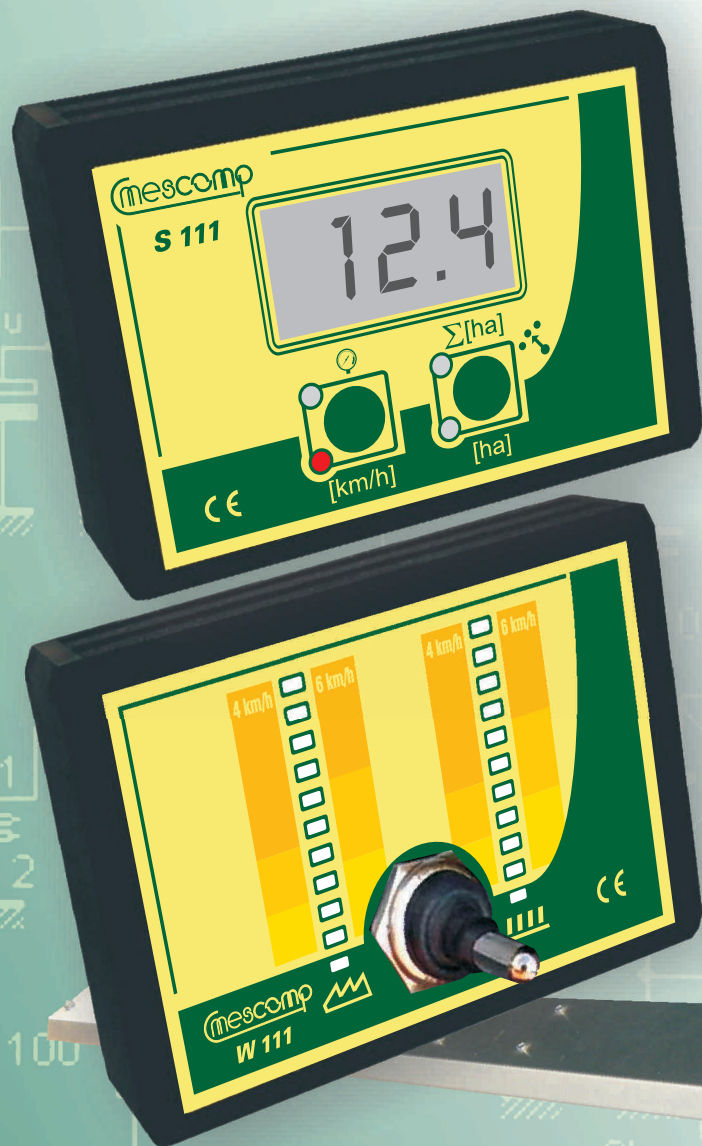


# The Mescomp Digital Grain Loss Monitor

## The world novelty

At present the manufacturers of harvesters are furnishing the combine harvesters with traditional grain loss monitors. The main shortcomings of those devices are well-known to you - the necessity of performing calibration, low accuracy and reliability, total ineffectiveness in case of small grain, rapeseed for instance. What is more - when you have performed the calibration at certain speed, then, with the change of velocity it starts misinforming the operator. Various sizes and moisture content are another sources of inaccurate readings of currently produced grain loss monitors.

The Mescomp Company - the producer of the legendary S411 computer for the spraying machine is currently producing a modern digital grain loss monitor. The monitor consists of a digital circuit and a measuring beam from stainless steel, which is struck by the grain that is being lost.



The grain loss monitor differs from traditional monitors installed in harvesting combines in such a way that it records every single stroke of a grain irrespective of its size, moisture and velocity at which it strikes the sensor beam. The digital processing of the signal eliminates errors resulting from chaff and small straw fragments hitting the beam. It is the first device in the world where the DSI method is implemented. The DSI, which stands for Digital Signal Identification for precise measurement of lost grain, was registered at the patent office. Thanks to implementation of that method the monitoring devices as produced by Mescomp do not have any adjustment knobs and no onerous calibrations by the combine operator are necessary.

Any onboard computer that is capable of frequency or voltage measurements, can be used for visualization of the results. The simplest solution can be the S111 versatile computer produced by Mescomp, which measures the velocity of combine harvester and in real time presents precisely the loss of grain in thousands grains per hectare. Upon entering the permissible volume of lost grain, the device will alert the operator with sound beeper once the set volume is exceeded. Apart from the S111 computer with the digital display, in the combine harvester cab it is possible to install a display showing the volume of losses on LED columns display.

Even though the device can operate in any type of a combine harvester, yet the Mescomp digital grain loss monitor should be installed in heavy duty combines, operating on hilly fields or with variety of kinds of soil, where traditional grain loss monitors installed by manufacturers usually do not work properly.

## Choose the new Mescomp technology

- 1** The digital grain loss monitor by the Mescomp Company has no adjustment knobs, neither does it require onerous calibration. The computer detects every single grain lost, irrespective of the grain size, moisture and velocity the grain hits the measuring bar.
- 2** The DSI (Digital Signal Identification) is applied for detection of lost grains. The method has been registered by Mescomp with the Patent Office.
- 3** The Mescomp digital grain loss monitor measures the combine velocity and presents the precisely measured number of lost grains per hectare.
- 4** We have applied the newest American electrical components for the monitor manufacturing. Miniature elements and modern SMD assembly made it possible to pack the technically advanced electronic device on a small printed circuit board that is placed beneath the measuring beam.
- 5** The users of the monitor praise the ease of operating, unique precision and repeatability of results, irrespective of the velocity of the combine harvester, and the kind of the threshed grain.



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