ID PACK
THE CONCEPT

The problem to be solved: the operator has to read the animal’s ear tag number when he is behind the animal in the pit.

We needed therefore to construct a system which transfers the animal’s number to the pit without operator intervention.

This number must also be fed to the counter.

The solution is to make use of the electronic ear tag.
THE CONSTRAINTS:

No electricity supply in the milking parlour.

The usual controls using an antenna/reading module are not feasible because the counters are, by definition, interchangeable.

The reading range must be great enough to read all cows, whether they are large or small.
THE COMPONENTS OF THE SYSTEM:

An RFID reader antenna to each milking stall.

An antenna cable extending to a female connector located in the pit.

A Lactocorder counter with a male cable and an RFID reader module.
INTEGRATING RFID EAR TAGS INTO MILKING RECORDING

The LACTOCORDER system
STEP 1:

Retrieving the weighing list:

- electronic identification number
- official identification number
- official working number
- animal’s name
- expected milk yield

Then the LACTOPRO programme integrates these data to create its own “BETRIEBE” [FARM] file
STEP 2:

The data are transferred into a data pack and then transmitted to each lactoCorder.

Before milking starts, each device knows all the animals. It is therefore self-contained.
STEP 3:

Link between the lactoCorder and the individual antenna via the ID PACK

Now milking can start …
For each animal while it is being milked:

- The RFID milk receiver is read by the internal reader (FDX–HDX) of the lactoCorder,
- The antenna is called by the lactoCorder which supplies the electric current required,
- The electronic identification is read and transmitted,
- The match is sought and displayed (working number and name).

All this simply by the operator pressing the START button on the lactoCorder
To summarise, the operator in the milking parlour carries out
3 operations per animal:

- Sample identification,
- “START” to identify the animal,
- “STOP” to stop measurement.

⇒ The lactoCorder then moves on to the next animal.
On 02 July 2008, a demonstration was given to the French Dairy Control Organisations [OCL], and was attended by thirty people.

The results were as follows:
- 100% identification
- 39 cows checked,
- 37 immediate readings by the antenna and the ID PACK which activates it,
- 1 reading 6 seconds after activation,
- 1 reading at the second call to the antenna.

Therefore, all the animals were identified automatically without disrupting the normal milking rhythm.

This is a great technological achievement for WMB and ALL FLEX
We have here another demonstration of the adaptability of the lactoCorder and the technical skills of their ideas people.