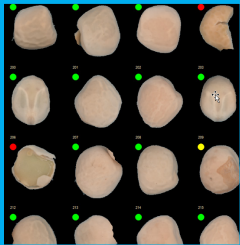
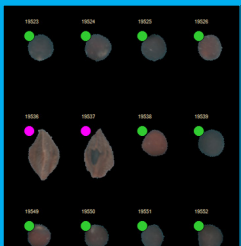


Maize (corn) application.
Detection of healthy and defect maize kernels.



Peas application.
Detection of broken peas and peas with cracks.



Pet food application.
Classification of kibble shapes and detection of broken kibbles.



Spinach seed purity application. Species to be identified in spinach purity analysis.



Oat de-husk application.
Detection of husked and de-husked kernels.



Videometer SeedLab

Enhance the capacity of your seed and grain analysis with the Videometer SeedLab - a complete system capable of analyzing, classifying and physically sorting your products with the aid of a powerful pick and place robot.

The Videometer SeedLab uses a vibrator to distribute granules from a funnel evenly onto a belt. The belt transports the granules under the VideometerLab scanner and subsequently sorts them with the aid of the pick and place robot based on their analysis.

Images of the sample are acquired, segmented and analyzed, and a summary report is automatically created at the end of the measurement.

The picking system is designed for physical sorting of high value granules, e.g. removal of defect granules (broken, non-germinating, infected).

VideometerSeedLab option KEY FEATURES AND ADVANTAGES

- The vibration unit distributes granules evenly onto the belt, in single layer formation.
- Segmentation routine extracts granules, separates touching granules and creates blob images for all granules in the sample.
- Prediction models classifies granules based on color, shape and texture features.
- Feature sets defines first order features to be calculated and summarized for each fraction/class defined by the prediction model.
- Images of granules and analysis results are displayed during the measurement.
- Summary report is created automatically at end of measurement.
- Pick and place robot automatically sorts granules based on classification results.



Videometer A/S · Hørkær 12 B, 3 · DK-2730 Herlev · Denmark
Tel +45 4576 1077 · mail@videometer.com · www.videometer.com

Videometer SeedLab

TECHNICAL SPECIFICATIONS

Sample size	Standard up to 1.5 liter. Larger sample sizes possible by customization.
Size and weight	192 cm (H) x 90 (D) x 130 (W) - 430 kg
Processing speed	160 cm belt = app. 1200 cm2 belt area per minute.
Sample throughput	Examples: Corn (maize) kernels: 100 grams in 14 minutes. (1% pick) Oilseed rape: 75 grams with 37.000 seeds in 22 minutes. (1% pick)
Sample distribution	Vibrator unit with adjustable vibration profiles for different sizes and types of granular products.
Software	The Videometer SeedLab option is controlled with the VideometerLab BlobAnalyzer tool. Interfacing with external sample feeding is possible via customized software plug-in.

Safety

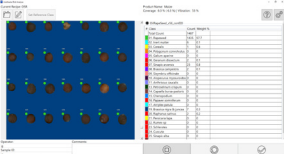
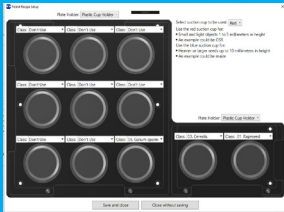
The Videometer SeedLab respects the safety requirements of the European CE Marking. For this reason it is encapsulated within a transparent safety cabinet, allowing you to monitor your analysis, while running.

Details



Different holders for cups, petri dishes or 96 well microtiter plates.

Videometer offers a wide range of spectral imaging instruments measuring what you see with your eyes – and beyond. They are fast, non-destructive, versatile, and reproduceable with world-leading accuracy. The accompanying Videometer software provides a unique variety of machine learning and AI spectral imaging analysis tools. Laboratory, at-line, on-line, and in-line systems are designed for quality assurance, process control, PAT, and product development.



The Videometer SeedLab Interface allows for easy-to-use and accurate analysis.



VideometerLab



Pick and Place robot arm



Suction cup