IM- 03

Pig carcass grading apparatus

The most modern, precise, reliable, and the cheapest apparatus on market which enables grading pig carcass according to EUROP system.

Due to the favour of the Silicon Valley companies, IM-03 is based on the most modern electronic parts available on the world market.

IM-03 is an opto-needle apparatus. The optical needle, inserted into the carcass during the grading process, has over 1500 optical sensors which "see" the distribution of fat and meet along the carcass, irrespective of the carcass' temperature.
Digital Signal Processor calculates the lean meat percentage at 140 million math operations per second.
… and most importantly:

IM-03 does not contain any movable parts.
A special, fixed guide helps the operator to easily find the place of measurement, prevents from inserting the needle in the wrong direction, secures grading repeatability and compatibility.

Technical parameters:

productivity: min. 150 carcasses per hour
memory: up to 14.000 grading results
accuracy: 2,3% (evaluated taking into consideration the lean meat percentage within a range 36% ... 63%)
apparatus type: needle optical, static measurements, 6 centimeters off the carcass midline, between the third and fourth last rib

IM-03 measures the thickness of backfat, muscle tissue and the thickness of the whole carcass. This allows estimating lean meat percentage to become more precise, eliminates split errors and PSE impact.
Only IM-03 has this feature!

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A large graphic display shows:
- current slaughter number
- the carcass' label (farmer's ID)
- the mass of the carcass
- fat and muscle tissue thickness
- lean meat percentage
- the class of the carcass and many more
The information is displayed in a text or graph form. As an extra optical signal a red LED diode is also used.

Waterproof keyboard with 16 keys enabling to enter the label, slaughter number, mass, and in special cases, to cancel the last result.

Power requirements: ca. 25 VA, 230 V

Cooperation with other systems:

The grading results can be output using the RS232C standard, which enables to plug IM-03 into any PC or other system.
An electronic scale can be directly connected to IM-03 – it becomes a fully independent operational system then, which allows a considerable reduction of the total cost of grading system – a fact especially important for small slaughterhouses.
The electronic scale doesn't have to be installed at
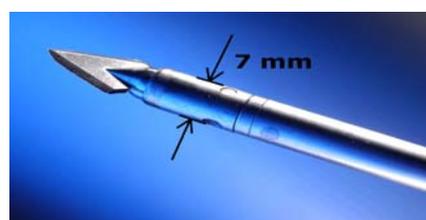
the place of measurement. IM-03 can automatically match the measured and weighted carcasses, even if they are remote from each other – without the operator's interference.
Attached software prints the classification results and settles the farmer's accounts.

And finally: IM-03 passed all the tests required by EU regulations, which allowed the introduction of the product on Polish market.

The package includes:

- IM-03 apparatus
- power supply
- RS 232C cable
- manual instruction