

# BEEF MEAT TRACING, IDENTIFICATION AND LABELLING.



Application of the regulations (EC)

1760/2000

1828/2000

999/2001

A practical case in an industrial meat  
processing plant



Spodbujanje konkurenčnosti  
agroživilske industrije

Sloveniji

5-6 junija 2008, Ljubljani

## Definitions.

Traceability means the ability to trace and follow food, feed food-producing animals or substances intended to be, or expected to be incorporated into food or feed, through all stages of production, processing and distribution;" (1760/2000)



## Definitions.

- **'meat'**  
means all parts of domestic bovine animals which are suitable for human consumption.
- **fresh meat'**  
means meat, including meat vacuum-wrapped or wrapped in a controlled atmosphere, which has not undergone any treatment other than cold treatment to ensure preservation.
- **'carcass'**  
means the whole body of a slaughtered animal after bleeding, evisceration and removal of the limbs at the carpus and tarsus, removal of the head.

## Definitions.

- **'offal'**  
means fresh meat other than that of the carcass, even if it remains naturally connected to the carcass;
- **'viscera'**  
means offal from the thoracic, abdominal and pelvic cavities, including the trachea and oesophagus;
- **'wrapping'**  
means the protection of fresh meat by the use of an initial wrapping or initial container in direct contact with the fresh meat concerned and the initial wrapper or initial container itself;
- **'packaging'**  
means the placing of wrapped fresh meat in a second container and the latter container itself;

## Definitions.

### - 'minced meat'

is defined as meat that has been minced into fragments or passed through a spiral-screw mincer with a maximal content of 1% NaCl.

### - 'batch'

the number of carcasses or quarters cut together and constituting one batch for the cutting plant concerned. This size may not, in any case, exceed the production of one day



## Why to trace?

- When products which constitute a danger for public health wind up on the market in spite of the safety measures a company has implemented under HACCP, we want to have a simple system so as to trace, locate, and block them in no time, regardless of where they are in the food chain or in the world.
- The results (= methods and technical solutions) that this conceptual exercise yielded are explained in what follows.

## How to trace?

- ▣ Traceability of origin / usual traceability
- ▣ Trace all information on
  - animal origin
  - plants where processing takes place
  - Voluntary labelling mentions

## 4 stages of tracing

- ▣ 1° Live cattle identification and tracing.
- ▣ 2° Information's gathering in the slaughterhouse.
- ▣ 3° The transmission of the data's trough the processing chain.
- ▣ 4° The information's delivery at the final consumer.



# 1° Live cattle identification and tracing.

« SANITEL »: the unique data base to an quality instrument

- ▣ Put into use from the beginning of the 80s.
- ▣ Identification data system and centralised recording of the cattle.
- ▣ Each animal is recorded under a single identification number.

# 1° Live cattle identification and tracing.



## 1° Live cattle identification and tracing.

Overschener Precneur Übernehmer / Tussenpersoon Intermediaire Zwischenperson			
Kantier No. No. Kantier	Naam Nieuw Name	Hand. Sign. Onderscht.	Datum Date
			/ /
			/ /
			/ /

Dierenarts Vétérinaire Tierarzt	
Dat. info. Antwoord <div style="text-align: center; height: 30px;">/ /</div>	Inhoud of gegevens <div style="text-align: center; height: 30px;">/ / /</div>
Hand. Sign. Onderscht. <div style="text-align: center; height: 30px;"></div>	Naam Nieuw Name Maatschap / Perfectionnement / Proef Onders. N° OMV / Kantiernummer

Naam van het dier  
Nom du l'animal  
Name des Tieres

Naam van de vader  
Nom du père  
Name des Vaters

Naam van de moeder  
Nom de la mère  
Name der Mutter

Laboratorium Laboratoire	
Refus LIMS No. Ref. LIMS Ref. No. LIMS <div style="height: 60px;"></div>	<p style="text-align: center; font-weight: bold;">Newscor Inciding / Trospeus de destination / Neue Hynde</p> <p style="font-size: small; text-align: center;">             Klad hier het etiket met afgepaste afbeelding van het nieuwe beschildering              Collez ici l'étiquette avec le format du nouveau trospous              Hier das Schildchen-Etikett mit neuem Hynde aufkleben           </p>

Reglementaire bepalingen
1. Bij verhandeling moet het reisdiapasspoort het rand steeds verzegelen. 2. Het huidige document is geen eigendomsbewijs. 3. Bij aankoop dient de naam van de overschener op de keuring van het reisdiapasspoort geschreven te worden. 4. Het vertrekklad dient binnen de wettelijke voorschriften gereguleerd te worden naar de bestemming en de reiswijze, enkel indien 1) geen andere wijze van communicatie gebruikt die wordt erkend door de bevoegde overheid.

Dispositions réglementaires
1. Le passeport doit toujours porter le bon sens d'un transfert. 2. Le présent passeport ne constitue pas un titre de propriété. 3. Lors de l'achat, le nom du preneur doit être inscrit au verso du passeport hévin. 4. Le volet de sortie doit être affiché à l'ajout d'un avertissement donné par l'association agréée à cet effet si vous n'utilisez pas d'autres systèmes de communication agréés par l'autorité compétente.

Dienstanwijzingen
1. Het Reisdiapasspoort kan het dier het Transfer instaan bepalen. 2. Verlegende document is geen eigendomsbewijs. 3. Bij aankoop dient het Naam des Overnehmer auf der Rückseite des Reisdiapasspoort vermeldt werden. 4. Der Abgangsschilder muss zur Planung binnen der gesetzlichen Frist nach der zu diesem Zweck zugelassenen Verordnungsgebung eingereicht werden, wenn Sie kein andere von der zuständigen Behörde zugelassene Meldeweise benutzten.

Handwritten Labels
01. Handwritten label 02. Handwritten label 03. Handwritten label 04. Handwritten label 05. Handwritten label 06. Handwritten label 07. Handwritten label 08. Handwritten label 09. Handwritten label 10. Handwritten label 11. Handwritten label 12. Handwritten label 13. Handwritten label 14. Handwritten label 15. Handwritten label



BE 7124  
4008

Specifiek getuigenis  
Vrijheid van  
Beweging

**BELGIË - BELGIQUE - BELGIEN**

Runderpaspoort  
Passeport Bovin  
Rinderpass

Statut: Statut: Statut

**R00**

Kleef hier indien nodig het gele stachthuiseticket  
Collez ici l'étiquette adhésive jaune si nécessaire  
Hier gegebenenfalls die gelbe Stachthaussetztafel aufkleben



BE 7124  
4008

Vers. R. Dat Prot.  
02 28 14/11/02

Belag Troupeau Herdy

Geboorte Naissanc Datum  
04/11/2002

Haarkleur Robe Haarfarbe  
**5 - WITBLAUW**

Seksueel Sex Geschlecht  
**V/F/W - VROUWELIJK**

Ras/type Type ras/type  
**2 - VLEESTYPE**

Mother Mère Mutter  
**BE 1 70865226**



BE 71244008 3270082339

Geboortestip Troupeau Naissance Geboortestip  
**BE 70865226**

Histories Historique Vorgeschichte  
Land Beldag Aankomstland

Vraag Belag Troupeau produktien Vörschnege Herde

Vere. R. Dat Prot.  
02 28 14/11/02

02 28 14/11/02

RUND

Geboortestip Datum  
**02 28 14/11/02**

Vers. R. Dat Prot.  
02 28 14/11/02

**Vertrekluk**



BE 71244008 2270082339

Per post te versturen binnen de wettelijke voorziene termijn  
aan de daartoe erkende Vereniging, indien u  
geen andere wijze van communicatie gebruikt die wordt  
erkend door de bevoegde overheid.

BE 7124  
4008

Vers. R. Dat Prot.  
02 28 14/11/02

RUND

Geboortestip Datum  
**02 28 14/11/02**

Vers. R. Dat Prot.  
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4008

Vers. R. Dat Prot.  
02 28 14/11/02

# The passport

The image shows a vertical strip of three Slovenian animal health certificates (passports) for sheep, numbered 2539. The certificates are labeled 1, 2, and 3 from bottom to top. Orange arrows point from the list on the right to each certificate.

- 3 Begeleidingsdokument / Document d'accompagnement / Begleiddokument**: This is the top certificate. It includes fields for the animal's name, sex, age, and date of birth, as well as a section for the owner's details and a signature. It also features a barcode and a stamp with the number 2539.
- 2 Vertrekduik**: This is the middle certificate. It includes fields for the animal's name, sex, age, and date of birth, as well as a section for the owner's details and a signature. It also features a barcode and a stamp with the number 2539.
- 1 Werkduik**: This is the bottom certificate. It includes fields for the animal's name, sex, age, and date of birth, as well as a section for the owner's details and a signature. It also features a barcode and a stamp with the number 2539.

- 1 send to the CA
- 2 hold by the owner
- 3 following the animal to the slaughterhouse

## 2° Information's gathering in the slaughterhouse.





## 2° Information's gathering in the slaughterhouse.

- ▣ Each animal arriving at the slaughterhouse is accompanied by the SANITEL passport board N°3 with informations about:
  - ▣ Origin
  - ▣ Age
  - ▣ Zoonotic status



## 2° Information's gathering in the slaughterhouse.



The passport brought by the owner (usually the trucker) is controlled.....

## 2° Information's gathering in the slaughterhouse.



- ▣ The informations mentioned on the passport are recorded in the database using a barcode scanner.

## 2° Information's gathering in the slaughterhouse.



- During the slaughtering process, the head and the carcass are always identifiable through the eartags naturally linked

## 2° Information's gathering in the slaughterhouse.



- ▣ At the weighing place the eartag's number is cheked.
- ▣ If the animal was not registred, the system denied the further process possibility



## 2° Information's gathering in the slaughterhouse.



- ▣ The eartag number is put into the database together with the carcass classification made under the operator's responsibility.

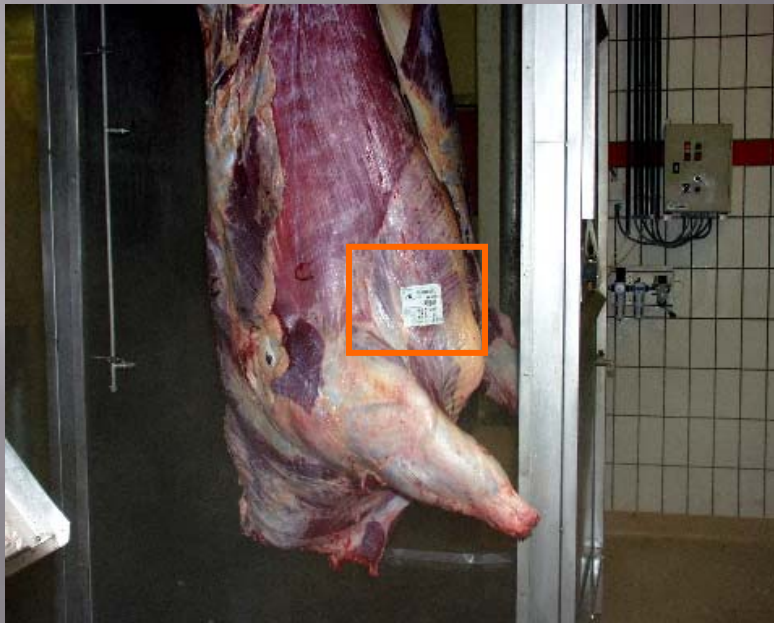
## 2° Information's gathering in the slaughterhouse.



- ▣ 5 labels showing the informations coming from the passport and the weighing, are printed.



## 2° Information's gathering in the slaughterhouse.



- ▣ 4 labels are fixed on the carcass, one on each quarter.

## 2° Information's gathering in the slaughterhouse.



- ▣ Waiting the BSE tests results, the offals are identified using the fifth label

## 2° Information's gathering in the slaughterhouse.

- ▣ The owner
  - ▣ the sanitel identification
  - ▣ The origin, date of birth
  - ▣ The classification
  - ▣ The age in months
  - ▣ Date and hour
- Are indicated on the label.



# ***Carcasses labelling.***

*regarding only bovine carcase including skirt and back steak without lungs, hard,  
lever, stomachs, the tong and the chicks  
(dir.64/433)*

- ▣ SANITEL label on each quarter

*N° SANITEL*

*1 Slaughtering country + 1 approval mark*

*1 country of born*

*1 or more fattening countries*

*If same :ORIGIN + country*

*No batches except skirt and back steak  
with the same origin and slaughtered  
at the same day*



## ▣ Registration.


### 1°In:

- ▣ N° SANITEL
- ▣ Date of arrival at the slaughterhouse
- ▣ Date of slaughtering

### 2°Out

- ▣ N° SANITEL
- ▣ Weight
- ▣ Date of departure
- ▣ Destination
- ▣ N° of the commercial document

### Commercial document



*N°*


*Date of departure from the slaughterhouse*

*Destination*

*Number carcasses older than  
1year with vertebrae*

*Number carcasses other  
the Sanitel numbers*

*Approval mark*



### 3° The transmission of the data's trough the processing chain.

- ▣ Before the deboning, batches are made
- ▣ Depending the case, the batche size vary between one quarter to ten carcasses.
- ▣ For each batch an new number is given.
- ▣ The database allowe the link between the batch number and the sanitel carcasses numbers .



### 3° The transmission of the data's trough the processing chain.



- ▣ Using a scanreader , the Sanitel's numbers are introduced into the database generating a batch number.



### 3° The transmission of the data's trough the processing chain.

/812 0

Lot : C00344020

Date : 24/08/00 (10:05) Page 1

68 Kg	Aba:22/08	lot:99021719	Prop: REYGAERTS RAFAEL	BE41870508
86 Kg	Aba:22/08	lot:99021694	Prop: DIELTJENS WALTER	BE16049485
80 Kg	Aba:22/08	lot:99021694	Prop: DIELTJENS WALTER	BE16049485
73 Kg	Aba:22/08	lot:99021676	Prop: MELKEBEKE-DAELE	BE53013090
72 Kg	Aba:22/08	lot:99021676	Prop: MELKEBEKE-BAELE	BE53013090
90 Kg	Aba:22/08	lot:99021701	Prop: BROUWERS JEF	BE16083539
88 Kg	Aba:22/08	lot:99021701	Prop: BROUWERS JEF	BE16083539
75 Kg	Aba:22/08	lot:99021717	Prop: REYGAERTS RAFAEL	BE42079017
86 Kg	Aba:22/08	lot:99021705	Prop: DE VLEESCHOUWER MARC	BE41809314
85 Kg	Aba:22/08	lot:99021705	Prop: DE VLEESCHOUWER MARC	BE41809314
71 Kg	Aba:22/08	lot:99021710	Prop: ELAUT WILLY	BE89108371
70 Kg	Aba:22/08	lot:99021710	Prop: ELAUT WILLY	BE89108371
97 Kg	Aba:22/08	lot:99021702	Prop: BROUWERS JEF	BE15877664
66 Kg	Aba:22/08	lot:99021706	Prop: DE VLEESCHOUWER MARC	BE41828209
80 Kg	Aba:22/08	lot:99021706	Prop: DE VLEESCHOUWER MARC	BE41828209
79 Kg	Aba:22/08	lot:99021693	Prop: DIELTJENS WALTER	BE56357300

1266 Kg

Into the data base  
the link between:

- ▣ The batch number
- ▣ And the sanitel numbers

is registered

### 3° The transmission of the data's trough the processing chain.



- ▣ At the deboning process end, each wrapping is labelled.

### 3° The transmission of the data's through the processing chain.



The label indicates:

- ▣ The piece's name.
- ▣ The origin.
- ▣ The slaughtering and deboning dates.
- ▣ The batch number.
- ▣ A duplicate counterfoil.

## 4° The information's delivery at the final consumer.



- ▣ 1° after maturation, the technical pieces are brought in the cutting place.
- ▣ All the needed tracing informations are mentioned on the counterfoil.



## 4° The information's delivery at the final consumer.



▣ 1° The counterfoil is fixed on a working document opposite with the order's label counterfoil.

▣ 2° a new batch number is given: ywwdnnn

## 4° The information's delivery at the final consumer.



1° On the final wrapping, the batch number give us the link with the working document (AP10343931).

2° from this working document it is easy to trace back to the deboning batch number and so on to the sanitel numbers.







812 0 Lot : C0034020 Date : 24/08/00 (10:05) Page : 1

68 Kg	Aba:22/08	lot:99021718	Prop: MEYGAERTS RAFAEL	BE41870508
86 Kg	Aba:22/08	lot:99021694	Prop: DIETJENS WALTER	BE16049485
80 Kg	Aba:22/08	lot:99021694	Prop: DIETJENS WALTER	BE16049485
72 Kg	Aba:22/08	lot:99021676	Prop: DE WILCKE-DARLE	BE53013090
72 Kg	Aba:22/08	lot:99021676	Prop: MELDEKE-HAKK	BE53013090
90 Kg	Aba:22/08	lot:99021701	Prop: BROUWERS JEF	BE16083539
88 Kg	Aba:22/08	lot:99021701	Prop: BROUWERS JEF	BE16083539
75 Kg	Aba:22/08	lot:99021717	Prop: MEYGAERTS RAFAEL	BE42019017
86 Kg	Aba:22/08	lot:99021705	Prop: DE VLEESCHOUWER MARC	BE41809314
85 Kg	Aba:22/08	lot:99021705	Prop: DE VLEESCHOUWER MARC	BE41809314
71 Kg	Aba:22/08	lot:99021710	Prop: ELAUT WILLY	BE53013090
70 Kg	Aba:22/08	lot:99021710	Prop: ELAUT WILLY	BE53013090
97 Kg	Aba:22/08	lot:99021702	Prop: BROUWERS JEF	BE15877664
66 Kg	Aba:22/08	lot:99021706	Prop: DE VLEESCHOUWER MARC	BE41828209
80 Kg	Aba:22/08	lot:99021706	Prop: DE VLEESCHOUWER MARC	BE41828209
79 Kg	Aba:22/08	lot:99021693	Prop: DIETJENS WALTER	BE53013090

1266 Kg



# Beef meat labelling

## ▣ Cutted beef meat labelling

*Sanitel n° or batch n°*

*1 country of the born*

*1 or more fattening countries*

*1 Slaughtering country + 1 appr. n°*

*One cutting place at the same day*

*1 Country + 1 approval mark*



## ▣ Registration

### 1° In:

- ▣ Date
- ▣ Sanitel n° or batch n°
- ▣ Weight
- ▣ Characteristic of the pieces
- ▣ Origin
- ▣ Delivery commercial document number

### 2° Out

- ▣ Date
- ▣ Sanitel n° or batch n°
- ▣ Characteristic of the pieces
- ▣ weight
- ▣ Destination
- ▣ Delivery commercial document n°

## COMMERCIAL DOCUMENT

N°

*Date and place of departure*

*Sanitel n) or batch n°*

*1 single destination*

*Nature and weight of the pieces*

*Approval mark*



# Minced meat tracing and labeling.







# Labeling at the final conditioning

Every beef patties container shows:



- ▣ 1° Viangros's approval mark , CEE26/H
- ▣ 2° A colored mark indicating the day of production
- ▣ 3° Product's identification label

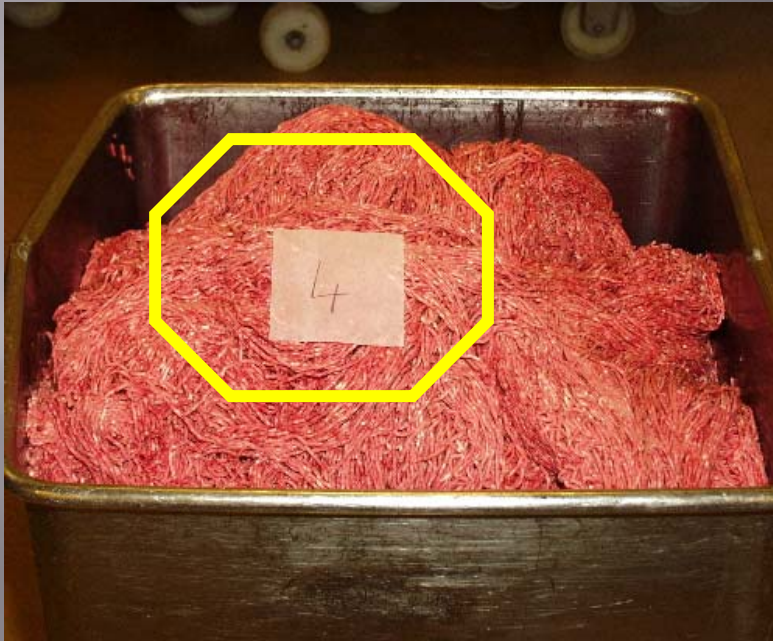
# Final product identification

## Label indicates:

- 1° Minced meat batch number
- 2° Line of production
- 3° Date of production
- 4° Use by date
- 5° Origin



## Identification of minced meat batch



Each part of the  
mincing batch  
wear a day's serial  
number

# Traceability of every lot in the meat mixture

2° 5° 1°

CONTROL PATTY QUICK

1405 19 98

1 de 1

RECEPTE HACHE PATTY - voir ordonnance n° 0000

Date: 24.08.00 Opérateur: [Signature] N° batch: 4

Suivi des températures des matières premières

Produit congelé		Produit semi-cuit		Produit frais		
D/B	DD	PM	PG	AM	Pasty M	PM
NA	NA	-5,2	-5,4	NA	NA	-0,5

Contrôle du pourcentage de matière grasse

Échantillon: Auyt - Ray (avant Batch 1; 10; 20)

Prise température du local (avant Batch 1; 10; 20)

Test	%	% MG	Contr 1	% MG 2	Contr 2	% MG 3	1° Pot de 1.3 à 1.6 °C	kg total
Auyt - Ray	7,54	19,5					-1,2	7,54

Infra-rouge

Batch 3, 4, 19 - analyse de la viande avec l'infra-rouge

TRACABILITE

Produit	PM	PG	AM
N° PAL 1			
N° PAL 2			

Produit	PM	PG	AM
N° PAL 3			
N° PAL 4			

Coller les étiquettes des différents numéros de lot

3°

Lot C00322-027 Z12620-C00322027

Lot C00324-009 Z13640-C00324009

Lot C00324-033 Z10640-C00324033

Lot C00333-044 Z15620-C00333044

Lot C00344-020 Z10620-C00344020

The traceability document shows:

- 1° Ground meats mixture's number
- 2° Date of mincing
- 3° Identification number of every ground meat lot in the mixture
- 4° Quality control results
- 5° Employee's name



# Identification of batches



Every meat going  
into a mixture is  
identified by a  
label




# Labelling of every batch in the meat mixture



This label shows:

- ▣ 1° Product's code
- ▣ 2° Deboning batch number AASSJIII number

## Composition of a deboning batch.



1°

2°

/812 0

Lot : C00344020

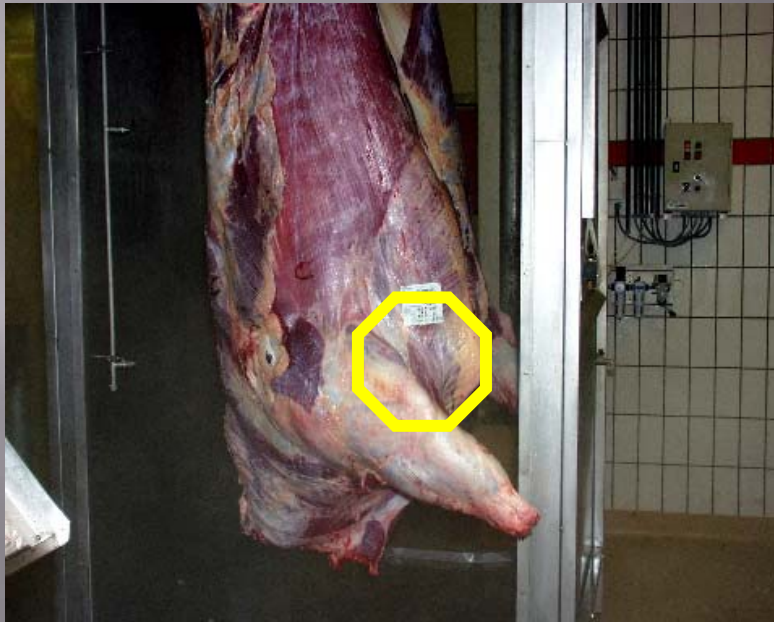
Date : 24/08/2008 (10:05)

68 Kg	Aba:22/08	lot:99021718	Prop: RUYGAERTS RAFAEL	BE41870508
86 Kg	Aba:22/08	lot:99021694	Prop: DIELTJENS WALTER	BE16049485
80 Kg	Aba:22/08	lot:99021694	Prop: DIELTJENS WALTER	BE16049485
73 Kg	Aba:22/08	lot:99021676	Prop: MELKEBEKE-DAELE	BE53013090
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90 Kg	Aba:22/08	lot:99021701	Prop: BROUWERS JEF	BE16083539
88 Kg	Aba:22/08	lot:99021701	Prop: BROUWERS JEF	BE16083539
75 Kg	Aba:22/08	lot:99021717	Prop: RUYGAERTS RAFAEL	BE42079017
86 Kg	Aba:22/08	lot:99021705	Prop: DE VLEESCHOUWER MARC	BE41809314
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66 Kg	Aba:22/08	lot:99021706	Prop: DE VLEESCHOUWER MARC	BE41828209
80 Kg	Aba:22/08	lot:99021706	Prop: DE VLEESCHOUWER MARC	BE41828209
79 Kg	Aba:22/08	lot:99021693	Prop: DIELTJENS WALTER	BE5635780

1266 Kg

Deboning batch number (1) allows to find the SANITEL number (2) of every animal in the lot

## SANITEL system



The carcass of every animal slaughtered at Viangros is identified by 4 labels showing all the necessary data for traceability.

*Minced meat labelling*  
*Only beef minced meat or mixing with beef meat majority*  
*Maximum 1% NaCl*

▣ Minced meat label

*Batch n°*  
*1 or more countries of born*  
*1 or more countries of fattening*  
*Slaughtering: 1 country*  
*Processing: 1 plant*

*Approval mark*



▣ Registration

1° In:

- ▣ Batch n°
- ▣ Weight
- ▣ Arrival date
- ▣ Origin
- ▣ Commercial document n°

2° Out:

- ▣ Batch n°
- ▣ Departure date
- ▣ Weight
- ▣ 1 Destination
- ▣ Delivery commercial document n°

▣ COMMERCIAL DOCUMENT

*N°*  
*Place of departure*  
*Place of arrival*  
*Batches n°*  
*Weight*  
*Approval mark*



## TRACEABILITY OF IMPORTED BEEF

- ▣ Progressive implementation of bovine individual identification systems by third countries
- ▣ Identification of beef products by herd number
- ▣ Ensuring traceability data registration from third countries slaughterhouses to E.U. retailers



