# Leocar EIRL
## Livestock management and genetic improvement with a traceability system



## Challenge

Today's consumers are becoming more and more strict on food quality, they want to know all types of information about their meat products, clear indication of "who did what, when and where" to a meat product. They now want to know how the animal was raised, what it was fed, how it was slaughtered, processed and packaged . . . and how far the resulting meat product was transported.

Not only are large food processing companies facing these challenges—small to one-person producers are, too. Regardless of where consumers buy their meat products, they are demanding the same information from businesses of all sizes.

This growing demand for data made cattle breeding company Leocar EIRL think about a traceability system that provides up-to-date and accurate information throughout the whole production chain.

## Solution

Leocar adopted GS1 standards, particularly GS1-128 barcodes and the GS1 Serial Shipping Container Code (SSCC).

By using GS1 standards, Leocar has access to all types of information about its cattle. GS1 standards enable the producer to trace information about the cattle and products, to include every production step in detail. GS1 identifiers encoded in GS1 barcodes provide the necessary foundation for the traceability solution.

Leocar applies RFID ear tags on the cattle since their birth, having this way the whole life voyage of the cattle recorded, from their birth to their sale as carcass or different cuts. The process of information collection has become more efficient along the entire supply chain.

With RFID tags, the producer can better control expenditures for food, fattening, veterinary controls, deaths and carcass specifications. Precise and complete information can be gathered and retrieved automatically from the very beginning of life of the cattle, controlled by transporters and retailers by simply scanning the GS1 SSCC and GS1-128 barcodes.



## Benefits

• Improves livestock management by 30% with respect to birth control, fattening and livestock benefits.

• Provides full traceability of inseminated cattle with premium cattle breed (Angus).

• Allows for 100% monitoring and follow-up during the whole process of production and transportation.

• Increases value chain transparency for Leocar and its trading Partners.

• Improves customer confidence by providing detailed, complete information about origin of meat products.

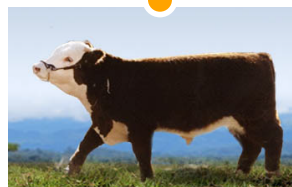# Critical Traceability Events and Key Data Elements

## Step 1

• Cattle is identified with RFID tags, an earring type (HDX and FDX frequencies according to ISO 11784 and 11785)

• Data inputs on this stage:

• Location of the cattle is identified with a Global Location Number (GLN)of farms where calves are raised
• Date of birth
• Source Data: birthplace, health events, food
• Fattening method
• Vaccination and other veterinary data



(251) DAC3802

DATABASE

**RFID Tags** – Earring Type HDX and FDX frequencies according to ISO 11784 and 11785

**RFID scanner**

**Barcode portable printer**

## Step 2

Data available at this stage:
- Cattle identification data
- Source data
- Batch number
- Date of slaughter
- Weight



**LEOCAR EIRL**

GTIN: 97751234549702
N° Referencia: DK23501
Peso Neto: 110 kg
Fecha Producción: 16-03-31
GLN 7751234706543

(01)97751234549702(251)DK23501(3100)000110
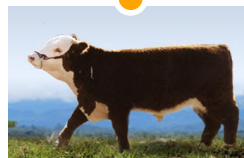
(11)160331(412)7751234706543

**DATABASE**

Carcass label applied at Leocar

## Step 3

Data available at this stage:
- Cattle identification data
- Source data
- Batch number
- Production date
- Weight



**LEOCAR EIRL**

GTIN: 97751234549715
N° Referencia: DK23501
Peso Neto: 60 kg

(01)97751234549715(251)DK23501(3100)000060

**DATABASE**

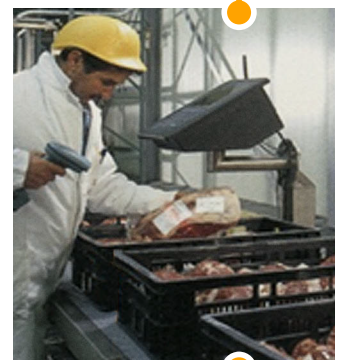Label applied at Leocar, a first processing step

## Step 4

Data available at this stage:
- Cattle identification data
- Source data
- Batch number
- Production date
- Weight
- Cutting method
- Location of a meat producer's company



**LEOCAR EIRL**

SSCC: 377512340000000019
GTIN: 977512345549726
Cantidad: 6 unidades
N° Referencia: DK23501
Peso Neto: 28.5 kg
GLN 7751234706557
Fecha Producción: 16-04-01

(01)977512345549726(10)6(251)DK23501

(3101)000285(412)7751234706557(11)160401
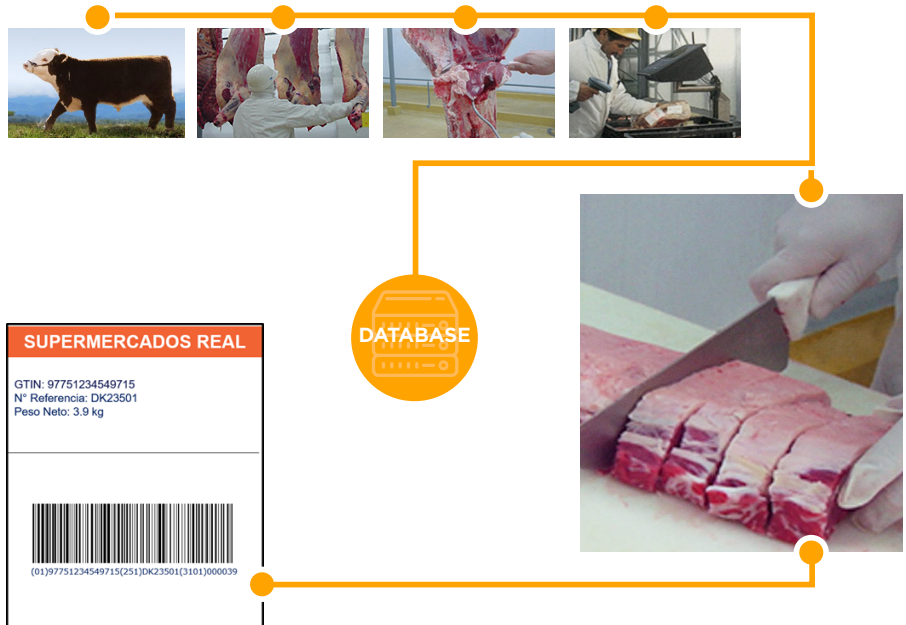
(00) 377512340000000019

**DATABASE**

Label applied at Leocar, a second processing step
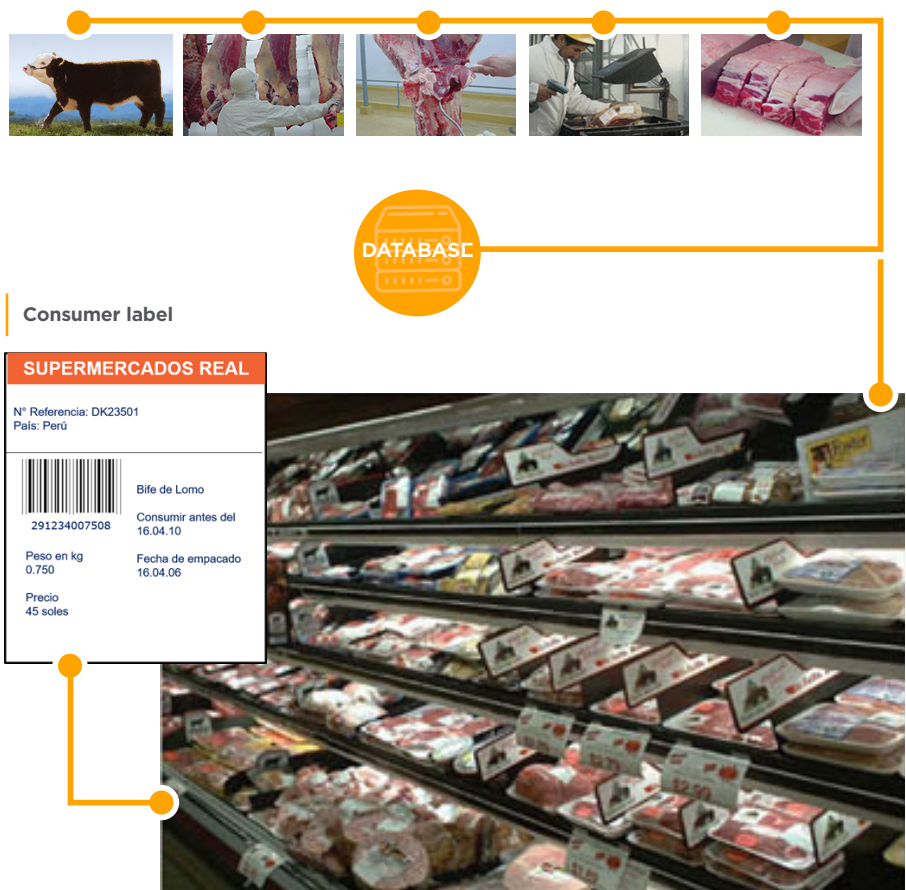
## Step 5

Data available at this stage:
- Cattle identification data
- Source data
- Batch number
- Date of date
- Weight
- Location of a meat producer's company
- Location of a retailer or a restaurant



**SUPERMERCADOS REAL**

GTIN: 97751234549715
N° Referencia: DK23501
Peso Neto: 3.9 kg

(01)97751234549715(251)DK23501(3101)000039

DATABASE

## Step 6

Data available at this stage:
- Cattle identification data
- Source data
- Batch number
- Date of date
- Weight
- Location of a retailer
- Price

DATABASE

**Consumer label**

**SUPERMERCADOS REAL**

N° Referencia: DK23501
País: Perú

291234007508

Bife de Lomo

Consumir antes del
16.04.10

Peso en kg
0.750

Fecha de empacado
16.04.06

Precio
45 soles



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