allgemein)
Saint (en général)
Santo (general)



A5/2/4/
2 St.George
St.Georg
St.Georges
San Jorge



A5/2/4/
3 St.John
St.Johannes
St.Jean
San Juán



I ♀ H

A5/2/4/
4 St.Lawrence
St.Lorenz
St.Laurent
San Lorenzo



A5/2/4/
5 St.Martin
St.Martin
St.Martin
San Martín



A5/2/4/
6 St.Nepomuk
St.Nepomuk
St.Nepomuk
Juan Nepomuceno



A5/2/4/
7 St.Nicholas
St.Niklaus
St.Nicolas
San Nicolás



A5/2/4/
8 St.Peter
St.Peter
St.Pierre
San Pedro



A5/2/4/
9 St.Sebastian
St.Sebastian
St.Sébastien
San Sebastián



A5/2/4/
10 St.Stephen
St.Stephan
St.Etienne
San Estebán



A5/2/4/
11 St.Vitus
St.Veit
St.Vith
San Vito





A5/2/5 Pope
Papst
Pape
Papa



A5/2/6 Cardinal
Kardinal
Cardinal
Cardenal



A5/2/7 Bishop
Bischof
Evêque
Obispo



A5/2/8 Abbot
Abt
Abbé
Abad



A5/2/9 Priest
Priester
Prêtre
Sacerdote



A5/2/10 Monk
Mönch
Moine
Monje



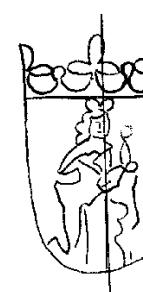
A5/2/11 David, king
David, König
David, roi
David, rey





A5/2/12	Three Magi Drei Könige Rois mages Magos, tres reyes	
A6	Men (ranks, politics) Männer (Rang; Politik)	Hommes (rang; politique) Hombre (rango, político)
A6/1	Emperor; king Kaiser; König Empereur; roi Emperador, rey	
A6/2	Prince; nobleman Fürst; Edelmann Prince; noble Principe, noble	
A7	Parts of human body Körperteile (Mensch)	Parties du corps humain Partes del cuerpo human
A7/1	Head Kopf Tête Cabeza	
A7/1/2	Negro, head of Mohrenhaupt Tête de nègre Cabeza de negro	
A7/1/3	Foolscap Narrenkappe	Tête de fou Cabeza de loco
A7/1/3/ 1	Foolscap, type 1 Narrenkappe, Typ 1 Tête de fou, type 1 Cabeza de loco, tipo 1	
A7/1/3/ 2	Foolscap, type 2 Narrenkappe, Typ 2 Tête de fou, type 2 Cabeza de loco, tipo 2	

A7/1/4	Portrait, bust of a man (name in full; in alphabetical order) Porträt, Brustbild eines Mannes (Name in Volltext; alphabetisch)	Portrait, buste d'un homme (nom sans abréviation; par ordre alphabétique) Retrato, busto de un hombre (nombre sin abreviatura, por orden alfabetico)
A7/2	Hand Hand	Main Mano
A7/2/1	Hand (general) Hand (allgemein) Main (en général) Mano (general)	
A7/2/2	Hand (swearing) Schwurhand Main (en serment) Mano (jurando)	
A7/3	Heart Herz Coeur Corazón	
A7/4	Arm Arm Bras Brazo	
A7/5	Leg Bein Jambé Pierna	
A7/6	Foot Fuss Pied Pie	
B	<u>Women</u> <u>Frauen</u>	<u>Femmes</u> <u>Mujeres</u>
B1	Woman (not specific) Frau (nicht weiter definierbar)	Femme (non spécifique) Mujer (no específico)
B2	Woman, Frau	Femme, Mujer
B2/1	Woman (general) Frau (allgemein)	Femme (en général) Mujer (genérico)

B2/2	Woman (in fashion or national dress) Frau (modisch oder in Nationaltracht) Femme (habillée à la mode ou en costume national) Mujer (con traje de moda o popular)	
B3	Woman (religion), Frau (Religion)	Femme (religion), Mujer (religión)
B3/1	Woman (Classical antiquity), Frau (Antike)	Femme (Antiquité classique), Mujer (antigüedad clásica)
B3/1/1	Diana/Artemis Diana/Artemis Diane/Artémis Diana/Artemisa	
B3/1/2	Venus/Aphrodite Venus/Aphrodite Vénus/Aphrodite Venus/Afrodita	
B3/2	Woman (Christianity), Frau (Christentum)	Femme (Christianisme), Mujer (cristianismo)
B3/2/1	St.Mary, the Virgin Maria, Gottesmutter Marie, la Vierge Virgen, La	
B3/2/2	Saint women, Heilige Frauen	Saintes, Santas
B3/2/2/ 1	St.Hildegard St.Hildegard St.Hildegard Santa Hilda	

B3/2/2/
2 St.Catherine
St.Katharina
St.Catherine
Santa Catalina



B3/2/2/
3 Saints, other women,
Heilige, andere

Saintes, autres,
Santas (otras)

B3/2/3 Nun
Klosterfrau, Nonne
Religieuse
Religiosa



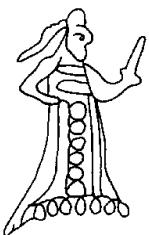
B4 Woman (rank; politics)
Frau (Rang; Politik)

Femme (rang; politique),
Mujeres (rangos, política)

B4/1 Empress; queen
Kaiserin; Königin
Impératrice; reine
Emperatriz, reina



B4/2 Noblewoman; lady
Edelfrau
Dame noble
Dama



B4/3 Woman, allegorical,
Frau (allegorisch)

Femme (allégories),
Mujer (alegoría)

B4/3/1 Justice
Justitia
Justice
Justicia



B4/3/2 Liberty
Libertas, Freiheit
Liberté
Liberdad



IPH

B4/3/3 Patria
Patria
Patrie
Patria



B4/3/3/
1 Pro Patria
Pro Patria
Pro Patria
Pro Patria



B4/3/3/
2 Patria (others)
Patria (andere)

Patria (autres)
Patria (otras)

B4/3/4 Hollandia
Hollandia
Hollandia
Hollandia



B4/3/5 Victory
Viktoria
Victoire
Victoria

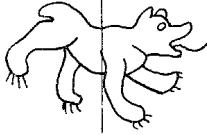
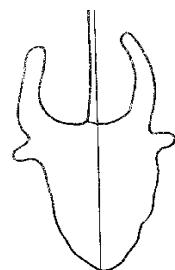
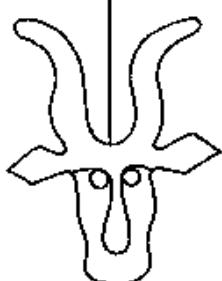


B4/3/6 Fortuna
Fortuna
Fortune
Fortuna

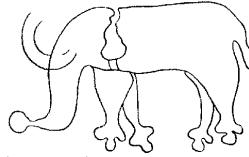
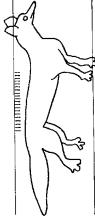
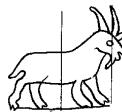
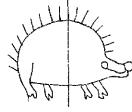
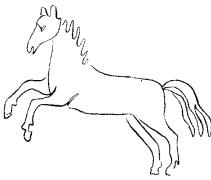
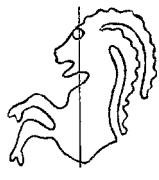
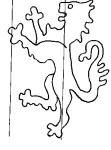


B4/3/7 Britannia
Britannia
Britannia
Britannia

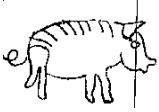
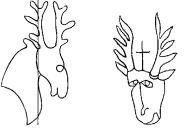
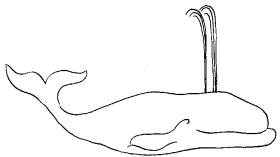
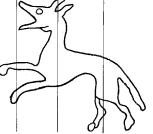


B4/4	Portrait, bust of a woman (name in full; in alphabetical order) Porträt, Brustbild einer Frau (Name in Volltext; alphabetisch)	Portrait, buste d'une femme (nom sans abréviation; par ordre alphabétique) Retrato, busto de una mujer (nombre sin abreviatura, por orden alfabetico)
C	<u>Mammals</u> <u>Säugetiere</u>	<u>Mammifères</u> <u>Mamíferos</u>
C1	Apé Affe Singe Mono	
C2	Bear Bär Ours Oso	
C3	Beaver Biber Castor Castor	
C4	Bull, ox, cow, Stier, Ochse, Kuh	Taureau, boeuf, vache, Toro, buey, vaca
C4/1	Bull, ox, cow ,whole animal or bust Stier, Ochse, Kuh , ganze oder Teil-Figur Taureau, boeuf, vache, figure entière ou buste Toro, buey, vaca, figura entera o busto	
C4/2	Bull's head, Ochsenkopf	Boeuf, tête, Buey, cabeza
C4/2/1	Bull's head, type I:(simple contour) Ochsenkopf Typ I (grober Umriss) Boeuf, tête, type I (contour simple) Buey, cabeza, tipo I (contorno simple)	
C4/2/2	Bull's head, type II:(contour with horn, eyes) Ochsenkopf Typ II (Umriss mit Hörnern, Augen) Boeuf, tête, type II (contour avec cornes, yeux) Buey, cabeza, tipo II (contorno con astas y ojos)	

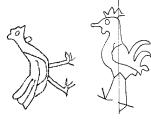
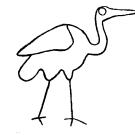
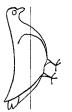
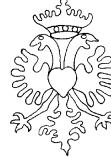
C4/2/3	Bull's head, type III:(head with eyes and nostrils) Ochsenkopf, Typ III:(Kopf mit Augen und Nüstern) Boeuf, tête, type III:(tête avec yeux et narines) Buey, cabeza, tipo III:(con ojos y ollares)	
C4/2/4	Bull's head, type IV: (others) Ochsenkopf, Typ IV: (andere) Boeuf, tête, type IV: (autres) Buey, cabeza, tipo IV: (otras)	
C4/3	Bull with wings (ox of St.Luke) Ochse mit Flügeln (Ochse des Lukas) Boeuf avec ailes (Boeuf de St.Luc) Buey con alas (buey de San Lucas)	
C5	Camel; dromedary Kamel, Dromedar Chameau, dromadaire Camello, dromedario	
C6	Cat Katze Chat Gato	
C7	Dog Hund Chien Perro	
C8	Dolphin Delphin Dolphin Delfin	

C9	Donkey, mule Esel, Maultier Âne, mulé Burro, mula	
C10	Elephant Elefant Eléphant Elefante	
C11	Fox Fuchs Renard Zorro	
C12	Goat Ziege Chèvre Cabra	
C13	Hedgehog Igel Hérisson Erizo	
C14	Horse Pferd Cheval Caballo	
C15	Ibex Steinbock Bouquetin Cabramontes	
C16	Leopard, panther Leopard, Panther Léopard, panthère Leopardo, pantera	
C17	Lion, Löwe	
C17/1	Lion (general) Löwe (allgemein) Lion (en général) León (general)	
C17/2	Lion, Dutch (holding arrows or sword) Löwe von Geldern (mit Pfeilbündel oder Schwert) Lion des Pays-Bas (avec flèches ou épée) León de Países Bajos (con flechas o espada)	
C17/3	Lion of St.Marc Markuslöwe Lion de St.Marc León de San Marcos	

I
P
H

C18	Pig, wild boar Schwein, Eber Cochon, sanglier Cerdo, jabalí	
C19	Ram, sheep, lamb, Widder, Schaf, Lamm	Bélier, mouton, agneau, Carnero, cordero
C19/1	Ram Widder Bélier Carnero	
C19/2	Sheep, lamb (general) Schaf, Lamm (allgemein)	Mouton, agneau (en général) Cordero (general)
C19/3	Agnus Dei Lamm Gottes Agneau de Dieu Agnus Die	
C20	Stag, Hirsch	Cerf, Cervo
C20/1	Stag, full size Hirsch (ganzes Bild) Cerf (figure entière Cervo (figura entera)	
C20/2	Stag, half length portrait or head Hirsch, Brustbild oder Kopf Cerf, buste ou tête Cervo, busto o cabeza	
C20/3	Antler Geweih Bois Cornamenta	
C21	Whale Wal Baleine Balena	
C22	Wolf Wolf Loup Lobo	
C23	Quadruped, unidentified, Vierbeiner (nicht näher bestimmbar)	Quadrupède (non identifiable), Cuadrúpedo (no identifiable)

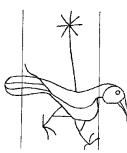


<u>D</u>	<u>Birds</u> <u>Vögel</u>	<u>Oiseaux</u> <u>Aves</u>
D1	Gallinaceous bird, Hühnervogel	Gallinacée, Ave gallinacea
D1/1	Cockerel Hahn Coq Gallo	
D1/2	Hen Huhn Poule Gallina	
D1/3	Chicken Küken Poussin Pollita	
D2	Crane Kranich Grue Grulla	
D3	Dove Taube Pigeon Pichón	
D4	Duck Ente Canard	
D5	Pato Eagle, Adler	Aigle, Aguila
D5/1	Eagle, single-headed Adler mit einem Kopf Aigle, une seule tête Aguila de una cabeza	
D5/2	Eagle, double-headed Doppeladler Aigle, tête double Aguila, doble cabeza	
D5/3	Eagle of St.John Johannesadler Aigle de St.Jean Aguila de San Juán	
D6	Falcon Falke Faucon Alcón	

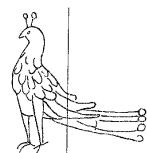
D7 Goose
Gans
Oie
Oca



D8 Crow
Rabe
Corbeau
Cuervo



D9 Peacock
Pfau
Paon
Pavo



D10 Stork
Storch
Cigogne
Cigüena



D11 Swan
Schwan
Cygne
Cisne



D12 Bird (unidentified),
Vogel (nicht näher bestimmbar)

Oiseau (non identifiable),
Pájaro (no identifiable)

D13 Pelican
Pelikan
Pélican
Pelícano



E
Fish, reptiles, insects, molluscs
Fische, Reptilien, Insekten, Mollusken

Poissons, reptiles, insectes, mollusques
Peces, reptiles, insectos, moluscos

E1 Crab, Lobster
Krebs, Krabbe, Hummer
Ecrevisse, crabe, homard
Congrejo, langosta



E2 Fish
Fisch
Poisson
Pez

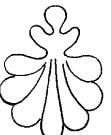
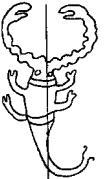


E3 Insect, Insekt
E3/1 Insect, unidentified,
Insekt (unbestimmbar)

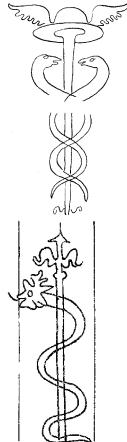
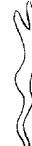
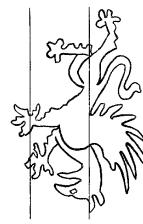
Insecte, Insecto
Insecte (non identifiable),
Insecto (no identifiable)

E3/2 Bee
Biene
Abeille
Abeja



E3/3	Butterfly Schmetterling Papillon Mariposa	
E3/4	Caterpillar Raupe Chenille Oruga	
E3/5	Dragon-fly Libelle Libellule Libélula	
E3/6	Fly Fliege Mouche Mosca	
E3/7	Grasshopper Heuschrecke Sauterelle Saltamontes	
E4	Lizard Eidechse Lézard Lagarto	
E5	Shell, mussel Muschel Coquillage Concha	
E6	Scorpion Skorpion Scorpion Escorpión	
E7	Snail Schnecke Escargot Caracol	
E8	Snake, Schlange	Serpent, Serpiente
E8/1	Snake (general) Schlange (allgemein) Serpent (en général) Serpiente (general)	
E8/2	Snake on a shaft (Aesculapian; medicine) Schlange an Stab/Kreuz (Aeskulap; medizinisch) Serpent sur bâton/croix (d'Esculape; médecine) Serpiente sobre baston o cruz (Esculapio, médico)	



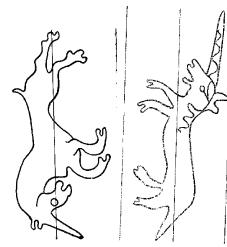
E8/3	Snake on a shaft (Mercury; commercial) Schlange an Stab (Merkur; Handel) Serpent sur bâton (de Mercure; commerce) Serpiete sobre bastón (Mercurio; comercio)	
E8/4	Snake on a shaft/column (other) Schlange an Stab/Säule (andere) Serpent sur bâton/colonne (d'autre) Serpiete sobre bastón/columna (otro)	
E9	Worm Wurm Ver Gusano	
F <u>Mythical figures</u> <u>Fabelwesen</u> <u>Monstres fabuleux</u> <u>Figuras mitológicas</u>		
F1	Dragon (wyvern) Drache Dragon Dragón	
F2	Griffin, Greif	Griffon, Grifo
F2/1	Griffin (general) Greif (allgemein) Griffon (en général) Grifo (general)	
F2/2	Basilisk, cockatrice Basilisk Basilic Basilisco	
F3	Mermaid, Meerjungfrau	Sirène, Sirena
F3/1	Mermaid, single tail Meerjungfrau mit einem Schwanz Sirène avec queue simple Sirena con cola de pez simple	
F3/2	Mermaid, double tail Meerjungfrau mit Doppelschwanz Sirène avec queue double Sirena con cola de pez doble	
F4	Unicorn,	Licorne,



Einhorn

Unicornio

- F4/1 Unicorn, full size
 Einhorn, ganze Figur
 Licorne, figure entière
 Unicornio, figura entera



- F4/2 Unicorn, bust or head
 Einhorn, Brustbild oder Kopf
 Licorne, buste ou tête
 Uniucornio, busto o cabeza



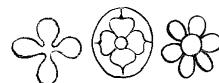
- F5 Phoenix
 Phönix
 Phénix
 Fenix



- G Plants (general); flowers; grass
 Pflanzen (allg.); Blumen; Gräser

- Plantes, (en général); fleurs; herbes
 Plantas (general); flores; hierba

- G1 Plant, flower (unidentified),
 Pflanze, Blume (nicht näher bestimmbar)
 Plante, fleur (non identifiable),
 Planta, flor (no identifiable)



- G2 Carnation
 Nelke
 Oeillet
 Clavel



- G3 Cereals,
 Getreide

- Céréales,
 Cereales

- G3/1 Barley
 Gerste
 Orge
 Cebada



- G3/2 Wheat
 Weizen
 Froment
 Trigo



- G3/3 Cereal, unidentified,
 Getreide (nicht näher bestimmbar)

- Céréale (non identifiable),
 Cereales, no identificables

- G4 Clover, trefoil
 Klee, Kleeblatt
 Trèfle
 Trebol



- G5 Grass,
 Gras

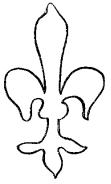
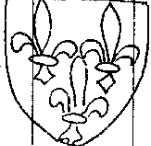
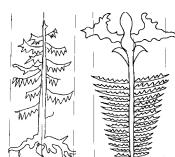
- Herbe,
 Hierba

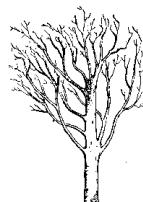
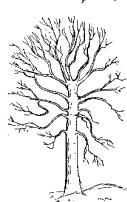
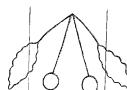
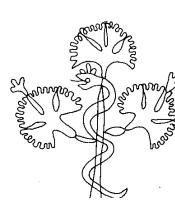
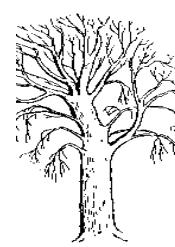
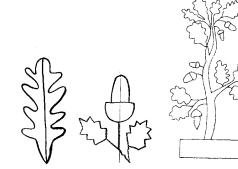
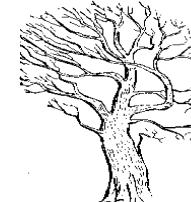
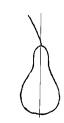
- G6 Lily,
 Lilie

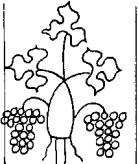
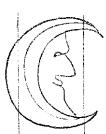
- Fleur de Lys,
 Flor de Lis

- G6/1 Lily (flower)
 Lilie (Blume)
 Fleur de Lys (fleur)
 Flor de Lis (flor)

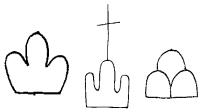
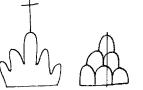
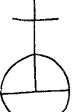
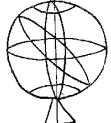
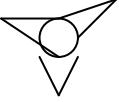


G6/2	Lily (heraldry) Lilie (Heraldik) Fleur de Lys (héraldique) Flor de Lis (heráldica)	
G6/3	Three lilies (heraldry) Drei Lilien (Heraldik) Trois fleurs de Lys (héraldique) Flores de Lis, tres (heráldica)	
G7	Nettle Nessel Ortille Ortiga	
G8	Rose Rose Rose Rosa	
G9	Tulip Tulpe Tulipe Tulipán	
G10	Bluebell Glockenblume Campanule Farolillo	
H	<u>Trees; shrubs; creepers</u> <u>Bäume; Sträucher; Schlingpflanzen</u>	<u>Arbres; arbustes; plantes grimpantes</u> <u>Árboles; arbustos; plantas trepadoras</u>
H1	Tree (indefinite) Baum (nicht näher bestimbar)	Arbre (non identifiable) Arbol (indefinido)
H2	Conifers, Nadelbäume	Conifères, Conífera
H2/1	Fir-tree Tanne Sapin Abeto	
H2/2	Pine Fichte, Föhre, Pinie Pin Pin o	
H2/3	Pine cone Fichtenzapfen, Pyr Pomme de pin Piña	
H3	Deciduous trees, Laubbäume	Arbres à feuilles, Árboles con hojas

H3/1	Acorn Ahorn Erable Aroe	
H3/2	Apple-tree Apfelbaum Pommier Manzano	
H3/3	Beech-tree Buche Hêtre Haya	
H3/4	Cherry-tree Kirschbaum Cerisier Cerez	
H3/5	Clove Nelkenbaum Giroflier Clavero	
H3/6	Laurel Lorbeer Laurier Laurel	
H3/7	Lime-tree Linde Tilleul Tilo	
H3/8	Oak Eiche Chêne Roble	
H3/9	Olive-tree Ölbaum Olivier Olivo	
H3/10	Pear-tree Birnbaum Poirier Peral	
H3/11	Pomegranate-tree or fruit Granatapfelbaum, Granatapfel Grenadier, Grenade Granado, o fruto	

H3/12	Walnut-tree Nussbaum Noyer Nogal	
H4	Shrub; creeper, Strauch, Schlingpflanze	Arbuste, plante grimpante, Arbustos; plantas trepadoras
H4/1	Shrub (indefinite), Strauch (unbestimmbar)	Arbuste (non identifiable), Arbusto (indefinido)
H4/2	Grapevine, Rebe	Vigne, Viña
H4/2/1	Grapevine (plant) Rebe (Pflanze) Vigne (plante) Viña (planta)	
H4/2/2	Grapevine (leaf) Rebe (Blatt) Vigne (feuille) Viña (hoja)	
H4/2/3	Grape Traube Raisin Uva	
H4/3	Ivy Efeu Lierre Hiedra	
J	<u>Sky; earth; water</u> <u>Himmel, Erde, Wasser</u>	<u>Ciel, terre, eau</u> <u>Cielo, tierra, agua</u>
J1	Comet Komet Comète Cometa	
J2	Moon, Mond	Lune, Luna
J2/1	Crescent Mondsichel Croissant Cuarto de luna	
J2/2	Full moon Vollmond Pleine lune Luna llena(cara)	
J2/3	Moonface Mondgesicht (Sichel) Lune (visage) Luna (cara)	

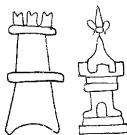
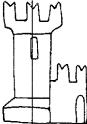
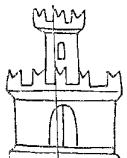
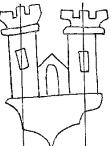
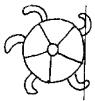
IPH

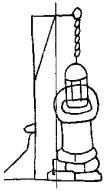
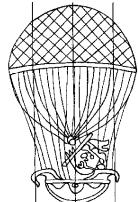
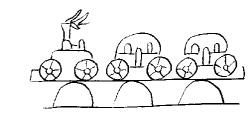
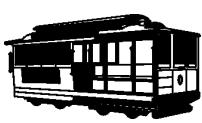
J2/4	Three moons Drei Monde Trois lunes Tres lunas	
J3	Mountain(s), Berg(e), Hügel	Montagne(s), colline(s), Montañas (colinas)
J3/1	Mountain, hill (one) Berg, Hügel (einer)	Montagne, colline (une) Montaña, colina (una)
J3/2	Mountains, hills (two) Berge, Hügel (zwei) Montagnes, collines (deux) Montañas, colinas (dos)	
J3/3	Three mountains (hills) Dreiberg Triple montagne (colline) Montañas, colinas (tres)	
J3/4	Mountains, hills (more than three) Berge, Hügel (mehr als drei) Montagnes, collines (plus que trois) Montañas, colinas (cuatro o más)	
J4	Sphere (see also 'orb') Sphäre (siehe auch 'Reichsapfel')	Sphère (cf. aussi 'globe impérial') Esfera (ver también „Globo Imperial“)
J4/1	Sphere Sphäre Sphère Esfera	
J4/2	Planet sphere Planetensphäre Sphère des planètes Esfera de planetas	
J4/3	Earth, globe Erdkugel, Globus Terre, globe Globo, tierra	
J5	Star(s), Sterne	Etoile(s), Estrella(s)
J5/1	Star (three points) Stern (dreistrahlig) Etoile (trois rayons) Estrella (tres rayos)	
J5/2	Star (four points) Stern (vierstrahlig) Etoile (quatre rayons) Estrella (cuatro rayos)	
J5/3	Star (five points) Stern (fünfstrahlig) Etoile (cinq rayons) Estrella (cinco rayos)	
J5/4	Star (six points) Stern (sechsstrahlig) Etoile (six rayons) Estrella (seis rayos)	

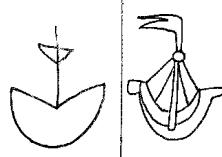
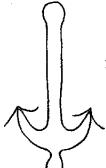
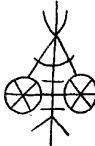
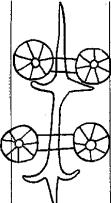


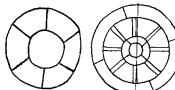
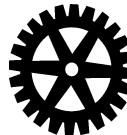
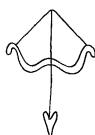
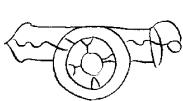
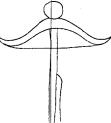
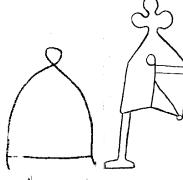
J5/5	Star (seven points) Stern (siebenstrahlig) Etoile (septrayons) Estrella (sieterayos)	
J5/6	Star (eight points) Stern (achtstrahlig) Etoile (huit rayons) Estrella (ocho rayos)	
J5/7	Star (irregular or more than 8 points) Stern (unregelmässig oder mehr als 8 Strahlen) Etoile (irrégulière ou plus que 8 rayons) Estrella (más de ocho rayos o irregular)	
J6	Sun, Sonne	Soleil, Sol
J6/1	Sun (disk), Sonne (Scheibe)	
J6/1/1	Sun (disk without face) Sonne (Scheibe ohne Gesicht) Soleil (disque sans face) Sol (disco sin cara)	
J6/1/2	Sun (disk with face) Sonne (Scheibe mit Gesicht) Soleil (disque avec face) Sol (disco con cara)	
J6/2	Sun (disk with points) Sonne (mit Strahlen)	Soleil (disque avec rayons) Sol (disco con rayos)
J6/2/1	Sun (disk with points without face) Sonne (mit Strahlen, ohne Gesicht) Soleil (avec rayons, sans face) Sol (con rayos, sin cara)	
J6/2/2	Sun (disk with points and face) Sonne (mit Strahlen und Gesicht) Soleil (avec rayons et face) Sol (con rayos y cara)	
K	<u>Buildings; parts of buildings</u> <u>Gebäude; Gebäude Teile</u>	<u>Bâtiments; parts de bâtiments</u> <u>Edificios; partes del edificio</u>
K1	Bridge Brücke Pont Puente	
K2	Column(s), Säule(n)	Colonne(s), Columna(s)
K2/1	Column without capital Säule ohne Kapitell Colonne sans chapiteau Columna sin capitell	
K2/2	Column with capital Säule mit Kapitell Colonne avec chapiteau Columna con capitell	

I PH

K2/3	Column, twisted Säule, gewunden Colonne tordue Columna salomónica	
K3	Fence Zaun Barrière Bariera	
K4	Fountain Brunnen (Röhrenbrunnen) Fontaine Fuente	
K5	Gate Tor, Stadttor Porte (aussi: de ville) Puerta (también de ciudad)	
K6	House Haus Maison Casa	
K7	Tower, Turm	Tour, Torre
K7/1	Tower, single Turm allein Tour seule Torre, sola	
K7/2	Tower with annexe Turm mit Anbau Tour avec annexe Torre con anexos	
K7/3	Tower with gate Turm mit Tor Tour avec porte Torre con puerta	
K7/4	Towers (two) with gate Türme (zwei) mit Tor Tours (deux) avec porte Torres, dos, con puerta	
K8	Wall Mauer, Stadtmauer Mur (enceinte) Muralla	
K9	Waterwheel Wasserrad Roue à aubes Rueda de paletas	

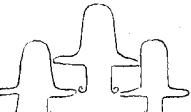
K10	Well Ziehbrunnen Puits Pozo	
L	<u>Transport, vehicles</u> <u>Transportwesen, Fahrzeuge</u>	<u>Transports, véhicules</u> <u>Transportes; vehiculos</u>
L1	Aircraft, Luftfahrt	Transport aérien, Transporto aereo
L1/1	Aircraft Flugzeug Avion, aéroplane Aeroplano, avión	
L1/2	Airship Luftschiff Aérostat Aereostato	
L1/3	Balloon Ballon Ballon, Montgolfière Globo (Montgolfière)	
L2	Car, Automobil	Automobile, Automovil
L3	Railway, Eisenbahn	Chemin de fer, Tren
L3/1	Locomotive (electric traction) Lokomotive (Elektroantrieb) Locomotive (électrique) Locomotora eléctrica	
L3/2	Locomotive (diesel) Lokomotive (Diesel) Locomotive (diesel) Locomotora diesel	
L3/3	Locomotive (steam) Lokomotive (Dampf) Locomotive (vapeur) Locomotora a vapor	
L3/4	Train Eisenbahnzug Train Tren	
L3/5	Wagon Eisenbahnwagen Wagon Vagón	
L4	Ship, Schiff	Bateau, Barco

L4/1	Rudder ship Ruderboot Bateau à rames Barco a remos	
L4/2	Sailing ship Segelschiff Voilier Velero	
L4/3	Motor ship, Motorschiff	Bateau à moteur, Barco con motor
L4/3/1	Steamer (with paddle wheel) Dampfschiff mit Schaufelrad Vapeur avec roue à aubes Vapor con rueda	
L4/3/2	Steamer (screw-driven) Dampfschiff mit Schraubenantrieb Vapeur à hélice Vapor a élice	
L4/4	Part(s) of ship, Schiffsteile	Pièces d'un bateau, Partes de un barco
L4/4/1	Anchor, Anker	Ancre, Ancla
L4/4/1/1	Anchor (flat) Anker (flach) Ancre (plat) Ancla (plana)	
L4/4/1/2	Anchor (bent) Anker (gekrümmt) Ancre (courbe) Ancla (curva)	
L4/4/2	Rudder Ruder Rame Remos	
L5	Wagon, cart, Wagen	Wagon, char, Carro, vagón
L5/1	Coach Kutsche Coche Coche	
L5/2	Wagon (two wheels) Wagen (zweirädrig) Char (à deux roues) Carro (dos ruedas)	
L5/3	Wagon (four wheels) Wagen (vierrädrig) Char (à quatre roues) Carro (cuatro ruedas)	

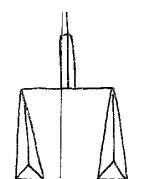
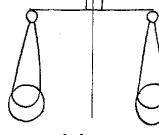
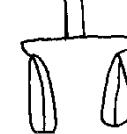
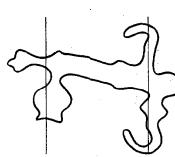
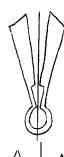
L5/4	Wheel, spoke-.wheel Rad, Speichenrad Roue, roue à rayons Rueda, rueda de radios	
L5/5	Cog-wheel Zahnrad Roue dentée Rueda dentada	
<u>M</u>	<u>Defence and arms</u> <u>Wehr und Waffen</u>	<u>Défence et armes</u> <u>Defensa y armas</u>
M1	Arrow Pfeil Flèche Flecha	
M2	Battle axe Streitaxt Hache d'armes Hacha	
M3	Bow Bogen Arc Arco	
M4	Cannon Kanone Canon Canón	
M5	Club Keule Masse d'armes Maza	
M6	Crossbow Armbrust Arbalète Ballesta	
M7	Dagger Dolch Poignard Puñal	
M8	Halberd Hellebarde Hallebarde Alabarda	
M9	Helmet Helm Casque Casco	
M10	Lance Lanze Lance Lanza	
M11	Rifle, musket Gewehr, Muskete Fusil, mousqueton Fusil, mosquetón	



M12	Sabre, Säbel	Sabre, Sable	
M12/1	Sabre, straight Säbel, gerade Sabre, droit Sable, recto		
M12/2	Scimitar Krummsäbel Sabre, courbé Sable curvo		
M13	Shield Schild Bouclier Adarga		
M14	Sword Schwert Epée Espada		
M15	Trident Dreizack Trident Tridente		
N	<u>Tools; equipment; clothing</u> <u>Werkzeug; Gerät; Kleidung</u>	<u>Outils; équipement; habillement</u> <u>Utensilios, equipamento, ropa</u>	
N1	Anvil Amboss Enclume Yunque		
N2	Axe, hatchet Axt, Beil Hache Hacha		
N3	Bellows Blasebalg Soufflet Fuelle		
N4	Boot, Stiefel Botte Bota		
N5	Bow-drill Drillbohrer Drille Soldado		
N6	Buckle Gürtelschnalle Boucle Hebillas		

N7	Candlestick, candelabra Kerzenhalter, Kandelaber Porte-bougie, chandelier Palmatoria, candelabro	
N8	Chopper Wiegemesser Hachoir Tajo	
N9	Currycomb Striegel Etrille Almohaza, rascadera	
N10	Dividers, compass Zirkel Compas Compás	
N11	Fork Gabel Fourche Horquilla	
N12	Hammer, Hammer	Marteau, Martillo
N12/1	Hammer (general) Hammer (allgemein) Marteau (en général) Martillo (general)	
N12/2	Hammer (cooper's) Küferhammer Marteau (tonneleier) Martillo de tonelero	
N12/3	Hammer (mining) Bergmannshammer Marteau (mineur) Martillo de minero	
N13	Harrow Egge Herse Rastrillo	
N14	Hat, Hut	Chapeau, Sombrero
N14/1	Hat (general) Hut (allgemein) Chapeau (en général) Sombrero (general)	
N14/2	Cowl Kapuze Capuchon Capucha	
N14/3	3 Hats 3 Hüte 3 chapeaux 3 sombreros	
N15	Horseshoe, Hufeisen	Fer à cheval, Herradura

N15/1	Horseshoe (whole) Hufeisen (ganz) Fer à cheval (entier) Herradura entera	
N15/2	Horseshoe (half) Hufeisen (halb) Fer à cheval (moitié) Herradura media	
N16	Key Schlüssel	Clef Llave
N16/1	one key ein Schlüssel une clef una llave	
N16/2	two keys, also crossed zwei Schlüssel, auch gekreuzt deux clefs, également croisées dos llaves, tambien cruzados	
N16/3	more than two keys mehr als zwei Schlüssel plus que deux clefs llaves, tres o más	
N17	Knife Messer Couteau Cuchillo	
N18	Ladder Leiter Echelle Escalera	
N19	Lamp Lampe Lampe Lámpara	
N20	Lantern Laterne Lanterne Linterna	
N21	Mallet Schlegel Maillet Mazo	
N22	Nail Nagel Clou Clavo	
N23	Nutcracker Nussknacker Casse-noix Cascanueces	
N24	Plane Hobel Rabot Cepillo	

I P H		
N25	Pliers Zange Tenailles Tenazas	
N26	Plough Pflug Charrue Arado	
N27	Saw Säge Scie Serra	
N28	Scales, Waage	Balance, Balanza
N28/1	Scales, beam type, with triangular pans Balkenwaage mit Dreiecks-Waagschale Balance, bassins triangulaires Balanza, platillos triangulares	
N28/2	Scales, beam type, with circular pans Balkenwaage mit runden Waagschalen Balance, bassins ronds Balanza, platillos redondos	
N28/3	Scales, other beam type Balkenwaage, andere Typen Balance, autres types Balanza otro tipo	
N28/4	Steelyard Schnellwaage Balance romaine Balanza romana	
N28/5	Steelyard weight Schiebegewicht Contrepoids Pesa	
N29	Scissors, Schere	Ciseaux, Cincel
N29/1	Shears (with spring) Feder-Schere Forces, tondeuse Cortadora	
N29/2	Scissors (with pivot) Klappschere Ciseaux (paire) Tijeras	
N30	Scraper Schaber Racle Rasqueta	



N31	Scythe Sense Faux Guadaña	
N32	Shoe, Schuh	Soulier, Zapato
N32/1	Shoe (leather) Lederschuh Soulier de cuir Zapato de cuero	
N32/2	Clog Holzschuh Sabot Zueco	
N32/3	Sole of boot/shoe Sohle Semelle Suela	
N33	Sickle Sichel Faucille Hoz	
N34	Spade Spaten Bêche Azadón	
N35	Spectacles Brille Lunettes Gafas	
N36	Spiral drill Spiralbohrer Foret Barrena	
N37	Spur Sporn Eperon Espuela	
N38	Square Winkelmaß Equerre Escuadra	
N39	Torch Fackel Torche Antorcha	

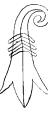
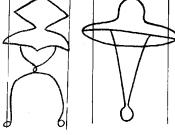
N40	Whip Peitsche Fouet Látigo	
N41	Yoke Joch Joug Yugo	
N42	Glove Handschuh Gant Guante	
N43	Quill Feder, Federkiel Plume Pluma	
N44	Clock, dial-plate Uhr, Zifferblatt Montre, cadran Reloj, esfera	
N45	Envelope Briefumschlag Enveloppe Sobre	
N46	Chaplet Rosenkranz Chapelet Rosario	
<u>O</u>	<u>Musical instruments</u> <u>Musikinstrumente</u>	<u>Instruments de musique</u> <u>Instrumentos musicales</u>
O1	Spherical bell Schelle Grelot Cascabel	
O2	Bell, Glocke	Cloche, Campana
O2/1	Bell, outline and clapper formed with a single piece of wire Glocke, Rand/Schwengel aus einem Drahtstück gebildet Cloche, bord et battant formés d'une seule pièce de fil Campana, borde y badajo formado por único hilo	
O2/2	Bell, outline and clapper formed with two or more pieces of wire Glocke, Rand/Schwengel aus mehreren Drahtstücken gebildet Cloche, bord et battant formés de plusieurs pièces de fil Campana, borde y badajo formado por varias piezas	
O3	Horn, Horn	Cor, Cuerno
O3/1	Horn, without baldric Horn ohne Kordel Cor sans cordelette Cuerno sin cuerda	

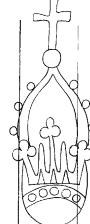
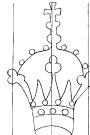
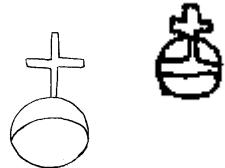
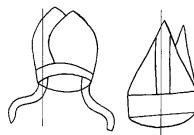
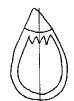
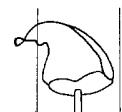


O3/2	Horn with baldric, Horn mit Kordel		Cor avec cordelette, Cuerno con cuerda
O3/2/1	Horn, with baldric, flat opening Horn mit Kordel, flache Mündung Cor avec cordelette, bouche simple Cuerno con cuerda, boca simple		
O3/2/2	Horn, with baldric, round opening Horn mit Kordel, Kreismündung Cor avec cordelette, bouche ronde Cuerno con cuerda, boca redonda		
O3/2/3	Horn, with baldric, oval opening Horn mit Kordel, ovale Mündung Cor avec cordelette, bouche ovale Cuerno con cuerda, boca ovalada		
O3/2/4	Horn, with baldric, and accessory sign(s) Horn mit Kordel und Beizeichen Cor avec cordelette et signe(s) accessoire(s) Cuerno con cuerda y signo(s) accesorio(s)		
O3/3	Bugle Bügelhorn Cor à spirale Cuerno espiral		
O4	Clarinet / Oboe Klarinette / Oboe Clarinette / Hautbois Clarinete / Oboe		
O5	Trumpet Trompete Trompette Trompeta		
O6	Violin Violine, Geige, Fiedel Violon Violin		
O7	Bagpipe Dudelsack Cornemuse Cornemusa		
O8	Lyra Leier Lyre Lira		
O9	Harp Harfe Harpe Arpa		
O10	Lute Lute		



P	<u>Containers</u> <u>Gefäße</u>	<u>Vases, emballages</u> <u>Vasos, recipientes</u>
P1	Barrel, Fass	Tonneau, Tonel
P1/1	Barrel Fass Tonneau Tonel	
P1/2	Keg, with cord Lägel, mit Seil Baril, avec corde Barril, con cuerda	
P2	Basket Korb Corbeille Cesto	
P3	Beaker, chalice, monstrance Becher, Kelch, Monstranz Coupe, gobelet, ostensorie Cubilete, copa, ostensorio	
P4	Bottle Flasche Bouteille Botella	
P5	Bucket, vessel Kessel, Kübel Cuve, seau Tina, sello	
P6	Jug, pot, vase, jar, Krug, Kanne, Vase	Pot, channe, vase, Pote, jarro, vaso
P6/1	Pot, without handle Krug ohne Henkel Pot sans anse Pote sine ansa	
P6/2	Pot, with one handle Krug mit einem Henkel Pot avec une anse Pote con una ansa	
P6/3	Pot, with two handles Krug, zweihenklig Pot avec deux anses Pote con dos ansas	
P7	Mortar Mörser Mortier Mortero	

P8	Flower-pot Blumenvase, Blumentopf Pot de fleurs Pote de flores	
P9	Bee-hive Bienenkorb Ruche Colmena	
Q	<u>Miscellaneous objects</u> <u>Vermischte Gegenstände</u>	<u>Objets divers</u> <u>Objetos diversos</u>
Q1	Bale of goods Warenballen Ballot Fardo	
Q2	Rod, whip Rute Verge Vara	
Q3	Tassel Troddele Houppe Borla	
R	<u>Insignia of rank, mace, sceptre, jewellery</u> <u>Rangabzeichen, Stäbe, Schmuck</u>	<u>Insignes de rang, batons, bijoux</u> <u>Insignia de rango, cetro, joya</u>
R1	Crook, bishop's crozier, Bischofsstab	Crosse, Cayado
R1/1	Shepherd's crook (whole) Krummstab (ganz) Crosse (entièbre) Cayado entero	
R1/2	Bishop's crozier Krümme Crosse (courbe) Cayado curvo	
R1/3	Basle crozier Baselstab Crosse de Bâle Cayado de Basilea	
R2	Cardinal's hat Kardinalshut Chapeau de cardinal Capelo cardenalicio	
R3	Crown, Krone	Couronne, Corona

R3/1	Crown without arches Krone ohne Bügel Couronne sans arches Corona sin arcos	
R3/2	Crown with arches, tall Krone mit Bügel, schmal Couronne avec arches, étroite Corona con arcos, forma estrecha	
R3/3	Crown with arches, wide Krone mit Bügel, weit Couronne avec arches, large Corona con arcos, forma ancha	
R4	Imperial orb Reichsapfel Globe impérial Globo imperial	
R5	Mitre (bishop's or abbot's hat) Mitra (Bischofs- oder Abtsmütze) Mitre (d'évêque ou abbé) Mitra	
R6	Ring Ring Anneau, bague Anillo	
R7	Sceptre Szepter Sceptre Cetro	
R8	Crown (papal) Papstkrone, Tiara Tiare (pape) Tiara	
R9	Wreath, garland Kranz Couronne, guirlande Corona, ghirnalda	
R10	Hat of Liberty (Phrygian bonnet) Freiheitsmütze (phrygische Mütze) Bonnet de liberté (phrygien) Gorra de libertad (frigia)	

R11

Fasces
Rutenbündel, Liktorenbündel
Faisceau
Fasces



S

Religious or magic symbols and signs
Religiöse oder magische Symbole und Zeichen

Signes religieux ou magiques
Signos religiosos o mágicos

S1

Cross,
Kreuz

Croix,
Cruz

S1/1 Egyptian cross (Ankh)
Henkelkreuz (ägypt.Kreuz, Anch)
Croix égyptienne (ankh)
Cruz egipcia



S1/2 Forked cross
Schächerkreuz
Croix fourchée (pairle)
Cruz ahorquillada



S1/3 Greek cross
Griechisches Kreuz
Croix grecque
Cruz griega



S1/4 Greek wide-edged (cloverleaf, anchor, crook) cross
Griechisches, breitrandiges (Kleeblatt-, Anker-, Krücken-) Kreuz
Croix tréflée, potencée, ancrée
Cruz trilobulada, potenciada, anclada



S1/5 Latin cross
Passionskreuz
Croix latine
Cruz latina



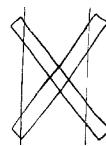
S1/6 Lorraine cross
Lothringerkreuz
Croix de Lorraine
Cruz lorena



S1/7 Papal cross
Papstkreuz
Croix papale
Cruz papal

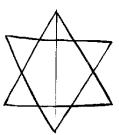


S1/8 St.Andrew's cross
Andreaskreuz
Croix de St.André
Cruz San Andrés

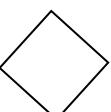


S1/9 St.Anthony's cross (Tau)
Antoniuskreuz (Tau)
Croix de St.Antoine (Tau)
Cruz en Tau (de San Antonio)



		
S1/10	Swastika Hakenkreuz Croix gammée Cruz gamada	
S2	Knot, Knoten	Noeud, Nudo
S2/1	Knot in a rope/string Knoten in Seil/Schnur Noeud dans une corde/ficelle Nudo en una cuerda	
S2/2	Quatrefoil knot Vierpassknoten Noeud quadrifolié Nudo cuadrifolio	
S2/3	Square knot Quadratknoten Noeud carré Nudo cuadrado	
S3	Hermes cross (single; in compositions: see trademarks) Hermesvier (allein; in Zusammensetzungen siehe Handelsmarken) Chiffre hermétique (quatre) seul (en compositions cf. marques de commerce) Cifra hermética (cuatro), sola (en composición, cf. marcas de comercio)	
S4	Hexagram, Star of David (see also 'Star') Davidsstern, Hexagramm (siehe auch 'Stern') Hexagramme, Etoile de David (cf. aussi 'Etoile') Hexagrama (estrella de David) (cf. también 'estrella')	
S5	Pentagram (see also 'Star') Pentagramm, Drudenfuss (siehe auch 'Stern') Pentagramme (cf. aussi 'Etoile') Pentagrama (cf. también 'estrella')	
S6	Nimbus Nimbus ('Heiligschein') Nimbe, auréole Nimbo, aureola	
S7	Freemasonry's signs Freimaurersymbole Signes de la Franc-Maçonnerie Signos masónicos	



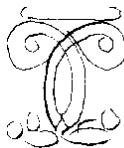
<u>T</u>	<u>Heraldry; Coat of arms; mason's marks; merchant's marks</u> <u>Heraldik; Wappen; Steinmetzzeichen; Handelsmarken</u>		
T1	Coat of arms, Wappen	Armoiries, Escudos	<u>Héraldique; armoiries; marques de tailleurs de pierre ou de commerce</u> <u>Heráldica, escudos, marcas de talladores de piedra o comercio</u>
T1/1	Coat of arms (non identified) Wappen (unbestimmt)	Armoiries (non identifiées) Escudos (no identificables)	
T1/2	Coat of arms (identified; in alphabetical order according to countries, towns and families) Wappen (bestimmt; in alphabetischer Reihenfolge nach Ländern, Städten und Geschlechtern)	Armoiries (identifiées; par ordre alphabétique selon pays, villes et familles) Escudos identificables, por orden alfabetico según paises, ciudades y familias	
T2	Flag, Fahne	Drapeau, Banderas	
T2/1	Flag (empty) Fahne (leer) Drapeau (vide) Bandera (vacía)		
T2/2	Flag (non identified) Fahne (unbestimmt)	Drapeau (non identifié) Bandera (no identifiable)	
T2/3	Flag (identified; in alphabetical order according to countries, towns and families) Fahne (bestimmt; in alphabetischer Reihenfolge nach Ländern, Städten und Geschlechtern)	Drapeau (identifié; par ordre alphabétique selon pays, villes et familles) Bandera identifiable, por orden alfabetico según paises, ciudades y familias	
T3	Mason's or merchant's marks, Steinmetzzeichen, Handelsmarke	Marques de tailleurs de pierre, ou de marchands, Marcas de talladores de piedra o comercio	
T3/1	Mason's or merchant's marks without Hermes cross Steinmetzzeichen, Handelsmarke ohne Hermesvier Marques de tailleurs de pierre ou de marchands sans le 'Quatre de chiffre' (4) Marcas de talladores de piedra o comercio sin cifra hermética (cuatro)		
T3/2	Mason's or merchant's marks with Hermes cross Steinmetzzeichen, Handelsmarke mit Hermesvier Marques de tailleurs de pierre ou de marchands avec le 'Quatre de chiffre' (4) Marcas de talladores de piedra o comercio con cifra hermética (cuatro)		
<u>U</u>	<u>Geometrical figures</u> <u>Geometrische Zeichen</u>		
U1	Circle Kreis Cercle Círculo		
U2	Rectangle Rechteck Rectangle Rectángulo		
U3	Rhomb Rhombus Losange Rombo		
U4	Square Quadrat Carré Cuadrado		
U5	Triangle Dreieck Triangle		



Triangulo

<u>V</u>	<u>Numbers; Numerals</u> <u>Zahlen, Ziffern</u>	<u>Nombres, chiffres</u> <u>Números, cifras</u>
V1	Roman numerals (in order of increasing values) Römische Ziffern (nach aufsteigenden Zahlwerten)	Chiffres romains (par ordre croissant) Números romanos en orden ascendente
V2	Arabic numbers/numerals (in order of increasing values) Arabische Ziffern (nach aufsteigenden Zahlwerten)	Chiffres arabes (par ordre croissant) Números árabes en orden ascendente
<u>W</u>	<u>Individual letters,</u> <u>Einzel-Lettern</u>	<u>Lettres isolées</u> <u>Letras aisladas</u>
W1	Letters - except gothic P - in alphabetical order; first capitals, then lower case Einzel-Letter, ausser Fraktur-P - in alphabetic order Reihenfolge; erst Versalien, dann Kleinbuchstaben	Lettres isolées, sauf lettre P gothique, par ordre alphabétique; en premier les majuscules, puis les minuscules Letras aisladas - excepto la P gótica - en orden alfabetico, primero mayúsculas, despues minúsculas
W2	Gothic letter P, Fraktur-P	Lettre P gothique, Letra P gótica
W2/1	Gothic letter P without forked stem Fraktur-P ohne Gabelfuss Lettre P gothique sans tige fourchée Letra P gótica sin pie bifurcado	
W2/2	Gothic letter P with forked stem, turned outwards Fraktur-P mit Gabelfuss, nach aussen gespreizt Lettre P gothique avec tige fourchée, tournée vers l'extérieur Letra P gótica con pie bifurcado, curvo hacia el exterior	
W2/3	Gothic letter P with forked stem, turned inwards Fraktur-P mit Gabelfuss, nach innen gekrümmmt Lettre P gothique avec tige fourchée, tournée vers l'intérieur Letra P gótica con pie bifurcado, curvo hacia el interior	
<u>X</u>	<u>Monograms; abbreviations with letters</u> <u>Monogramme; Abkürzungen mit Lettern</u>	<u>Monogrammes; abréviations par lettres</u> <u>Monogramas, abreviaturas con letras</u>
X1	Monograms, abbreviations with letters in alphabetical order according to the first letter occurring; first capitals, then lower case Monogramme und Abkürzungen in alphabetic order Reihenfolge der ersten Letter; erst Versalien, dann Kleinbuchstaben	Monogrammes et abréviations par lettres, par ordre alphabétique de la première lettre; en premier les majuscules, puis les minuscules Monogramas por orden alfabetico de la primera letra, primera las mayúsculas, despues las minúsculas
X2	Special monograms / ciphers Spezielle Monogramme und Letternverbindungen	Monogrammes et chiffres spéciaux Monogramas y cifras especiales
X2/1	IHS IHS IHS IHS	
X2/2	C C C C	

X2/3 Double C
Doppel-C
C double
C doble



X2/4 GR (Royal cipher)
GR
GR
GR



X2/5 FR
FR
FR
FR



X2/6 FWR
FWR
FWR
FWR



Y

Names; words
in full; in alphabetical order according to the way the name is written beginning with the first part; first capitals, then lower case
Namen; Wörter
ausgeschrieben; in alphabetischer Reihenfolge des ersten Namens/Wortes; erst Versalien, dann Kleinbuchstaben

Noms; mots
en entier; par ordre alphabétique du premier nom/mot; en premier les majuscules, puis les minuscules
Nombres, palabras
completas, por orden alfabético del primer nombre, primero las mayúsculas, después las minúsculas

Z

Unclassifiable watermarks
Wasserzeichen, nicht klassifizierbar

Filigranes non classifiables
Filigranas inclasificables

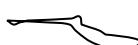
Z1

High, narrow forms
Hohe, schmale Formen
Forme haute, étroite
Forma alta, estrecha



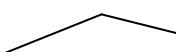
Z2

Wide, low forms
Breite, niedere Formen
Forme basse, large
Forma baja, ancha



Z3

Wire lines, straight
Drahtlinien, gerade
Lignes droites
Lineas derechas



Z4

Wire lines, curved
Drahtlinien, gebogen
Lignes courbées
Lineas curvas

