Livestock Farming

Handout 4

Calibration Example

Example:

From: www.lmi.co.za/

LMI livestock scales consist of two load bars (2000 kg capacity) and a digital readout instrument. We also supply a full range of crates and platforms, neck and body clamps, which are bolted on top of the two load bars. Alternatively, we can the supply a sketch showing a crate that can be manufactured by the customer himself.

The length of the load bars can be chosen as 600, 800 or 1000 mm.

Maximum capacity (kg)	2000
Length of beams (mm)	600/800/1000
Height of beams (mm)	100
Weight of beams (kg)	8
Smallest reading (kg)	1 (0.1 In fine mode)

For the readout instruments we offer the following choice:

LS4 (simple readout, hand-held, fine mode, basic statistical functions)
LS2 (alphanumeric keyboard, RS232 connection, data storage and transfer to PC)

LS2P (same as above with small printer incorporated)
LS2000 (hand-held, alphanumeric keyboard, average daily gain calculation)
LS2000P (same as above, supplied together with separate printer)

All these instruments can operate from 220V AC, as well as 12 V DC. Both cables are supplied.

All the readout instruments are equipped with a stabilizing algorithm, which eliminates the spikes and oscillations in the measurements caused by very lively animals, and gives a stable reading. Actually it is possible to do the following test, which is quite impressive: let's assume that the weight of a person is 83 kg. The person jumps on to the scale, and keeps jumping up and down without stopping. After about 3 seconds the display will show the exact figure (83 kg), even if the person never stopped jumping.

* The LS4 instrument shows only the weight, but it can give the following information: Number of animals weighed, total mass of all animals, average mass of all animals, maximum and minimum mass. If used in "fine mode" (up to 200 kg weight) it is accurate to 100 g. It is hand held, with rechargeable battery incorporated.

* The LS2 instrument allows you to save the animal's I.D with its mass. All the stored data can then be downloaded to a computer. The stored data can also be printed on an internal printer (optional). The data can also be printed while busy weighing. Windows software is supplied with the scale to determine daily average growth and many more reports.

* The LS2000 instrument is compact and hand-held, but quite powerful. It presents the same capabilities of the LS2, with a cell-phone type alphanumeric keyboard, and it allows to determine average daily growth while in the field

Platform	Load bars
Cattle crate	LS4
LS2	LS2000