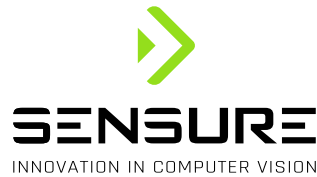


PICCO

THE OPTICAL ANALYSIS SYSTEM FOR PARTICLE SIZE DISTRIBUTION (GRANULOMETRY)

coffee dust


SENSURE



Since 2007, **SENSURE** has been designing and developing both **on-line and off-line vision inspection systems** with **artificial intelligence** that work through **self-learning**. The SENSURE solutions can be applied to all needs, including:

- **Automating quality control processes** to identify and reject non-compliant products.
- **Supporting continuous process improvement activities** through real-time display and monitoring of measured values, historical reports, root cause analysis tools, and more.
- **Optimizing Pick & Place** by providing product gripping coordinates to the Robot and PLC, as well as communicating quality information for automatic sorting.

The SENSURE technology is designed to be used on **highly variable products**, such as:

- Biscuits, cookies, crackers, rusks, and more.
- Bread products, including pancakes, waffles, baguettes, buns, muffins, bagels, and more.
- Pastries, such as donuts, croissants, pretzels, and more.
- Cakes and pies.
- Pizza, focaccia, tortillas, and more.
- Snack and confectionery products, such as snack bars, chocolates, candies, chewing gum, ice cream, and more.
- Other food products, including meat and poultry, cheese, seafood, and more, as well as non-food products.

SENSURE also produces **optical instruments** for particle size distribution (granulometry) and for analyzing dots in various sectors, such as food, agriculture, coffee, and mining.

SENSURE Care

Always at Your side

We advise and support our Customers from the initial quotation and throughout the life of our systems with our services, which include Helpdesk, Remote and Onsite assistance, and Spare parts management.

150+ systems
installed worldwide

Experience and Competence

The over ten years of experience we have acquired working with highly variable products has allowed us to develop the best quality control features using 2D and 3D vision technologies.

4.0 ready

Industry 4.0

SENSURE vision systems meet the requirements for Industry 4.0, including real-time data analysis, machine learning capabilities, and seamless integration with other automated systems.

THE OPTICAL ANALYSIS SYSTEM FOR PARTICLE SIZE DISTRIBUTION (GRANULOMETRY) WITH A WIDE MEASURING RANGE FROM 50 TO 2.000 MICRON



PICO

Thanks to optical technology, it is possible to capture the product particles and measure the main features:

Minor Axis / Major axis
Perimeter / Area and equivalent sphere diameter.



go online

PROCESS OPTIMIZATION

PICO enables optimal control of granulation processes in just a few minutes. The instrument has high accuracy and repeatability, thereby eliminating the inaccuracies that are typically associated with time-consuming manual analyses of traditional sieves.

REAL-TIME RESULTS

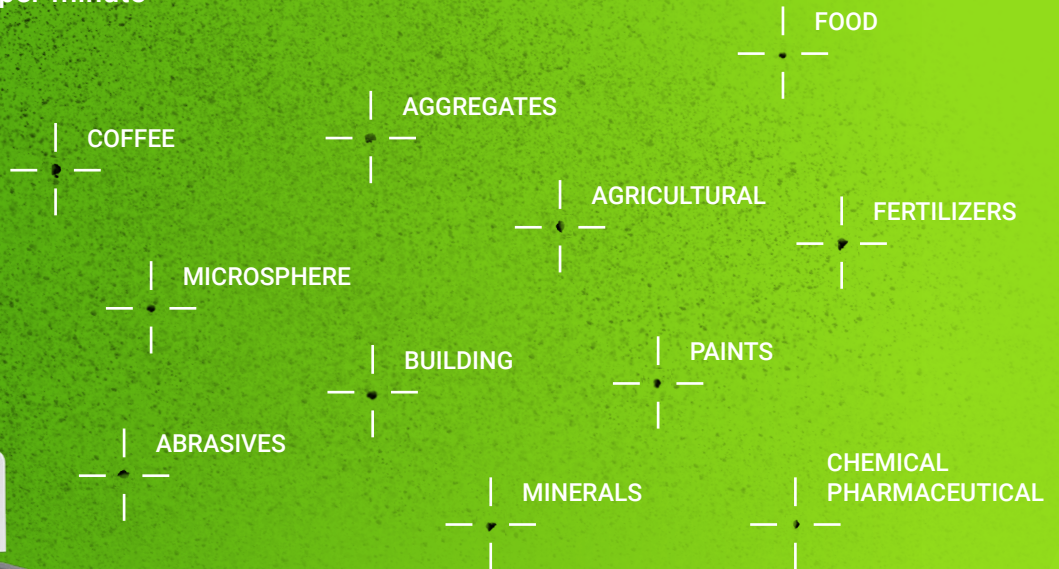
The PICO system stores every single test in the database and provides detailed reports in PDF in real-time. During the test, the graph of the particle size distribution and the main statistical data is shown in real-time, allowing immediate intervention in the process.

up to **1.000.000**
measured particles per minute



FIELDS OF USE

PICO can analyze particles from 50 µm up to 2.000 µm.
A wide range of measurement for many sectors.



TECHNICAL SPECIFICATIONS

Measurement range	from 50 micron to 2 mm
Sample weight	5 g - 100 g
Measurement time	Proportional to the sample quantity (E.g.: a 7.5 g sample is analyzed in 1 min)
Repeatability measure	5 micron (sample of 20 g, considering the parameter D (0,5))
Type of measurement	Dry, in air flow
Required accessories	None
Cleaning system	Manual or by aspirator (estimated time 10 s)
Measurement parameters	Distribution graph of the particle size by volume of <ul style="list-style-type: none"> ■ Equivalent sphere diameter ■ Major axis and minimum Axis ■ Particle shape ratio graph ■ Quantiles D (0.1), D (0.25), D (0.5), D (0.75), D (0.9) ■ Number of particles measured ■ Percentage of agglomerated particles

EASE OF USE AND CLEANLINESS

The machine does not require special cleaning cycles or treatments for various subsequent analyses.

PERFORMANCE

	PICO	Sieves	Laser
Wide measurement range	+	+	+
Reproducibility and repeatability	+	+	+
High resolution for narrow distributions	+	-	+
Particle shape analysis	+	-	-
Direct measurement technique	+	+	-
Reliable detection of oversized grains	+	+	-
Robust hardware	+	+	+
Analysis of single particles	+	-	-
High measurement speed / Short measuring times	+	-	+
Analysis of nanoparticles	-	-	+
Versatility (No need for adjustment) / Different type of materials	+	+	+
Cost	+	+	-
Measurement range	50 μ m - 2 mm	10 μ m - 125 μ m	10 nm - 5 mm

+ Top performance
 + Average performance
 - Function not available

OUR PLUS



Fast

Excellent measurement time

The PICO system is capable of analyzing samples of different weights in just a few seconds.

Customization

Adaptable to any need

Customizable measures, controls, or alarms can be incorporated in the system to monitor the particle shapes or granulometry of the material.

Cost

Efficiency and savings

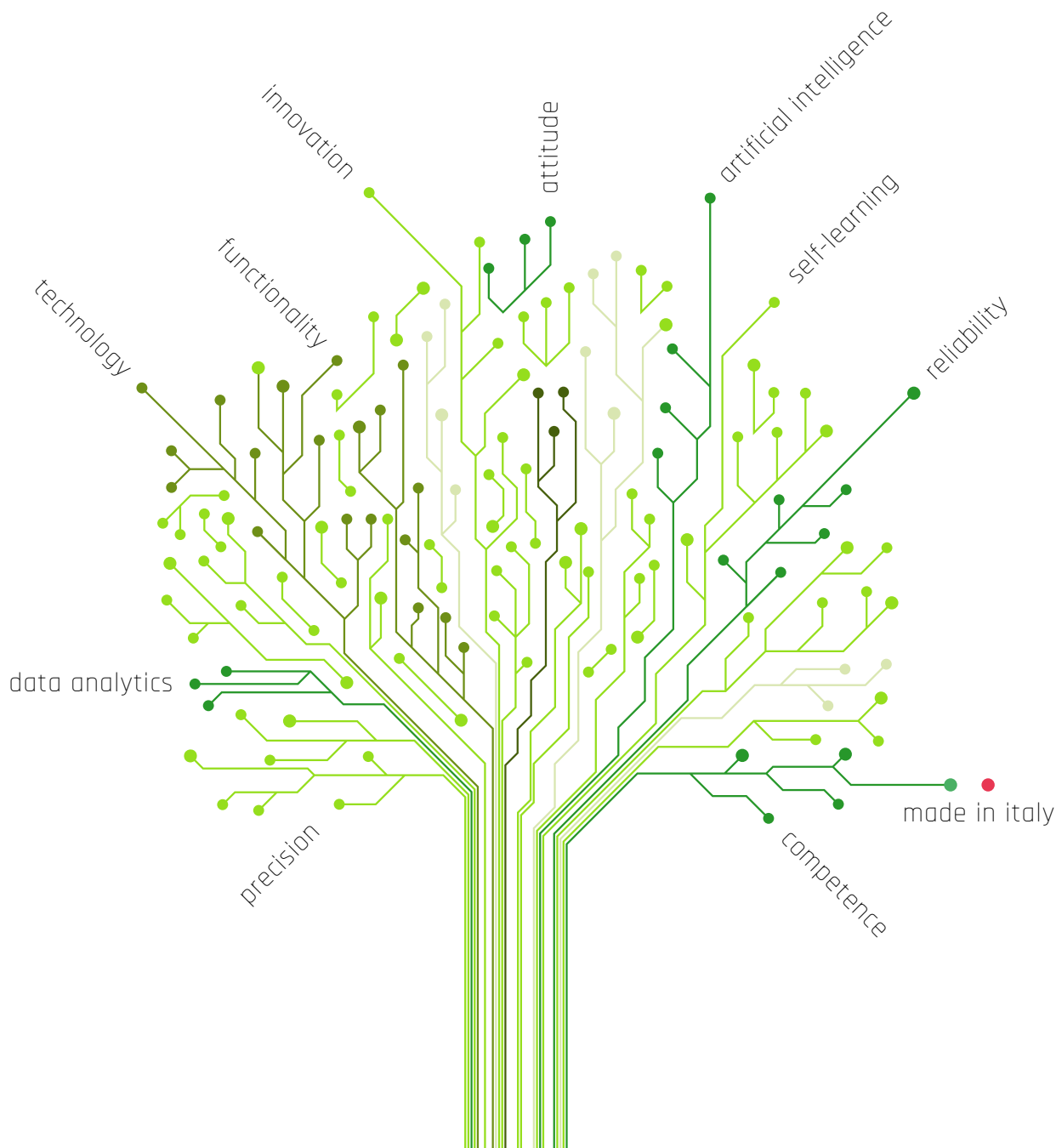
The PICO system can deliver results comparable to the most sophisticated measurement systems that rely on laser diffractometry techniques, but at a significantly lower cost.

Analysis

Shape aspect ratio measurement

Thanks to optical technology, the PICO system is able to measure the aspect ratio of particles. The analysis allows the detection of grinder wear.

NEVER STOP LEARNING



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