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ODETTE
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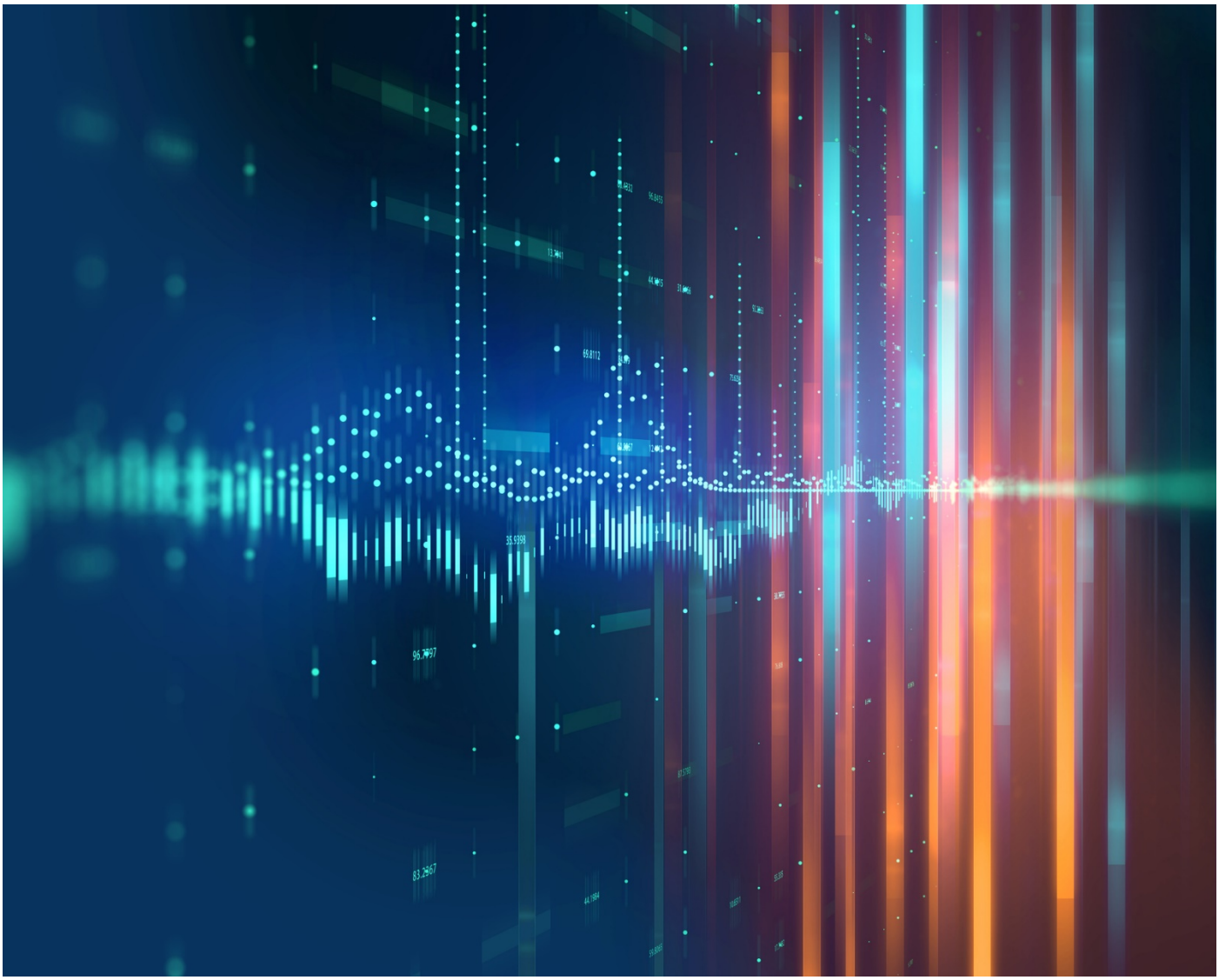
Odette Transport Label (OTL1)

Ref LL03 Version 1.4.1 Published March 2007



Changes from Version 1.4 to Version 1.4.1

Addition of Appendix D: Labelling Print Quality Requirements

Changes from Version 1.3.1 to Version 1.4

Chapter 3, page 3

Dock and Gate area (TDED = 3920 or 3921 or 3922 or 3923)

At the end of the paragraph, add the following note:

'Note: Data Element 3923 (Additional Destination Details) may be printed in the Dock and Gate area of the Parts Identification label.'

Chapter 3, page 5

Logistics reference area

The first sentence of the second paragraph should now read: 'This area is reserved for the supplier's part number.'

Chapter 4, page 1

Bar Code Symbology

"Code configuration": Delete the whole paragraph.

The 4 characters ($,/,+,%) may now be used in order to align the character set of code 39 with the character
set used for the EDI messages.

Chapter 5, page 1

Parts Identification label "S" (TDED = 7102)

First paragraph,

after '...contains only the product information.'

add 'In addition, the Dock and Gate field of the shipping section may be used to print the Additional Destination Details (Data Element 3923).'

Chapter 6, page 2

Summary of Transport Label Data

Should read:

"Date	2837	C	1 x an7**	7"
			=	

** This information is composed with an alphabetical character and the 6 numerical characters of the date.

The Odette Transport Label is intended to be used on all transport packages between two trading partners - supplier and buyer (as defined below). It is expected that in most cases the label will be used in conjunction with advance shipping information i.e. the Despatch Advice (AVIEXP) message which is transmitted between the parties electronically. For shipment of some steel products such as coils and sheets, a modified Odette Transport Label is used; specific information on this steel label is explained in Chapters 7 and 8.

Odette Transport Label Format

The Odette standard Transport Label is divided into two sections:

1) Shipping section containing information relating to destination (e.g. Buyer Address, Unloading gate etc). The Shipping section must be printed on all transport units.

2) Parts Identification section divided into two distinct parts containing information related to the product.

   (a) A bar coded area:

   Part Number, Quantity, Supplier Code, Serial Number.

   (b) A special data area:

   Part Description, Logistics Reference area, Date, Engineering Change etc.

   For containers or boxes separately labelled as described in Chapter 5, where only the parts identification section is needed and it is unsuitable because of its size, please refer to the small package label specification published separately.

Notes: For simplicity the terms 'supplier' and 'buyer' are used throughout this document when referring to the two parties. It should be understood that the despatcher of the goods will not always be the supplier nor will the recipient always be the buyer.

The term 'transport unit' refers to any item that can be labelled for transportation. This could be, for example: a container comprising numerous packages; a single package; an unpackaged part, etc.

SHIPPING SECTION

Field	Description
Receiver	Buyer's unloading location
Dock/Gate	Buyer's final delivery point
Document No.	Supplier's reference number e.g. advice note number, AVIEXP number, buyer's order number or DELINS number
Gross Wt.	Total transport unit weight
Net Wt.	Material weight within transport unit
No. of boxes	Number of packages within one transport unit
Supplier Address	Supplier's name and address, country of origin.

PARTS IDENTIFICATION SECTION

Bar Coded Area

Field	Description	Bar Code Identifier
Part No.	Buyer's Part number	P
Quantity	Package or transport unit Quantity	Q
Supplier	Supplier code	V
Serial Number	Supplier package or transport unit identification number	S,M,G

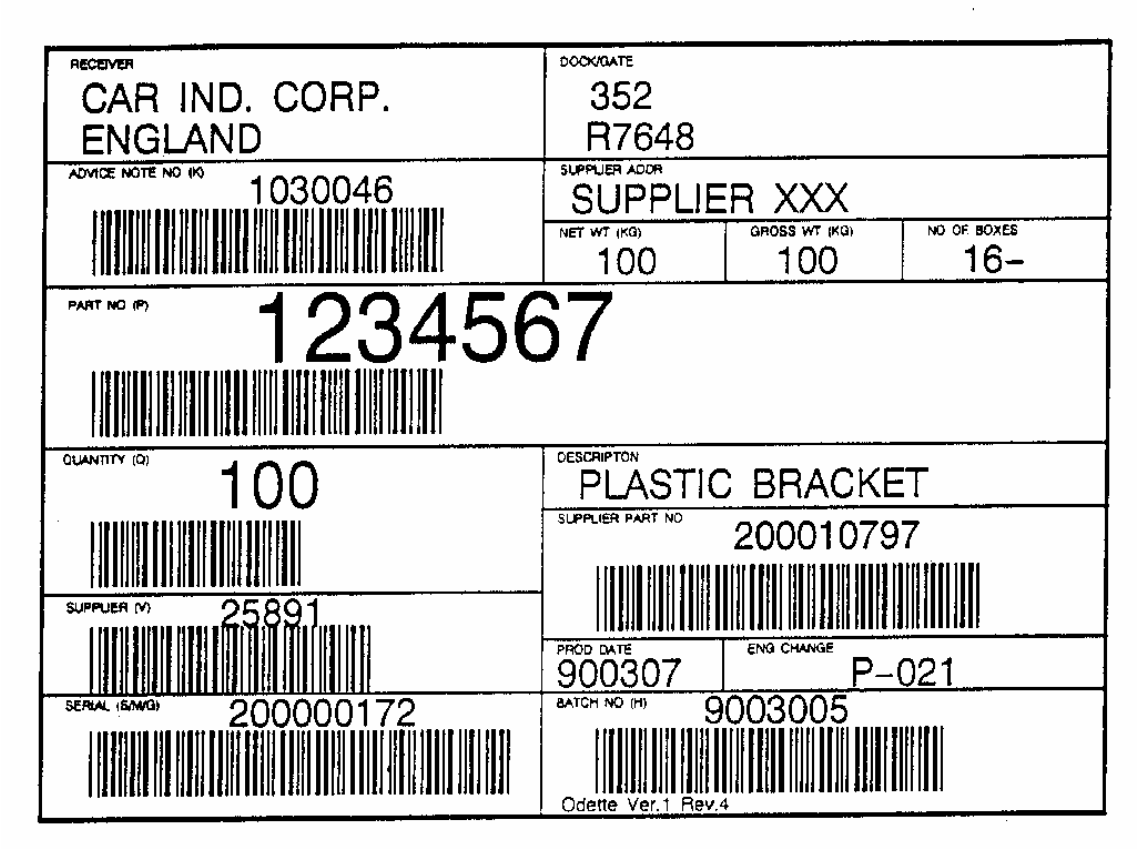
Note: For a detailed explanation of varying bar code identifiers for Serial Number, see Chapter 5.

Special Data Area

Field	Description
Description	Buyer's part description
Logistics ref.	Supplier's part number, Kanban number, transport unit code etc.
Engr Change	Buyer's engineering change number
Date	Material production date, despatch date or latest date for use.
Batch no.	Supplier's identification for batch of produced VSP-parts (Vital Safety Parts) and/or AQP mark for quality assured parts. Bar coded, with identifier "H"
Version/Source Indicator	One line as specified, to identify Odette as source of Label

The use of non-mandatory data items within the Shipping Section and Special Data Area is to be agreed between supplier and buyer. No alternative data other than that specified is permitted, i.e. where data fields are not used they must be left blank.

The illustration below (not actual size) shows an example of the Label as applied within Volvo Car Corporation.



The format of the Odette Transport Label is A5 (210 x 148 mm). This format may, if required, be printed on larger paper size, e.g. A4. The label paper must be white with black printing, with minimum (Print Contrast) PCS=75. To minimise the risks of distortion it is recommended that label paper - or in the case of composite paper, adhesive and release paper together - is 160-170 g/m2 and weather-resistant. If the adhesive label is glued on a surface, paper may be of lower weight (e.g. 80 g/m2). The label must be durable enough to ensure readability at its destination.

Printing

Normally all bar coded areas are printed left justified (see illustrations). When the label is carried in the holder on Odette recommended containers, it may be necessary to centralise the bar codes in their respective areas to provide the minimum quiet zone essential to successful scanning. This practice is, of course, only possible when the number of characters in each element of data is less than the maximum specified.

Tags (Hang Tags)

The tag size must be the same as described plus the material necessary to add a reinforced eyelet.

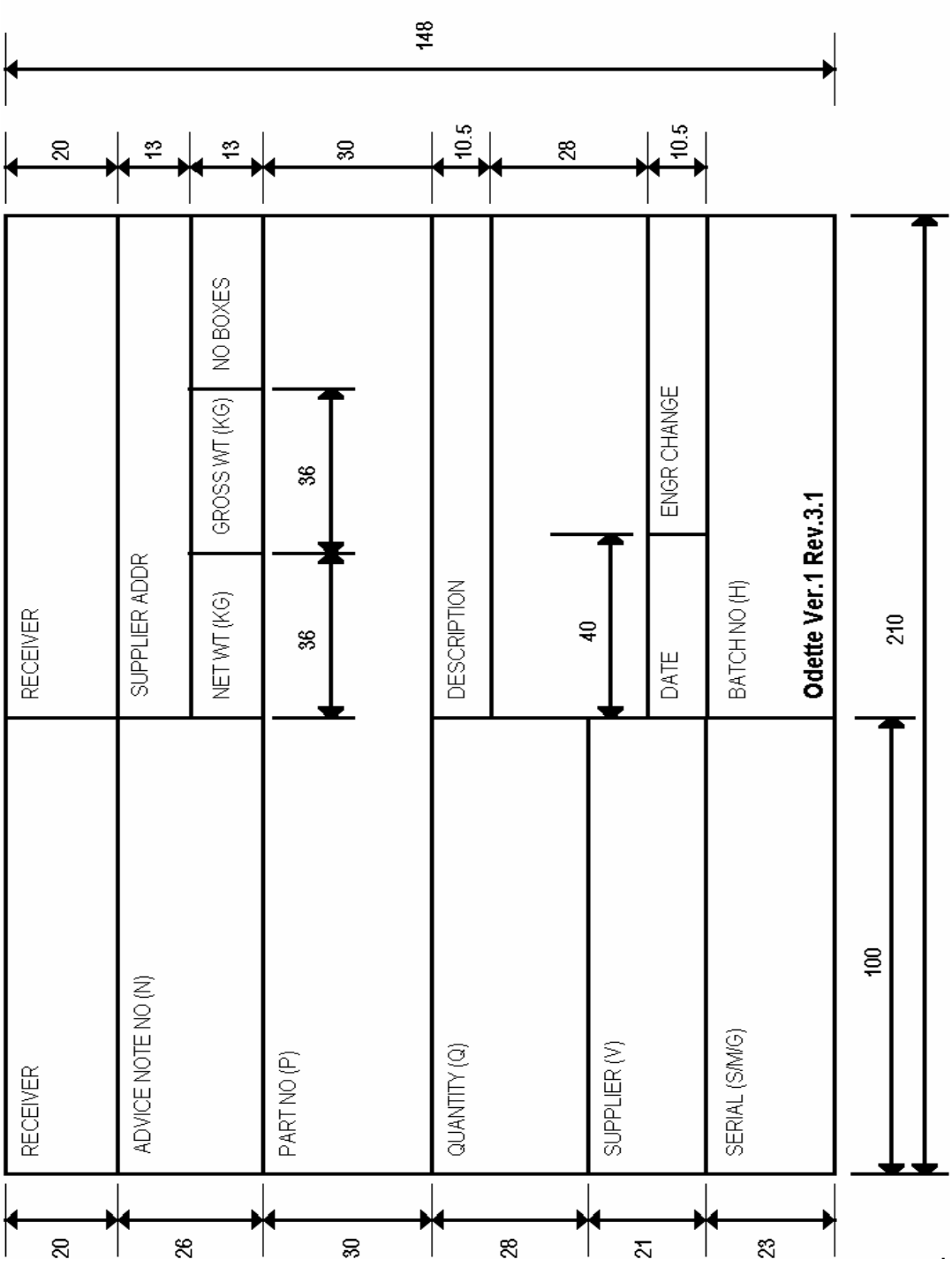
Affixing the label

Placing of the label on the transport unit is to be agreed between the partners, according to internal company standards.

To assist readability and automatic scanning, the label should be secured horizontally, when the package is in its normal position. Securing methods, e.g. staples or the addition of stickers (Quality Assurance, Safety Item) must be used in such a way that readability is not impaired.

Adhesive labels may be pressure-sensitive or dry-gummed as long as adherence to the package substrate is assured.

The illustration below is not to actual size.



The part number, quantity, supplier code and serial number are mandatory except for mixed load master labels when part number and quantity are not used. The data must be printed in both bar code and human readable characters. As data will vary in number of characters, that indicated in the specification is a maximum based on the recommended font - Helvetica Bold.

Because space is a limitation, there are differences between the characters specified for label fields and those specified in the UN Trade Data Element Directory (referred to within this publication as the TDED) which is the basis of field lengths specified in the Despatch Advice message (AVIEXP) or any other related Odette messages. The TDED tag numbers used in this document are intended to relate label data to AVIEXP data. It is envisaged that the permissible label field lengths are sufficient to satisfy most requirements.

Wherever possible Odette uses data elements within the TDED. Where data requirements are not met by the TDED, Odette has developed provisional data elements, identified by a second digit of 8 or 9 in the four character numeric tag number. These have been submitted for inclusion within the TDED. Where Odette provisional data elements have been accepted for inclusion in the TDED, the provisional tag number is changed to a permanent number without 8 or 9 as second digit. In these cases, both the accepted TDED number and the previous Odette provisional tag number are shown in this document.

Data contained on the Transport Label must, in case of established data transmission, be consistent with data covered in the Despatch Advice message.

Conditional data fields which are not required by agreement between supplier and buyers must be left blank.

Non-significant zeros and blanks in the data string should be suppressed, when the bar codes and/or human readable characters are printed.

Type of font

Any readable character set can be used, but Odette recommends the use of one of the following listed types of fonts for printing the information on the label:

1) Helvetica bold
2) ISO 3098 Part 1, standard character set, lettering B vertical.

It is recommended to limit the number of character sizes, to avoid unnecessarily large memory space in printers. The width of characters used for printing the transport label depends on the length of information in the fields, but as wide and as bold as possible.

The recommended character heights are: 1.5 2.5 5.0 7.0 13.0 (mm)

Printed characters must be as close to recommended sizes as possible, depending on printer capability.

Data Areas and Titles

Each data area is to be separated by thin lines and must contain its title and data identifier, if appropriate, in the upper left hand corner, as shown in the illustrations. Outer border lines should not be printed within the active A5 format area. Titles of data areas may be printed in the supplier's language with 1.5 mm high characters.

Data Identifier Codes

The format of each element of bar code is a Starter Character followed by the Data Identifier followed by the data and end character (see Chapter 4). The Data Identifier, as the name implies, identifies the data element, and is obviously essential when more than one element of data is being scanned. The Data Identifier is omitted from the human readable characters but is printed to the right of the title for each data area (see illustrations). The Data Identifier is a single alpha character or one, two or three numeric digits followed by a single alpha character (nnna). The first alpha character following the Start Code is always the last, or only, character of the Data Identifier.

The Data Identifiers in this document represent a subset of those in the FACT (Federation of Automatic Coding Technologies) Data Identifiers Standard (FACT DI-Standard). Data identifiers printed underlined are those complying with the FACT DI-Standard; others will be changed in a future publication.

The FACT DI-Standard can be obtained from AIM Europe (Automatic Identification Manufacturers association) or the Odette Secretariat in London.

P - Part number
C - Continuation of long part numbers, if required
Q - Quantity
V - Supplier code
S - Unique serial number - see chapter 5
M - Unique serial number - see chapter 5
G - Unique serial number - see chapter 5
K - Buyer's order number
16K - DELINS message number
15K - KANBAN card number
5K - Part consignment number
2W - Manufacturing reference number
B - Package reference number (type of package)
1B - Buyer's transport unit ID (returnable container ID)
I - VIN number, the full Vehicle Identification Number (not used)
2I - Vehicle identification number, abbreviated VIN number
20S - Additional traceability code assigned by the buyer
e.g. sequence number for cars on the assembly line.
30S - Additional traceability code assigned by the manufacturer
2L - Receiver's location (dock/gate)
H - Batch number
N - Advice note number

Receiver area (TDED = in the CSG segment, (3036+3124) ex 3132; or (3920+3124) ex 3920)

The destination name and address as designated by the buyer. Human readable characters only. Characters will be bold and 7 mm high where allowing for 2 lines of 20 characters. Alternatively, where additional address information is
required, characters 5 mm high may be used which allows for 3 lines of 27 characters.

Dock and gate area (TDED = 3920 or 3921 or 3922 or 3923)

Final destination point, the name and place to which the goods are to be finally delivered. Destination and gate can be coded. At the buyer's request, information may be printed in one of the following ways:

1) Human readable characters only

A: 1 line, 13 mm high, 12 characters maximum
B: 2 lines, 7 mm high, 21 characters maximum
C: 3 lines, 5 mm high, 29 characters maximum

2) Human readable characters and bar code

A: Bar code and human readable on one line 5 characters 13 mm high.
The human readable characters must be to the right of the bar code, separated with a quiet zone.
The bar code must be prefixed by the identifier "2L" Receiver's location.

B: Bar code with human readable characters above, maximum 6 characters 5 mm high. Bar coded information includes country and geographical district, prefixed by '2L' Receiver's location. Additional human readable characters can be printed to the right of the area in 3 lines, 5 mm high, 12 characters maximum.

Note: Data Element 3923 (Additional Destination Details) may be printed in the Dock and Gate area of the Parts Identification label.

Document number area

To be used for shipping reference designated by the buyer; otherwise left blank. The reference may be printed in bar code and allows a maximum of 9 characters plus the data identifier. The human readable characters are printed above the bar code with 7 mm high.

The shipping reference can be one of the following:

Data Identifier	"N"	=	Advice Note Number or AVIEXP number (TDED = 1128)
	"K"	=	Order Number (TDED = 1022 ex 1804)
	"16K"	=	DELINS Number (TDED = 1004)

The description must comply with the data used, i.e. either Advice Note Number, AVIEXP Number, Order Number or DELINS Number and be printed in the upper left corner in 1.5 mm high characters.

Supplier's address area (TDED = in the CDT segment, (3036+3124) ex 3336; or (3412+3124) ex 3860)

Name and shipping address of the supplier, and country of origin designated by the supplier. Human readable characters 5 mm high and maximum 29 characters.

Net weight area (TDED = 6160)

Weight of goods in (kg) or (lb) excluding transport packaging. 7 mm high, maximum 5 characters. Unit of measurement must be printed in the title of the field in brackets.

Gross weight area (TDED = 6292)

Weight of goods in (kg) or (lb) including transport packaging. 7 mm high, maximum 5 characters. Unit of measurement must be printed in the title of the field in brackets.

Number of boxes area

Number of boxes on the transport unit. 7 mm high, maximum 5 characters.

Part number area (TDED = 7304)

Part number designated by the buyer for the product in the package. The human readable characters must be bold and 13 mm high and printed above the bar code symbol. Depending on the nominal dimension of the bar code symbol, part numbers of varying lengths can be printed on one line. The maximum bar coded part number that can be printed in the available space is 24 characters plus the data identifier (P).

At the buyer's request, the bar code symbol for the Part Number may be split into two sections on the same line, the first bar code prefixed by the data identifier (P) and the second by the data identifier (C) for continuation.

At the buyer's request, a sign for safety items (VSP) may be added at the rightmost in the part number field, either as a printed graphic symbol or as a sticker. If the symbol is printed, it must be very bold or in reverse graphics. The safety item symbol is a circle 20 mm to maximum 30 mm diameter, with an inscribed equilateral triangle (see illustration).

Quantity area (TDED = 6853)

Quantity in the package. The human readable characters must be 13 mm high, printed above the bar code symbol.

The maximum number of digits that can be printed in the available space is 9 characters plus the data identifier (Q).

When the unit of measurement is pieces, no notation is required. When the unit of measurement is not pieces (e.g. kilograms, pairs, meters, etc) it must be noted in human readable form only. When used, the unit of measurement must be directly to the right of the human readable quantity and must be 5 mm high. The unit of measurement must not be bar coded. The unit of measurement specifier in the TDED (= 6410) must be used.

Description area (TDED = 7008)

Mandatory plain language description of articles or products, designated by the buyer or according to agreement between supplier and buyer, printed bold 7 mm high, maximum 22 characters or 5 mm high, 30 characters.

Logistics reference area

Information for the improvement of logistics between supplier and his buyers. The human readable characters must be bold and 13 mm high. The bar code symbol must be directly below the human readable characters.

This area is reserved for the supplier's part number. However, if agreed by the supplier, the area may be used to print alternative data as specified by the buyer. There are nine data options of which up to 3 may be printed in 3 lines of human readable characters which are 5, 7 or 13 mm high. If bar coded data is required, then only one item of data can be printed. The data options are as follows:

1) Supplier's part number and hazard code or symbol. The supplier's part number (TDED = 7194 ex 7810) is printed with bold 7 mm high, maximum 22 characters; or 13 mm high, maximum 10 characters; or bar coded with maximum 10 characters plus data identifiers "30S" and human readable characters of 13 mm high.

2) KANBAN card number (TDED = 1420 ex 1860), maximum 10 characters plus data identifiers "15K".

3) Part Consignment number (TDED = 1310), maximum 10 characters plus data identifiers "5K".

4) Manufacturing reference number (TDED = 7905), maximum 10 characters plus data identifiers "2W".

5) Package reference number (TDED = 1906), maximum 10 characters plus data identifier "B".

6) Buyer's transport unit identification number (TDED = 1438 ex 1907), maximum 10 characters plus data identifiers "1B".

7) Unique abbreviated Vehicle Identification Number (VIN) (TDED = 1844), maximum 10 characters plus data identifiers "2I".

8) Sequence number for specific car on assembly line (TDED = 7910), maximum 10 characters plus data identifiers "20S".

9) Date and Time for assembly in the car plant (TDED = 2803 and 2067 ex 2804), printed only in human readable characters maximum 12 and 13 mm high.

Supplier code area (TDED = 3337 or 3347, or 3296 ex 3803)

In the absence of a unified European Supplier coding system at this point in time, the supplier code is defined as the buyer's designated supplier code. The human readable supplier code characters must be 5 mm high. The bar code symbol for the supplier code must be directly below the human readable characters. The maximum length anticipated for the supplier number is ten (10) characters plus the data identifier "V".

Date area (TDED = 2837)

Date of production, despatch date or date for latest use of the product. The date must be printed with 7 mm high characters in the format YYMMDD (Y = year, M = month, D = day) preceded by the character "P", "D" or "U".

e.g.	Production date	P YYMMDD
	Despatch date	D YYMMDD
	Latest date for use	U YYMMDD

Engineering change area (TDED = 1376 ex 1843)

Designated by receiver to specify engineering changes, as agreed between buyer and supplier. Information may be coded (e.g. P-04) or in clear (e.g. "pre serial" etc). Printed only in human readable characters, with bold 7 mm high and maximum 14 characters.

Serial number area (TDED = 7246 ex 7812; or 7102)

The serial number must be a unique number (not necessarily in sequential order) assigned by the supplier, not the buyer. Suppliers must avoid repeating serial numbers within at least one year. Each shipping container or pack bearing the Odette Transport Label must have a unique serial number. For S, M and G separate sequences may be used. In this way each container, regardless of content or destination, can be differentiated from others.

The human readable characters must be 5 mm high. The bar code symbol for the serial number must be directly below the human readable characters. The maximum length of the serial number must be nine (9) numeric characters plus the data identifier (S, M or G).

Identifiers S, M or G are assigned according to label usage:

1. (S) Part Identification labels, on boxes and cartons, and master labels for Standard transport units.

2. (M) Master label Multiple, Common Item packs. In cases where a transport unit holds several packages (labelled with S identifier) each containing the same part.

3. (G) Master label Mixed Item Loads. In cases where a transport unit holds several packages (labelled with S identifier) which do not all contain the same part.

The supplier name, city, country and postal code (TDED = in the SDT segment, 3036 ex 3346 or 3412 ex 3824; and if using MDT segment, 3036 ex 3280 or 3412 ex 3844) must be directly below the bar code symbol and should be 2.5 mm high, 29 characters.

A detailed description of label usage is given in chapter 5.

Batch number and Indicators area

Batch number (TDED = 7338)

Reference number assigned by the manufacturer to designate grouping of products within the same production batch. The batch number may be printed in bar code if required by the receiver. Where only human readable characters are used they must be bold and 13 mm high, maximum 12 characters. When the Batch Number is bar coded, the bar code symbol must be directly below the human readable characters, maximum 10 characters plus data identifier "H". Human readable characters must be printed 5 mm high.

Indicators

Where the Batch code length permits, the area may be used for the Quality Assured "AQP" sign and the VSP symbol, to be defined by the buyer or according to national regulations (see Part Number Area). Marks may be printed as graphic symbols or applied as stickers. Stickers must be affixed so as not to impair reading of printed bar codes (quiet zones and bar codes).

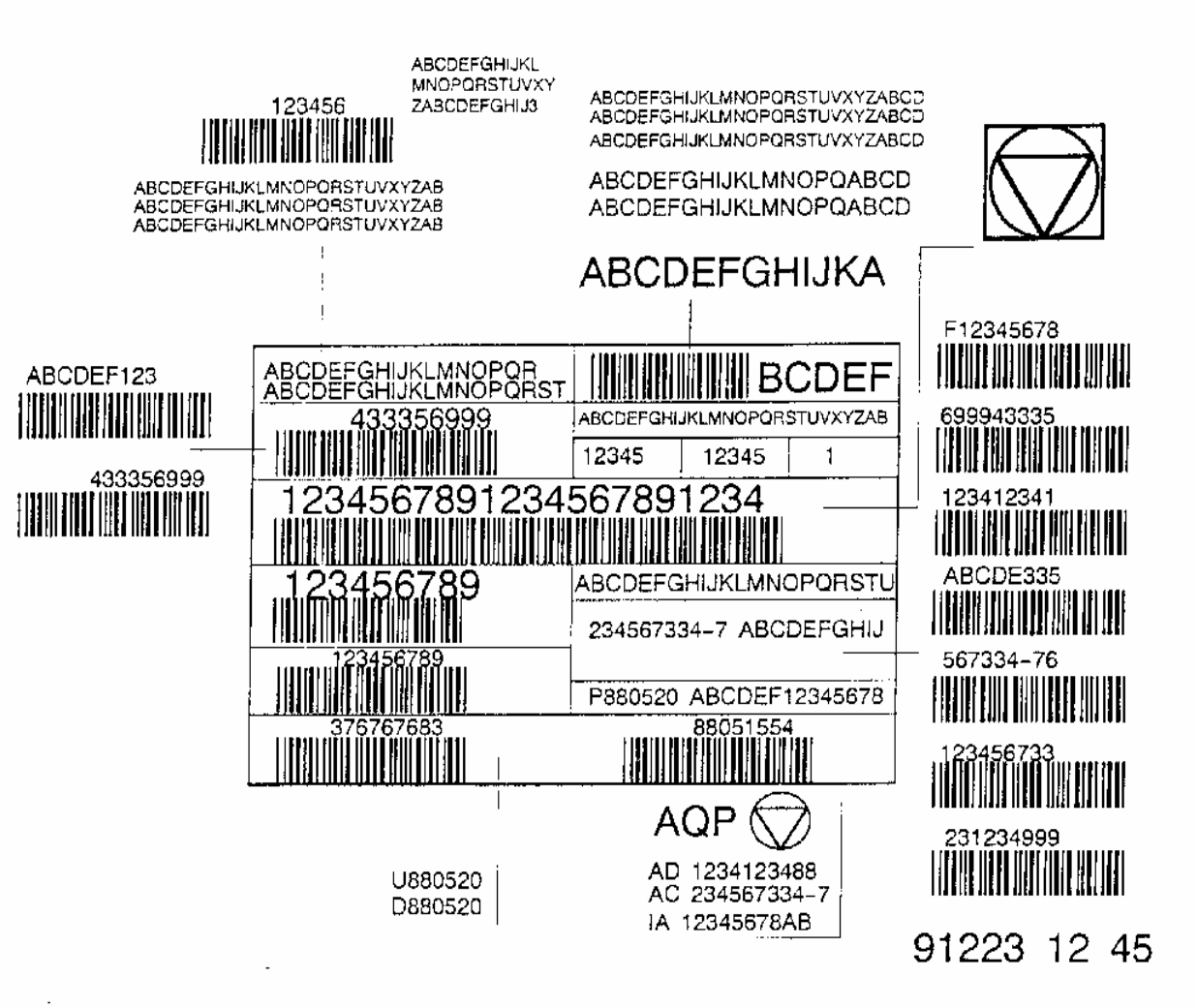
Version/Source Indicator

This line indicates the exact version and source of the Label. To appear on one line, just below the batch number area, in the same font as the rest of the label, 18 characters in human readable 2.5mm character size, exactly as follows:

Odette Ver.1 Rev.4

A summary of data may be found in Chapter 6.

The illustration below is not shown to actual size.



Bar codes must be of the 3-of-9 (code 39) type with the following requirements:

Code Density and Dimensions

The bar heights must be 13 mm high, or as near as possible depending on printer capability. For each bar code symbol, the average width of the narrow elements must be:

within the range of [X] = 0.33 mm to 0.43 mm element with tolerance of
[t] = +-0.11 mm to +-0.15 mm, which is a function of the average narrow element with [X] and the element ratio [N].

$$t = +- 4/27 (N - 2/3)X$$

The ratio of the nominal width of the wide elements to the nominal width of the narrow elements must be 3:1 with an allowable range of 2.8:1 to 3.2:1.

The table below shows tolerances for various commonly used dimensions:

Average Narrow Element Width [X] (mm)	Average Wide Element Width (mm)	Element Ratio [N]	Element Tolerance [t](mm)
0.330	0.991	3.0	+- 0.11
0.381	1.143	3.0	+- 0.13
0.432	1.295	3.0	+- 0.15

To achieve maximum first time read rates, the code height must be at least 15% of overall code length. This means that for optimal bar code reading, codes longer than 13 characters must be kept to a minimum.

In this specification all codes are 13 mm high.

Inter-character gap

The space between two characters in code 39 [I]. In printing, the inter-character gap should be as close to the average narrow element width as is practical.

$$I (min) = 1.0 X – t$$

Quiet zones

Begin and end margins (quiet zones) must be at least 6.4 mm.

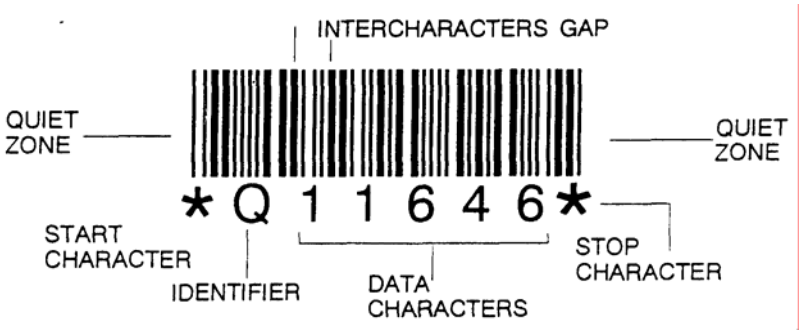
Quality Assurance Requirements

It is the responsibility of the supplier to provide bar coded labels that meet these specifications. There is equipment available to verify that bar code symbols meet these requirements.

For more comprehensive information on Code 39, this document refers to the USS Code 39 document, originating from AIM Europe.

The illustrations below are not shown to actual size.

CHAR	PATTERN	BARS	SPACES	CHAR	PATTERN	BARS	SPACES
1		10001	0100	M		11000	0001
2		01001	0100	N		00101	0001
3		11000	0100	O		10100	0001
4		00101	0100	P		01100	0001
5		10100	0100	Q		00011	0001
6		01100	0100	R		10010	0001
7		00011	0100	S		01010	0001
8		10010	0100	T		00110	0001
9		01010	0100	U		10001	1000
0		00110	0100	V		01001	1000
A		10001	0010	W		11000	1000
B		01001	0010	X		00101	1000
C		11000	0010	Y		10100	1000
D		00101	0010	Z		01100	1000
E		10100	0010	-		00011	1000
F		01100	0010	*		10010	1000
G		00011	0010	SPACE		01010	1000
H		10010	0010	START/STOP		00110	1000
I		01010	0010	$		00000	1110
J		00110	0010	/		00000	1101
K		10001	0001	'		00000	1011
L		01001	0001	\		00000	0111



The following is a guide to the use of Parts Identification, Master and Mixed Loads labels. The specific use of these types of label should be established between partners, i.e. between supplier and buyer.

Parts Identification label "S" (TDED = 7102)

Parts Identification labels can be produced and used in the manufacture and/or storage of the part prior to despatch. If the data existing on the label meets the buyer's requirements for despatch purposes and the part forms a transport unit, then the "shipping section" could be printed at the despatch point to provide a complete Transport Label. Otherwise an additional Master Label is required. The Parts Identification label contains the product information.

In addition, the Dock and Gate field of the shipping section may be used to print the Additional Destination Details (Data Element 3923). The bar coded Serial Number on the label must be prefixed by "S".

For containers or boxes separately labelled as described, where only the parts identification section is needed and it is unsuitable because of its size, please refer to the small package label specification.

Master Label for transport unit "S" (TDED = 7102)

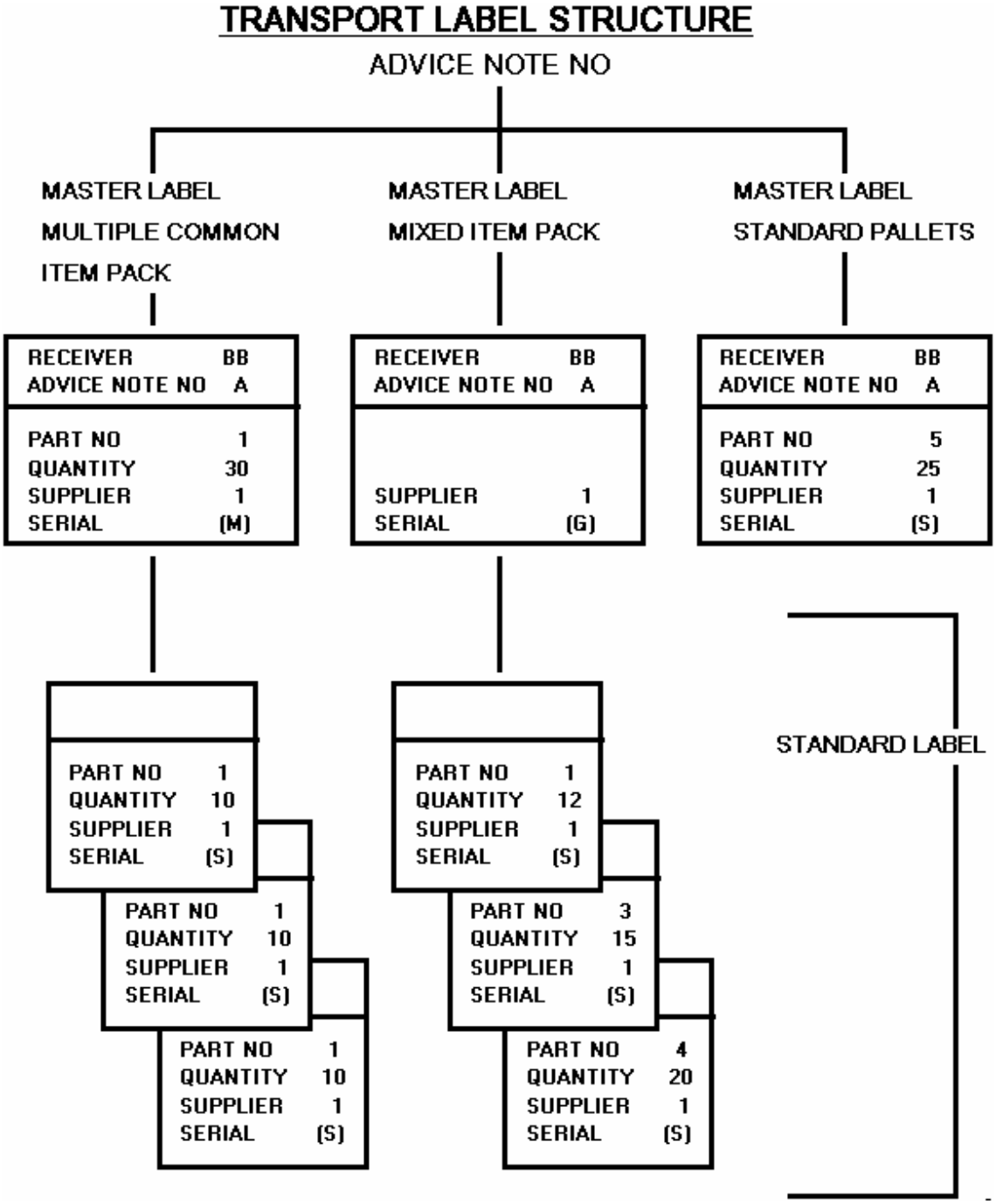
Transport label to be used on all transport units containing the same part number or separate packages with the same part number when each package is not labelled with a "Parts Identification" label (see above). The full Odette Transport Label must be attached by the supplier to the transport units prior to shipment to a buyer. The bar coded Serial Number on the label must be prefixed by "S".

Master Label Multiple, Common Item Pack "M" (TDED = 7246, ex 7812)

Master labels must be used where a number of common item packages are loaded within the same transport unit. Each package is previously labelled with a "Parts Identification" label. The quantity on the "Master" Label must be the sum of the quantities within all the packages. The transport unit must be labelled with the full Transport Label. The bar coded Serial Number on the label must be prefixed by "M". Individual packages may have a prefix of "S".

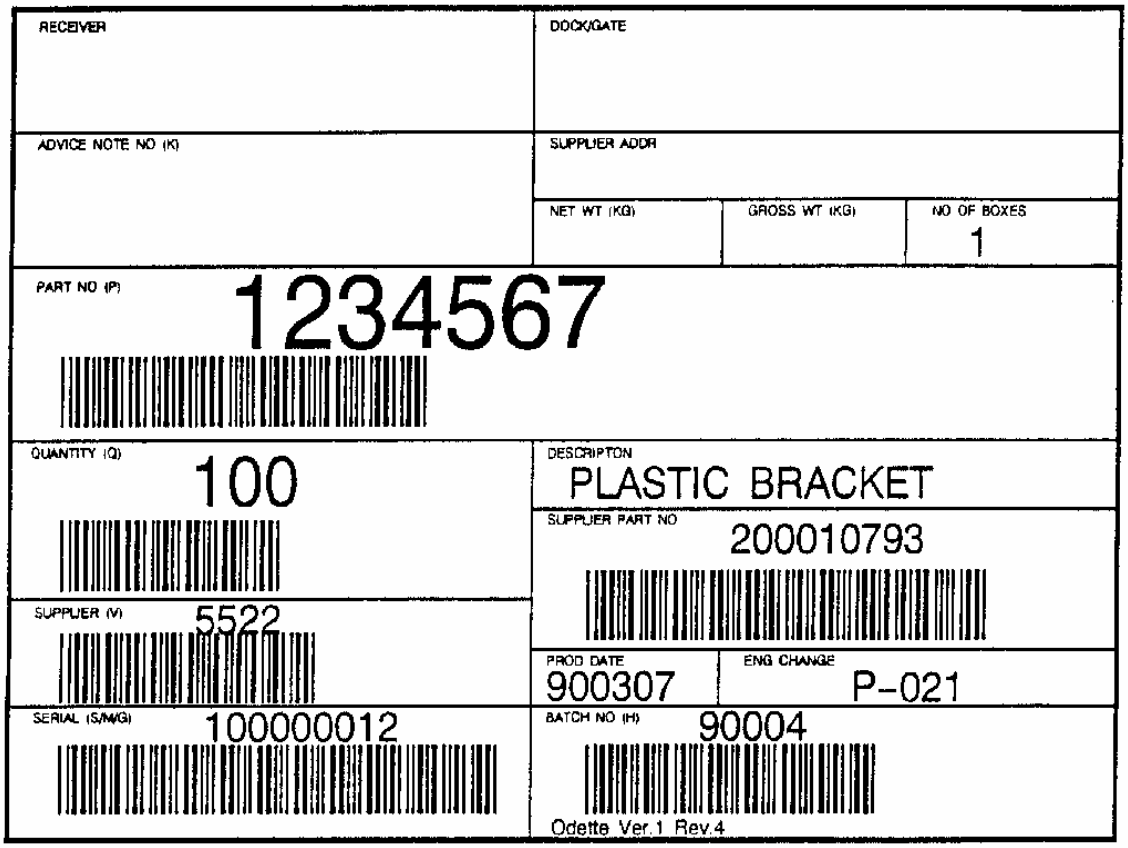
Master Label Mixed Item Pack "G" (TDED = 7246, ex 7812)

Mixed Item Loads labels must be used where a number of packages with different part numbers are loaded within the same transport unit. Each package must be labelled with a "Parts Identification" label. The transport unit must be labelled with the full Transport label on which the Part Number and Quantity fields are left blank. The Serial Number on the label must be prefixed by a "G". Individual packages may have a prefix of "S".

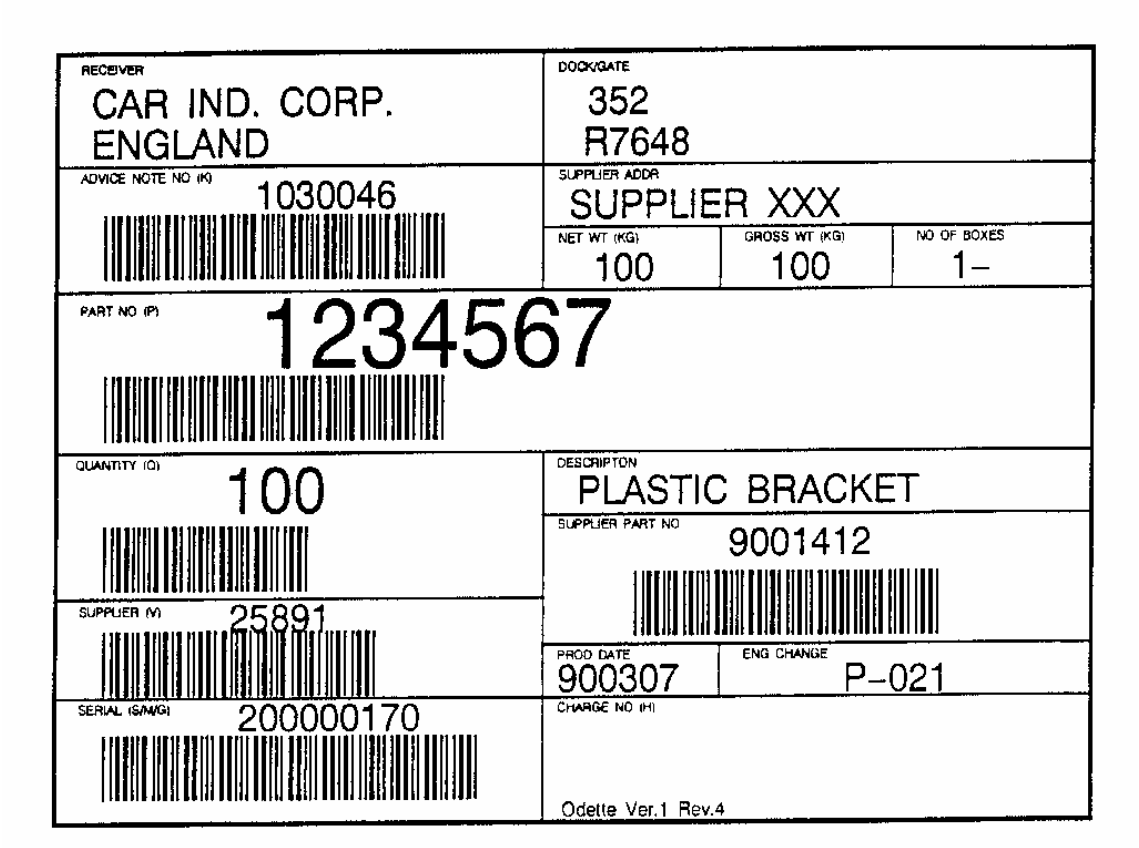

TRANSPORT LABEL STRUCTURE
ADVICE NOTE NO
MASTER LABEL
MULTIPLE COMMON
ITEM PACK
MASTER LABEL
MIXED ITEM PACK
MASTER LABEL
STANDARD PALLETS
RECEIVER BB
ADVICE NOTE NO A
PART NO 1
QUANTITY 30
SUPPLIER 1
SERIAL (M)
RECEIVER BB
ADVICE NOTE NO A
SUPPLIER 1
SERIAL (G)
RECEIVER BB
ADVICE NOTE NO A
PART NO 5
QUANTITY 25
SUPPLIER 1
SERIAL (S)
PART NO 1
QUANTITY 10
SUPPLIER 1
SERIAL (S)
PART NO 1
QUANTITY 10
SUPPLIER 1
SERIAL (S)
PART NO 1
QUANTITY 10
SUPPLIER 1
SERIAL (S)
PART NO 1
QUANTITY 12
SUPPLIER 1
SERIAL (S)
PART NO 3
QUANTITY 15
SUPPLIER 1
SERIAL (S)
PART NO 4
QUANTITY 20
SUPPLIER 1
SERIAL (S)
STANDARD LABEL

The following four illustrations (not to actual size) show examples of the Label as applied within Volvo Cars Corporation.

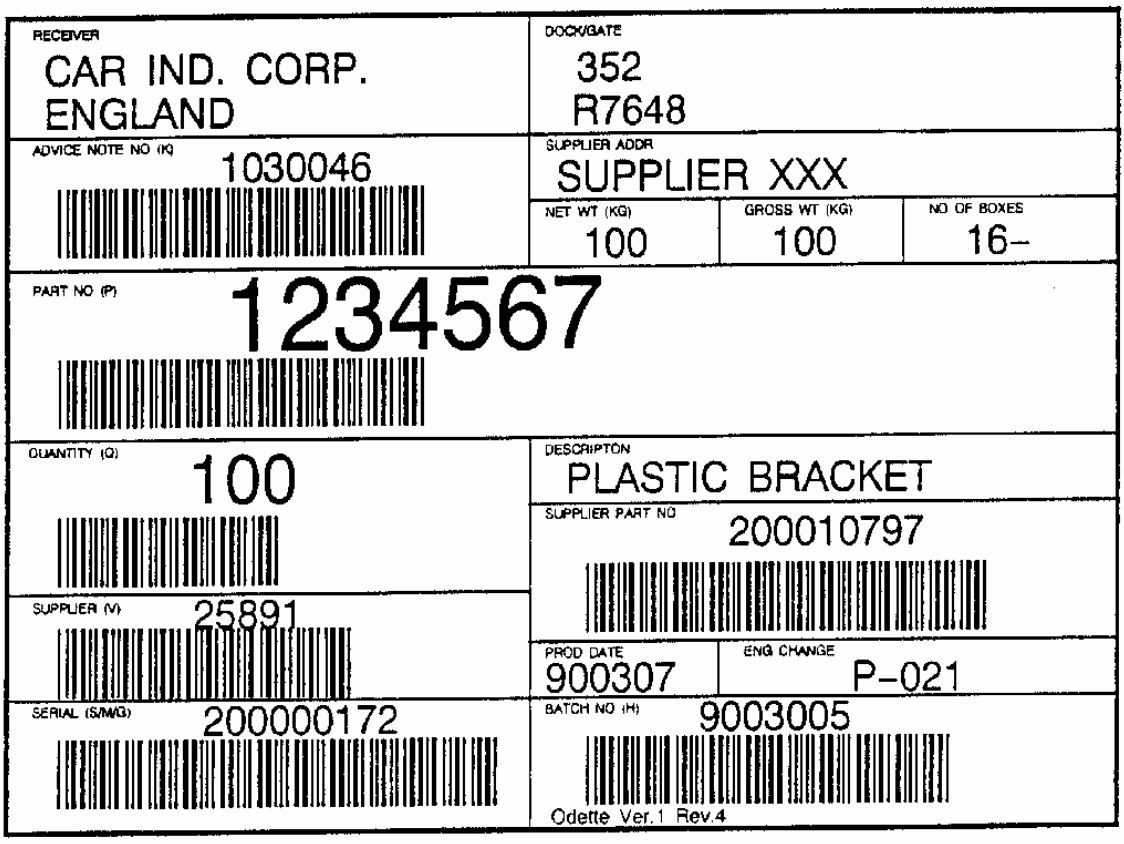
STANDARD LABEL 'S'



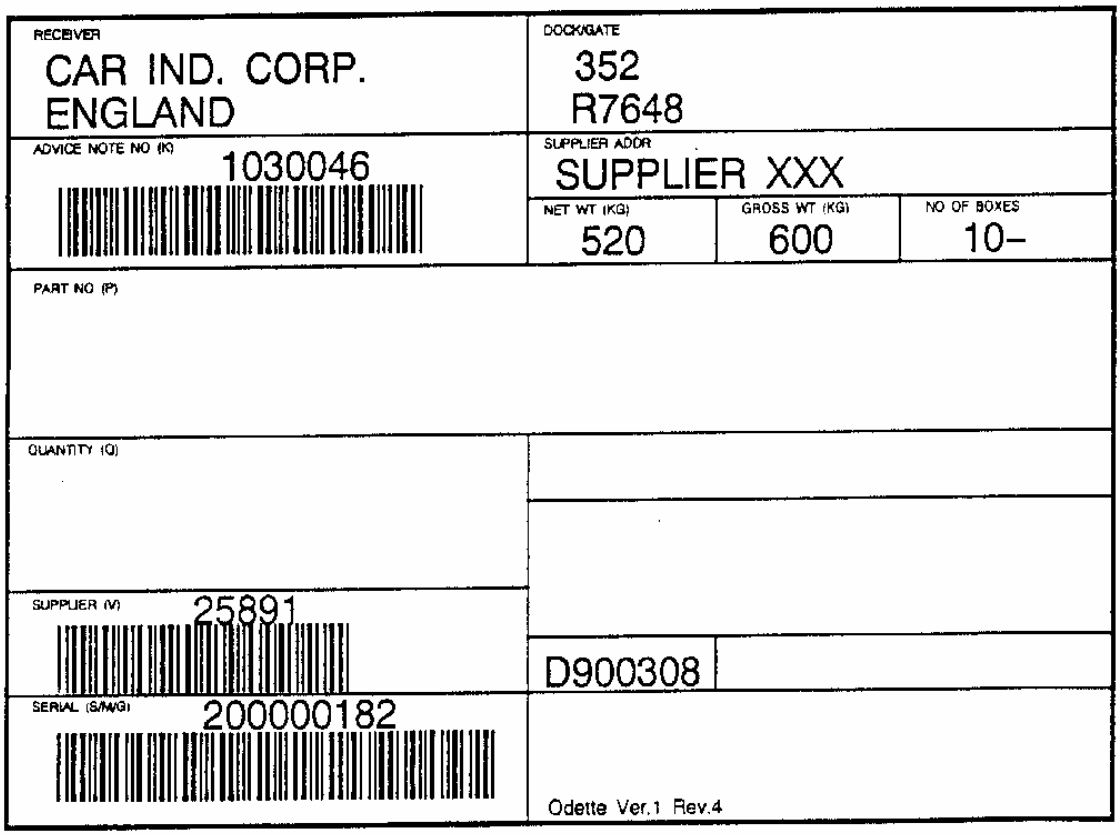
MASTER LABEL FOR STANDARD PALLETS 'S'



MASTER LABEL MULTIPLE COMMON ITEM PACK 'M'



MASTER LABEL MIXED ITEM PACK 'G'



Data	TDED	M/C	Field Length	Size	Id code	
Receiver	3036 (3132)	M	2 x an..20	7		
	+3124		3 x an..27	5		
	3920 (3920)					
	+3124					
Dock and Gate	3920	M	1 x an..12	13		
	or 3921	"	or 2 x an..21	7		
	or 3922	"	or 3 x an..29	5		
	or 3923	"	or 1 x an..5	13	2L	*
			or 1 x an..6 +	5		
			or 3 x an..12	5		
Document number	1128	C	1 x an..9	7	N	
	or 1022 (1804)	C	" K	*		
	or 1004	C	"	16K	*	
Supplier's address	3036 (3336)	C	1 x an..29	5		
	+3124					
	3412 (3860)					
	+3124					
Net weight	6160	C	1 x n..5	7		
Gross weight	6292	C	1 x n..5	7		
Number of boxes	-	C	1 x n..5	7		
Part number	7304	M	1 x an..24	13	P	
Quantity	6853	M	1 x n..9	13	Q	
Unit of measurement	6410	C	1 x an..3	5		
Description	7008	M	1 x an..22	7		
	7008	M	1 x an..30	5		
Logistics reference	7194 (7810)	C	1 x an..22	7		
		C	1 x an..10	13		
		C	1 x an..10	13	30S	*
	1420 (1860)	C	1 x an..10	13	15K	*
	1310	C	1 x an..10	13	5K	*
	7905	C	1 x an..10	13	2W	*
	1906	C	1 x an..10	13	B	*
	1438 (1907)	C	1 x an..10	13	1B	*
	1844	C	1 x an..10	13	2I	*
	7910	C	1 x an..10	13	20S	*
	2803 +					
	2067 (2804)	C	1 x an12	13		
Supplier	3337)	M	1 x an..10	5	V	
	3347)					
	3296 (3803)					
Date	2837	C	1 x an7**	7		
Engineering change	1376 (1843)	C	1 x an..14	7		
Serial number	7102	M	1 x n..9	5	S	
	7246 (7812)	M	1 x n..9	5	M,G	
Supplier name	3036 (3346)	C	1 x an..29	2.5		
	or 3412 (3824)					
	or 3036 (3280)					
	or 3412 (3844)					
Batch number	7338	C	1 x an..10	5	H	
(human readable only)	7338	C	1 x an..12	13		
Version indicator	-	M	1 x an18	2.5		

Key to Summary of Transport Label Data

Data elements shown in brackets e.g. 1022 (1804) indicate provisional tag numbers formerly assigned by Odette, now re-numbered in the TDED.

M = Mandatory
C = Conditional

'Size' column refers to height in millimetres of human-readable characters.
Data Identifiers marked with (*) are in compliance with the FACT Data Identifiers Standard.

** This information is composed with an alphabetic character and the 6 numerical characters of the date.

When using the label described in this chapter for automotive steel products, the same requirements described in the Odette master transport label apply.

For long steel products, the full size Odette label which this specification describes may be unsuitable because of its size. In these cases, please refer to the specification for the small bar coded label for steel products.

Number of boxes area

Depending on the type of steel products, this area shall be used for one of following pieces of information:

A) Number of sheets
B) Length of the coil and unit of measurement (m or ft)
C) Base boxes

Information must be printed with 7 mm high and maximum 5 characters.

Quantity area (TDED = 6853)

Quantity in the invoice, for example:

A) Theoretical weight
B) Net weight
C) Number of pieces

Information must be printed bold with 13 mm high and maximum 9 characters plus the data identifier code "Q".

Description area (TDED = 7008)

For steel products this area is used for quality codes defined by agreement between the supplier and buyer, for example the following codes:

- Passivation
- Coating code
- Oiled surface
- Quality code
- Type of coating

Information must be printed bold with 7 mm high and maximum 22 characters or 5 mm high 30 characters.

Dimension area

Depending on the type of product, the data area must contain one of the following dimensions. The unit of measurement must be stated.

A) Sheet metal:

Thickness [T] / Width [W] / Length [L].

Information must be printed on one line, in the order T,W and L with 7 mm high and maximum 7 characters each.

B) Coils:

Information is printed on two lines in the following order,
5 mm high and maximum 7 characters per data:

Line 1 Thickness [T] / Width [W] / Internal diameter [d]
Line 2 / External diameter [D]

C) Tin products:

The thickness of the coating, printed with 5 mm high and maximum 15 characters.

Supplier area 1

Special supplementary data on the supplier requested by the buyer, printed in one or two lines with 5 mm high and maximum 30 characters.

A) Reference given by the buyer (e.g. agency order)
B) Coil number
C) Type of package
D) Choice and Finished code for tin products
E) Reference given by the supplier

Supplier area 2

Free area to the right of the date area. Should be used by the supplier for special data such as:

A) Packing code
B) Marking and handling instruction
C) Supplier order number

Information must be printed in either one or two lines with 5 mm high and maximum 25 characters.

Heat process number area (TDED = 7338)

Reference number assigned by the supplier to designate or group a number of products within the same production. For steel products this is equal to the heat process number or the coil number for the original coil for the sheet metal plus welding code for tin products.

The heat process number may be printed in bar code if required by the receiver. Where only human readable characters are used they must be bold and 13 mm high. Where the heat process number is bar coded, the bar code symbol must be directly below the human readable characters of 5 mm high. Maximum length anticipated is 10 characters plus data identifier "H".

The illustration below is shown at 85 % of actual size.

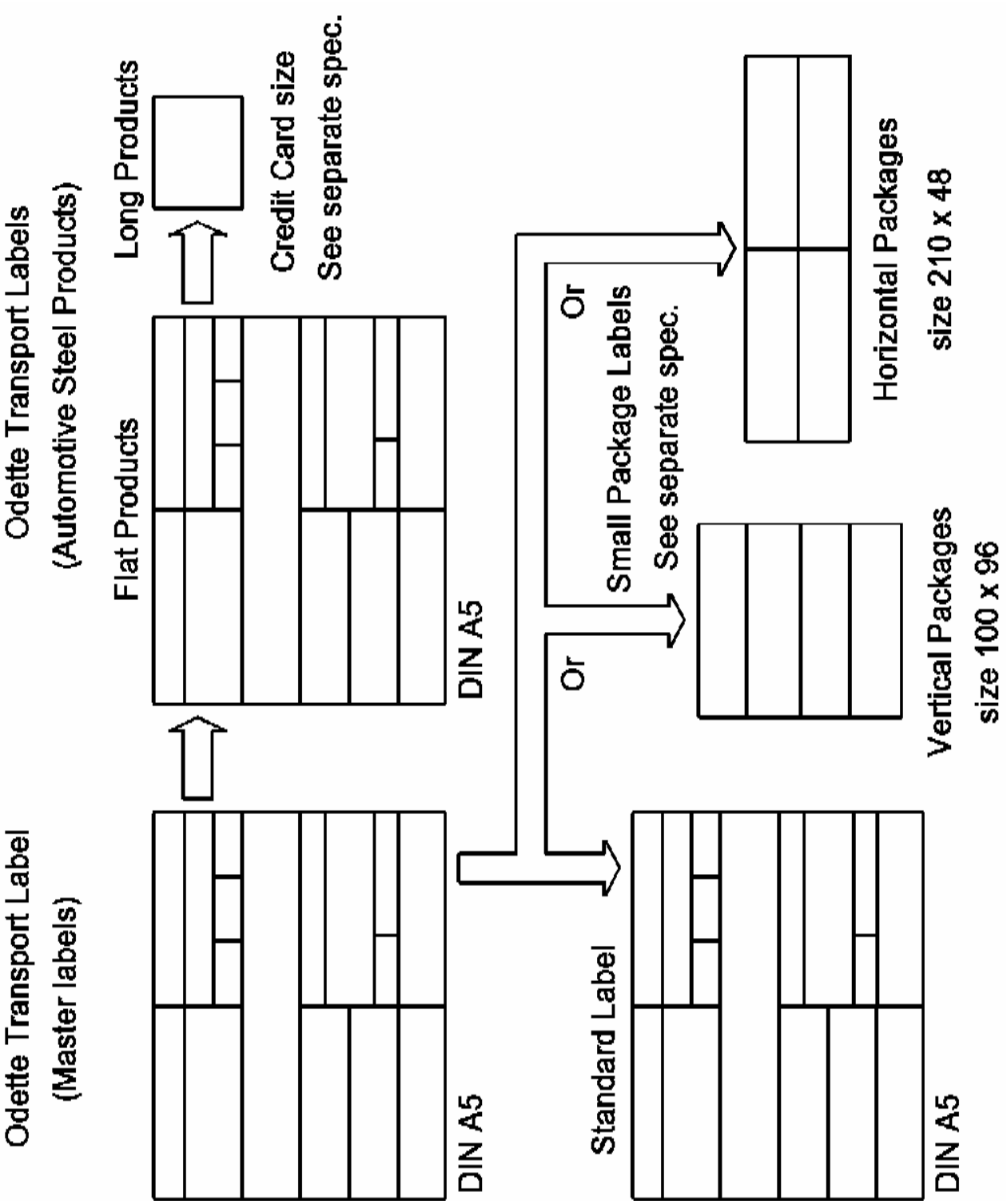
Data	TDED	M/C	Field Length	Size	Id code
Number of boxes	-	C	1 x n..5	7	
Quantity	6853	M	1 x n..9	13	Q
Unit of measurement	6410	C	1 x a..3	5	
Description	7008	M	1 x an..30 1 x an..22	5 7	
Dimension		C	an7/an7/an7 2 x (an7/an7/an7) 1 x an15	7 5 5	
Supplier area 1		C	1 x an30 2 x an30	5 5	
Supplier area 2		C	1 x an25 2 x an25	5 5	
Heat process number	7338	C	1 x an..10 1 x an..12	5 13	H

Key

Data elements shown in brackets e.g. 1022 (1804) indicate provisional tag numbers formerly assigned by Odette, now re-numbered in the TDED.

'Size' column refers to height in millimetres of human-readable characters.

M = Mandatory
C = Conditional


Odette Transport Label
(Master labels)
DIN A5
Odette Transport Labels
(Automotive Steel Products)
Flat Products
Long Products
Credit Card size
See separate spec.
DIN A5
Or
Standard Label
DIN A5
Or
Small Package Labels
See separate spec.
Horizontal Packages
size 210 x 48
Vertical Packages
size 100 x 96

1. GENERAL

The label is intended to be used on small packages only where the product part of the ODETTE standard transport label is unsuitable because of its size.

2. GENERAL RULES

The transport unit containing the small packages has an ODETTE transport label.

The small label contains the human readable and bar coded mandatory data of the ODETTE transport label:

Supplier code
Serial number
Customer's part number
Quantity.

Positioning of the label and securing method are to be agreed between partners and must comply with Odette standard recommendations for containers.

3. SIZE AND MATERIALS

The format of the active area is either 210 x 48 mm or 110 x 96 mm (see Exhibits 1 and 2).

Larger labels can be produced which contain additional information, providing that the format for the active data area is maintained and the outer border is identified with a black line outside the active area. Any additional bar coded information must have standard identifiers.

The label material has a white surface with black printing. To minimise risk of distortion it is recommended that the label is water-resistant, giving good reflectivity and print contrast.

4. DATA AREA CHARACTERISTICS

All areas are normally printed left justified.

When bar coded, the data must be printed in both bar code and human readable characters. Human readable characters can be printed on the right of the title, as for the ODETTE transport label standard.

4.1 Area size

	Width (mm) (210 x 48 mm)	(110 x 96 mm)	Height (mm)
Supplier code	110	110	21
Serial number	100	110	21
Part number	110	110	27
Quantity	100	110	27

4.2 Titles

Titles are to be printed on one line and the data identifier following on the same line.

4.3 Supplier address (TDED = in the SDT segment, 3036 ex 3346 or 3412 ex 3824 and if using the MDT segment, 3036 ex 3280 or 3412 ex 3844)

On supplier's or customer's request the supplier's address can be printed in the upper right part of this area with 2.5 mm high characters. Length of the supplier address is 1 x an..29.

4.4 Supplier code (TDED = 3337 or 3347 or 3296 ex 3803)

In the absence of a unified European coding system, the supplier code is defined as the buyer's designated supplier code (TDED = 3296 ex 3803).

The human readable characters for the supplier code must be 5 mm high. The bar code symbol for the supplier code must be directly below the human readable characters. Length for the supplier code is 1 x an..10 plus the data identifier (V).

4.5 Serial number (TDED = 7246 ex 7812; or 7102)

The serial number must be a unique number (not necessarily in sequential order) assigned by the supplier. Suppliers must avoid repeating serial numbers within a one year period.

The human readable characters for the serial number must be 5 mm high. The bar code symbol for the serial number must be directly below the human readable characters. Length of the serial number must be 1 x n..9 plus data identifier (S).

4.6 Customer's part number (TDED = 7304)

The human readable characters must be bold.

The human readable characters must be 13 mm high if customer's part number is less than or equal to 10 characters. They must be 7 mm high if customer's part number is more than 10 characters. Limit to the customer's part number is 1 x an..13. The data identifier is (P).

The bar code symbol for the customer's part number must be directly below the human readable characters.

4.7 Quantity (TDED = 6853)

Quantity in the package.

The human readable characters must be bold with a height of 13 mm. The bar code symbol for quantity must be directly below the human readable characters. Length of the quantity is 1 x n..9 plus the data identifier (Q).

When the unit of measure is pieces, no notation is required. When the unit of measure is not pieces (eg. kilograms, pairs, metres etc.) it must be noted in human readable form only. When used, the unit of measurement must be directly to the right of the readable quantity and must be a minimum of 5 mm high. The unit of measurement must not be bar coded. TDED data element 6410 for unit of measurement must be used.

4.8 Safety and Quality Items

Where the quantity code length permits, the safety and/or the quality item can be printed to the right of the quantity field (up to 4 characters, the quantity code length permits the safety and quantity item to be printed).

5. BAR CODE SYMBOLOGY

The same as for the ODETTE transport label.

6. HUMAN READABLE CHARACTERS

Fonts Helvetica Bold or ISO-3098 part 1 standard characters set are recommended, subject to printer generating software.

7. SUMMARY OF SMALL PACKAGE LABEL DATA

The bar height must be 13 mm or as close as possible depending on printer capability.

Data	TDED	M/C	Field Length	Size	Id code
Supplier add.	3036 (3346) or 3412 (3824) or 3036 (3280) or 3412 (3844)	C	1 x an..29	2.5	
Supplier code	3337 3347 3296 (3803)	M	1 x an..10	5	V
Serial number	7246 (7812) or 7102	M	1 x n..9	5	S
Part number	7304	M	1 x an..13	13 up to 10c 7 up to 13c	P
Quantity	6853	M	1 x n..9	13	Q

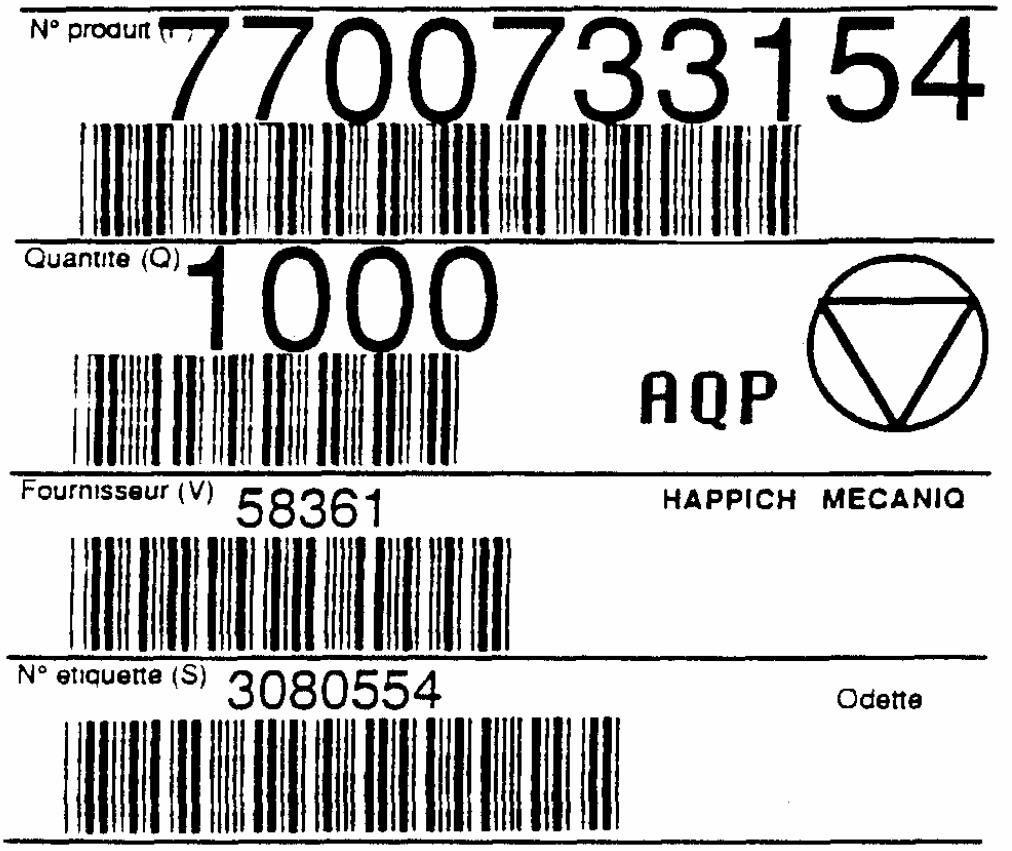
Key

Data elements shown in brackets e.g. 3296 (3803) indicate provisional tag numbers formerly assigned by Odette, now re-numbered in the TDED.

M = Mandatory
C = Conditional

'Size' column refers to height in millimetres of human readable characters.


Odette
N° étiquette (S) 3080554
Quantité (Q) 1000
AQP
HAPPICH MECANIQ
Fournisseur (V) 58361
N° Produit (P) 7700733154


N° produit (P) 7700733154
Quantité (Q) 1000
AQP
Fournisseur (V) 58361
HAPPICH MECANIQ
N° etiquette (S) 3080554
Odette

This document outlines the details of the standard for a long steel products small label, of credit card size (84 mm x 54 mm), containing 5 high density bar codes.

1. GENERAL

The label is intended to be used on long (1) products where the large Odette standard transport label is unsuitable because of its size. The label is intended only for hand scanning. The active data area including the name of the supplier shall be able to be printed on a label of credit card size 84 mm x 54 mm. Although developed for the automotive industry, it is intended to be used for the supply of long steel products to all industries.

Label Content

The label will have an active area containing the following fields:

Supplier	Supplier code (Mandatory)	Alphanumeric
Serial Number	Supplier identification number (Mandatory)	Numeric
Part Number	Customer identification of the product (Mandatory)	Alphanumeric
Quantity	Package or transport unit quantity (Mandatory)	Numeric
Batch Number	Supplier identification for one cast (Conditional)	Alphanumeric

The label can also contain the control item symbol and the AQP designation.

(1) The adjective 'long' applies to steel bars when delivered in bundles.

2. SIZE AND MATERIALS

The format of the active data area is of standard credit card size 84 mm x 54 mm.

The label material must have a white surface with black printing. To minimise risk of distortion it is recommended that the label is weather-resistant, giving good reflectivity and print contrast. All areas are printed left justified.

Larger labels can be produced which contain additional information, providing that the format for the active data area is maintained and the border identified with a black line outside the active area. Any additional information in bar coded format must have standard identifiers which are different to those included in the active area.

Positioning of the label and securing method is to be agreed between partners. The label must be attached with accessibility to the operator for scanning.

3. DATA AREA CHARACTERISTICS

The data must be printed in both bar code and human readable characters with the following maximum number of characters in each field, defined in the following order (see Annex 1):

Supplier	Maximum 10 characters
Serial Number	Maximum 9 characters
Part Number	Maximum 13 characters
Quantity	Maximum 9 characters
Batch Number	Maximum 10 characters.

4. BAR CODE SYMBOLOGY

Bar code 39 with density 5.7 to 6.5 characters per inch shall be used. The bar code height shall be not less than 5 mm and other element dimensions according to the AIAG standard.

Average width of the narrow element will be within the range 0.22 mm to 0.33 mm. The ratio of the nominal width of the wide elements to the nominal width of the narrow elements is to be within the range of 2.0:1 to 3.0:1. The range of the element dimensions and tolerances are to be to the AIAG standard.

Quiet zones at the beginning and end of each bar code must not be less than 7 mm.

5. HUMAN READABLE CHARACTERS

Fonts Helvetica Bold or ISO-3089 part 1, standard character set are recommended, subject to printer generating software. The character height shall be 2 mm. The control item symbol shall be 10 mm diameter placed at the end of the quantity item.

The AQP quality item shall be 5 mm high and placed at the end of the Batch Number.

6. DATA AREA TITLES

Each data field is to be separated by a 1 mm blank area. Each data area will have two lines of data, one of human readable characters and below that, one line of bar coded information. The human readable data must start with the field title and data identifier. Odette standard identifier codes must be used (see Annex 1).

a) Supplier code area (TDED = 3337 or 3347 or 3296 ex 3803)

In the absence of a unified European coding system at this point in time, the supplier code is defined as the buyer's designated supplier code. The bar code symbol for the supplier code must be directly below the human readable characters. The maximum length anticipated for the supplier number is ten (10) characters plus the data identifier (V).

b) Serial number area (TDED = 7246 ex 7812; or 7102)

The serial number must be a unique number (not necessarily in sequential order) assigned by the supplier. Suppliers must avoid repeating serial numbers within a one year period.

The human readable characters for the serial number must be 2 mm high. The bar code symbol for the serial number must be directly below the human readable characters. The maximum length of the serial number must be nine (9) numeric characters plus data identifier (S).

c) Part Number area (TDED = 7304)

The part number is designated by the buyer for the product in the package. The human readable characters must be 2 mm high and printed above the bar code symbol. The maximum bar coded part number which can be printed in the available space is 13 characters plus the data identifer (P).

d) Quantity area (TDED = 6853)

Quantity in the package. The human readable characters must be 2 mm high, printed above the bar code symbol. The maximum number of digits which can be printed in the available space is 9 characters plus the data identifier (Q).

When the unit of measurement is pieces, no notation is required. When the unit of measurement is not pieces (eg. kilograms, pairs, metres etc.) it must be noted in human readable form only. When used, the unit of measurement must be directly to the right of the readable quantity and must be 2 mm high.

Safety Item (Control Symbol)

At the buyer's request a symbol for safety items (VSP) may be added to the right of the quantity area field, either as a printed graphic symbol or as a sticker. The safety item symbol is a circle not less than 10 mm diameter with an inscribed inverted equilateral triangle.

e) Batch Number (TDED = 7338)

Reference number assigned by the manufacturer to designate one cast of steel. Batch number may be printed in bar code if required by the receiver. Where only human readable characters are used they must be bold and 5 mm high, maximum 12 characters. When the batch number is bar coded, the bar code symbol must be directly below the human readable characters, maximum 10 characters plus data identifier (H). Human readable characters must then be printed 2 mm high.

Indicator AQP

Only the area to the right of the batch number field may be used for the Quality Assured 'AQP' sign, to be defined by the buyer or according to the national regulations. The AQP must be printed very bold and 5 mm high. This sign may be printed or applied as a sticker. Stickers must be affixed such as not to impair reading of printed bar codes.

7. SCANNING EQUIPMENT

The long steel products small label is designed for use with medium/high density contact wand readers, hand held laser diode scanners in the 30/40 scans per second range and charged couple devices operating at up to 200 scans per second. Ideally, these devices should be self discriminating and automatically recognise and decode different bar code symbologies if used in conjunction with other systems. Such devices would therefore be capable of reading a broad spectrum of densities, from high density (6-9 characters per inch - long products small label) to low density (3-4 characters per inch - Odette standard transport label).

8. BAR CODE SYMBOL GENERATOR

The current state of technology defines the generation of high density bar code symbologies. To meet the specified tolerance levels special attention must be paid to the types of printing equipment.

9. MEDIA AND DURABILITY

Accelerated weathering tests have been undertaken to BS3900 Part F3 on bar codes printed onto a range of materials. An optimum read rate is obtained if the label concerned suffers not more than 5% deterioration in a 12 month accelerated weathering period.

10. SUMMARY OF LONG STEEL PRODUCTS SMALL LABEL DATA AND FORMAT

A summary of the data area characteristics is given in Annex 1, and the design format of the label is shown in Annex 2.

11. TRANSPORT

The label is intended as a product identification label. Transport information can be printed either on the advice note, together with the serial number, or supplied in some other economic form.

12. OTHER SITUATIONS

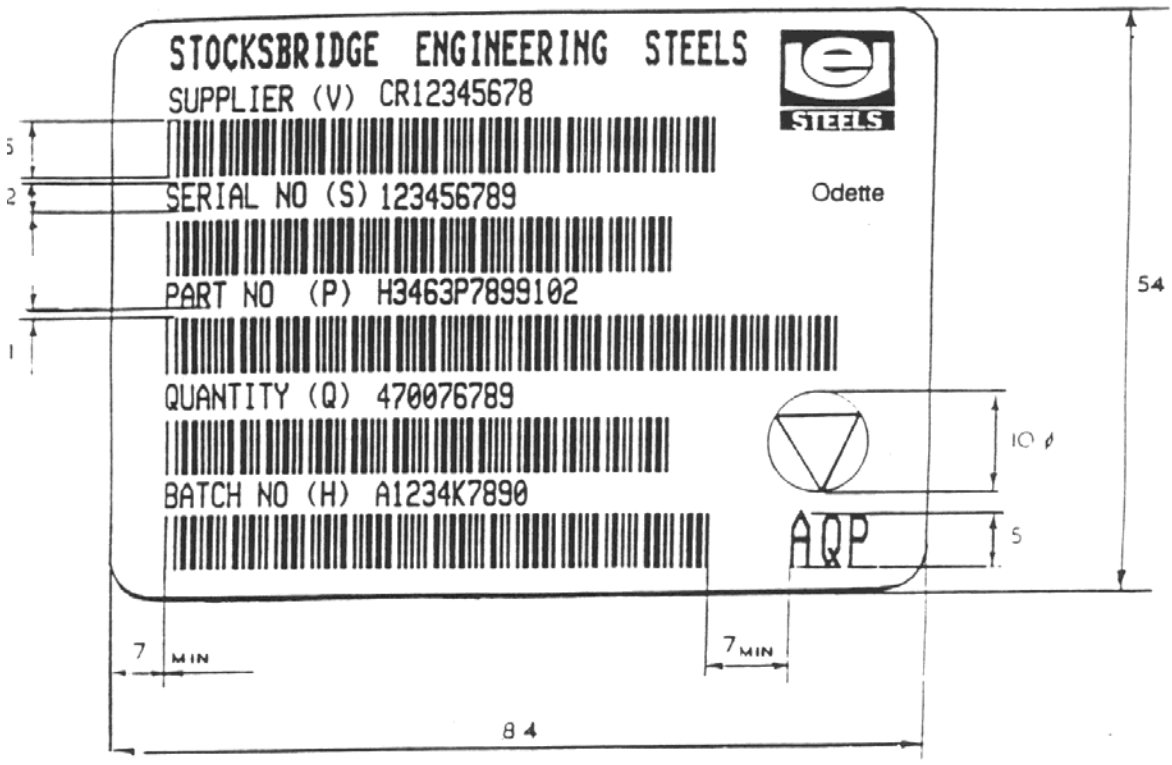
For long steel products supplied outside the automotive industry it is possible to replace the part number bar code with human readable characters to identify quality and dimensions defined by the customer. This information can be one line of characters 7 mm high or two lines of characters 3 mm high.

Data	TDED	M/C	Field Length	Id code
Supplier Number	3337 3347 3296 (3803)	M	1 x an..10	V
Serial Number	7246 (7812) or 7102	M	1 x n..9	S
Part Number	7304	M	1 x an..13	P
Quantity	6853	M	1 x n..9	Q
Batch Number	7338	C	1 x an..10	H
Supplier Name	Free area for company identity and logo at the top of the label.			

Key

Data elements shown in brackets e.g. 3296 (3803) indicate provisional tag numbers formerly assigned by Odette, now re-numbered in the TDED.

M = Mandatory
C = Conditional


STOCKSBRIDGE ENGINEERING STEELS
SUPPLIER (V) CR12345678
STEELS
SERIAL NO (S) 123456789
Odette
PART NO (P) H3463P7899102
QUANTITY (Q) 470076789
BATCH NO (H) A1234K7890
AQP
10 ø
5
54
5
2
1
7 MIN
7 MIN
84

ISO/IEC 15416 Bar Code print quality test specification - Linear Symbols shall be used to determine the print quality of the Code 39.

The minimum symbol grade at point of customer scan shall be "C", C/10/660, where:

- "C" is the minimum print quality at final point of destination."
- 10 is the measurement aperture.
- 660 (+/- 10) nm is the inspection wavelength.

Please note that print quality "B" might be a requirement in some business relations, especially in cases where automated scanning is used.

References:
One good source of information about Bar Code print quality issues is a document published by AIM, the Association for Automatic Identification and Data Capture technologies: *The Layman´s Guide to ANSI, CEN and ISO Bar Code Print Quality Documents.* This document is available through Odette International and Odette National Organisations.