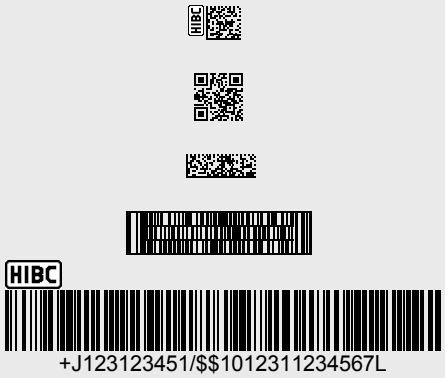
Health Industry Barcode

for unique identification of Medical products

Short form specification

- Unique data structure for short to long alpha numeric product codes
- Symbologies for marking large to smallest products
- ISO conforming specification
- Interoperability with any other coding system
- Suitable for any ISO Bar Code, 2d-Code and RFID

- *Trend from linear Barcode to 2D*



Health Care Barcode (HIBC)

HIBC identifies products uniquely where ever in the world.
HIBC is a compressed data structure for unique marking Health Care products. HIBC was invented 1986 offering an increased level of security that is not surpassed today for full filling the requirements of tracking and tracing. HIBC is recommended for worldwide application jointly with the alternative codes ASC and GS1 supported by the standard ISO 22742 for labeling product packages. The HIBC data structure is technology independent useful for any ISO AIDC symbology and RFID.
The Emblem HIBC attached to the code shows: Scan HIBC here!

Note: ISO powered RFID see separate specification

Health Care Barcode HIBC

➢ *HIBC for more than 2 to 5 digit (to 18) and alpha numeric product codes.*

Where GS1 kept the limited numeric code capacity in the range of 3 to 5 digits, HIBC is maintaining the extended capacity for variable number sets, which amounts 1 to 18 characters for the pure product code. Therefore HIBC is recommended for all Medical products of variable length and alpha numeric character set's.

➢ *Automatic recognition*

The system identifier (SI) for the HIBC structure is "+" and for GS1 the "FNC1". Both SIs are positioned prior to the data, guaranteeing interoperability between HIBC and GS1 according to ISO/IEC 15418 within the same system.

The structure of the Health Care Barcode (HIBC)

HIBC consists of the Company ID, packaging index and product number. The traceability data are located in the secondary code: Expiry date, Lot/Serial number and optional quantity (see table 1). The HIBC data structure is designed to be carried by Barcode, 2D and RFID.

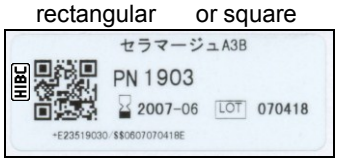
Illustration of a HIBC primary and secondary code concatenated by the separator "/".

Code 128 or same data with QR or Datamatrix ISO/IEC15417

rectangular or square

+J123**12345**1/$$**101231**1234567L

L--- Modulo 43 safety check
1234567-----Lot/Serial number
101231----------Expiry date 2010-12-31
/$$----------Separator and format characters
12345,1------Product code, up to 18 char. an, package ID
J123----------Registered Labeler Identification Code
+ ----------HIBC System Identifier ISO/IEC 15418 part DI's



Medical device with HIBC QR

Table 1) Secondary code stores traceability data in different formats (excerpt of HIBC spec. chapter 10.4)

#	HIBC Flag	Quantity flag	Qty. format	Exp. date flag	Expiry format	LOT field	LINK Char.	Mod43 Check Char.	sample **secondary** code with „Link"character L" (last character of Primary code)
1	+				YYJJJ	LOT	L	C	**+952713C001*L*G**
2	+$					LOT	L	C	**+$3C001*L*V**
3	+$$				MMYY	LOT	L	C	**+$$09953C001*L*7**
4	+$$			2	MMDDYY	LOT	L	C	**+$$20928953C001*L*J**
5	+$$			3	YYMMDD	LOT	L	C	**+$$39509283C001*L*K**
6	+$$			4	YYMMDDHH	LOT	L	C	**+$$4950928223C001*L*P**
7	+$$			5	YYJJJ	LOT	L	C	**+$$5952713C001*L*D**
8	+$$			6	YYJJJHH	LOT	L	C	**+$$695271223C001*L*I**
9	+$$			7		LOT	L	C	**+$$73C001*L*Y**
10	+$$	8	QQ		MMYY	LOT	L	C	**+$$82409953C001*L*L**
11	+$$	8	QQ	2	MMDDYY	LOT	L	C	**+$$82420928953C001*L*X**
12	+$$	8	QQ	3	YYMMDD	LOT	L	C	**+$$82439509283C001*L*Y**
13	+$$	8	QQ	4	YYMMDDHH	LOT	L	C	**+$$8244950928223C001*L*S**
14	+$$	8	QQ	5	YYJJJ	LOT	L	C	**+$$8245952713C001*L*R**
15	+$$	8	QQ	6	YYJJJHH	LOT	L	C	**+$$824695271223C001*L*W**
16	+$$	8	QQ	7		LOT	L	C	**+$$82473C001*L*5**
17	+$$	8	QQ				L	C	**+$$824*L*P**
18	+$$	9	QQQQQ		MMYY	LOT	L	C	**+$$90010009953C001*L*H**
19	+$$	9	QQQQQ	2-7	**Date formates row 19-25 like row 11-17**				
26	+$+					S/N	L	C	**+$+0001LC**
27	+$$+				MMYY	S/N	L	C	**+$$+09050001LC**
28	+$$+			2	MMDDYY	S/N	L	C	**+$$+20928050001LC**
29	+$$+			3	YYMMDD	S/N	L	C	**etc.**
30	+$$+			4	YYMMDDHH	S/N	L	C	
31	+$$+			5	YYJJJ	S/N	L	C	
32	+$$+			6	YYJJJHH	S/N	L	C	
33	+$$+			7		S/N	L	C	

Note: The complete HIBC Guidelines you will find under www.HIBC.de

Medical products *- Examples marked uniquely by Health Industry Barcode (HIBC)*

HIBC carried by stacked Code 128

Reduced Space HIBC for smallest *(Instruments, Vials, etc.)*

The following schematic illustrates the data s ation Mark (UIM) solution shared with other industries for Direct Product Marking (D , Precision Mechanics, etc.

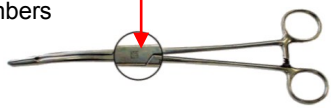
Unique data in Code 128, ISO/IEC 15417 or same data carried by QR or Datamatrix

rectangular or square

25SLHJ123**1234567**

1234567---Serial number alpha numeric
J123----------Registered Labeler Identification Code
LH----------*Issuing Agency Code Health Care (EHIBCC) ISO/IEC 15459
25S----------ISO/IEC15418 part DI Data Identifier for Unique Serial Numbers

A HIBC Unique Identification Mark (UIM) fulfills the requirement for world wide uniqueness. DIN V66401 specifies the application in detail.



**Issuing Agency Codes – see ISO/IEC 15459 part 2, list under: www2.nen.nl/nen/servlet/dispatcher.Dispatcher?id=167677*

Appendix*: One standard, one solution – different numbers, thanks to ISO TC 122*

In Health Care different data structures are in use for automatic data capture (ADC) and documentation. For product marking 3 major data structures are common on a worldwide bases, the EAN structure, coming from consumers area, HIBC developed for Health Care and ASC of the industries. All 3 are considered with the ISO standard “Product Packaging – linear and two dimensional symbols for product packaging - ISO 22742”. This standard was published by all National Standards Institutions connected to ISO TC 122 Packaging. The purpose of this standard is to achieve an optimum of efficiency by public available specifications and to avoid re-labeling and limitations for traceability data. The chart below shall illustrate common features and differences.

Table 2) Common features, differences between key structures of ISO 22742 EAN, HIBC, ASC

Feature	***EAN(GS1)***	***HIBC***	***ASC***
Capacity for product numbers.	5 digit (average)	1 to 18 char., an	1 to 20 char., an
System identifiers for	FNC1	+	Syntax 15434
Interoperable	YES	YES	YES
ISO 22742 for product packages	YES	YES	YES
ISO/IEC 15417 Code 128	YES	YES	YES
2D Code	RSS, Composite	any ISO symbol	any ISO symbol
RFID	YES	YES	YES
ISO/IEC 18004 QR Code JIS X0510	NO	YES	YES
ISO/IEC 15418 Application Data Identifiers	YES	YES	YES
ISO 22742 Product labeling	YES	YES	YES
Capacity for world wide tracing	YES	YES	YES
For consumers area (POS)	YES	NO	NO
For world wide tracing medical products	YES	YES	Instruments
Sample Code 128 with same data content	EAN 01112345671234521012345671710123 1	HIBC +J123123451/$$10123112345671	
Sample 2D	RSS Composite A	RSS Composite B	QR DATAMATRIX
printed same resolution, dot size 0,25mm			

The Emblem will be positioned to a HIBC horizontal or vertical for highlighting: Scan HIBC here!
Download ot he emblem graphics see www.hibc.de