



# FEED MILL COMPANIES AND CEREAL INDUSTRY

AGRICULTURAL SECTOR

THE REFERENCE SENSOR FOR MONITORING  
THE QUALITY OF RAW MATERIALS



POLISPEC.COM

polispec

GETTING INSIGHT

Those who contact us have the opportunity to meet a partner able to offer:



KNOW-HOW



EXTREME SPECIALISATION



COMPLETE DESIGN  
AND PRODUCTION, "turnkey"

### *Spectrophotometry and applied electronics*

We are a dynamic and creative company founded in 2012, **specialising in spectrophotometry and applied electronics**. We use our theoretical and practical knowledge and methodologies to design and **build electronic systems and measuring instruments**. Our core business is applied spectrophotometry, in its various forms and for each application sector. We work to design and build systems for rapid and non-destructive measurements, **suitable for all contexts where precise, immediate and multiparametric information is required**. This allows us to study and obtain technological solutions for various fields of application, to manage the variables necessary for the integration of systems in different environments and to solve the specific needs of each production process.

We are versatile and multisectoral,  
our ideas have no boundaries.



THE REFERENCE SENSOR FOR  
MONITORING THE QUALITY OF RAW  
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# Polispec NIR

## Getting insight

We have created **POLISPEC NIR (Portable and On-Line SPECTrophotometer)**, a compact spectrophotometer with an industrial design, designed and built both for portable use and for online installation. Its operation is based on the interaction of a light source with the molecules and with the chemical bonds that characterise the matrix to be analysed, thus performing both quantitative and qualitative measurements.

**Polispec NIR is designed to ensure intensive use in all agricultural processes in which immediate and precise measures are required for the management of variables and for self-control systems.**

### TECHNOLOGICAL ADVANTAGES



. DESIGN

- ⊕ COMPACTNESS
- ⊕ RESISTANCE

**Polispec NIR is simple and intuitive,** suitable for multiple uses and designed for intensive use on a large variety of matrices.



. QUALITY

- ⊕ RELIABILITY
- ⊕ PRECISION

**Polispec NIR is a robust and reliable instrument,** designed for use in the field and in demanding environmental conditions (temperature, vibrations, atmospheric agents, etc.).



. SOFTWARE

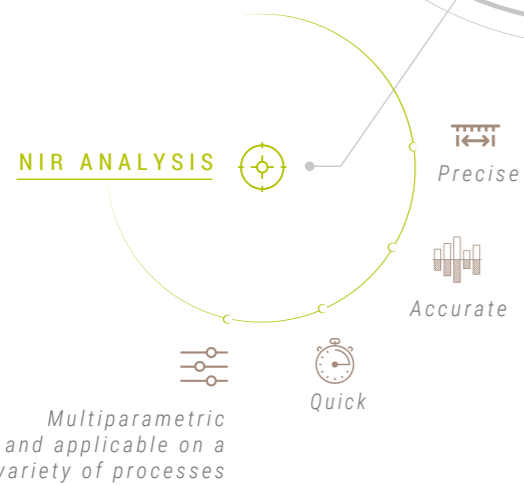
- ⊕ INNOVATION
- ⊕ COMPLETENESS

**Polispec NIR** is equipped with software that allows it to be used in many contexts, both **as a manual system** and as an **integrated tool to agricultural machinery.**



Polispec's NIR (Near Infra Red) analysis is the method that measures products as they are with extreme precision, providing immediate results and without the need for highly qualified personnel to perform the analysis operation.

- . MEASUREMENT VERSATILITY
- . ANALYSIS PRECISION
- . IMMEDIATE DATA

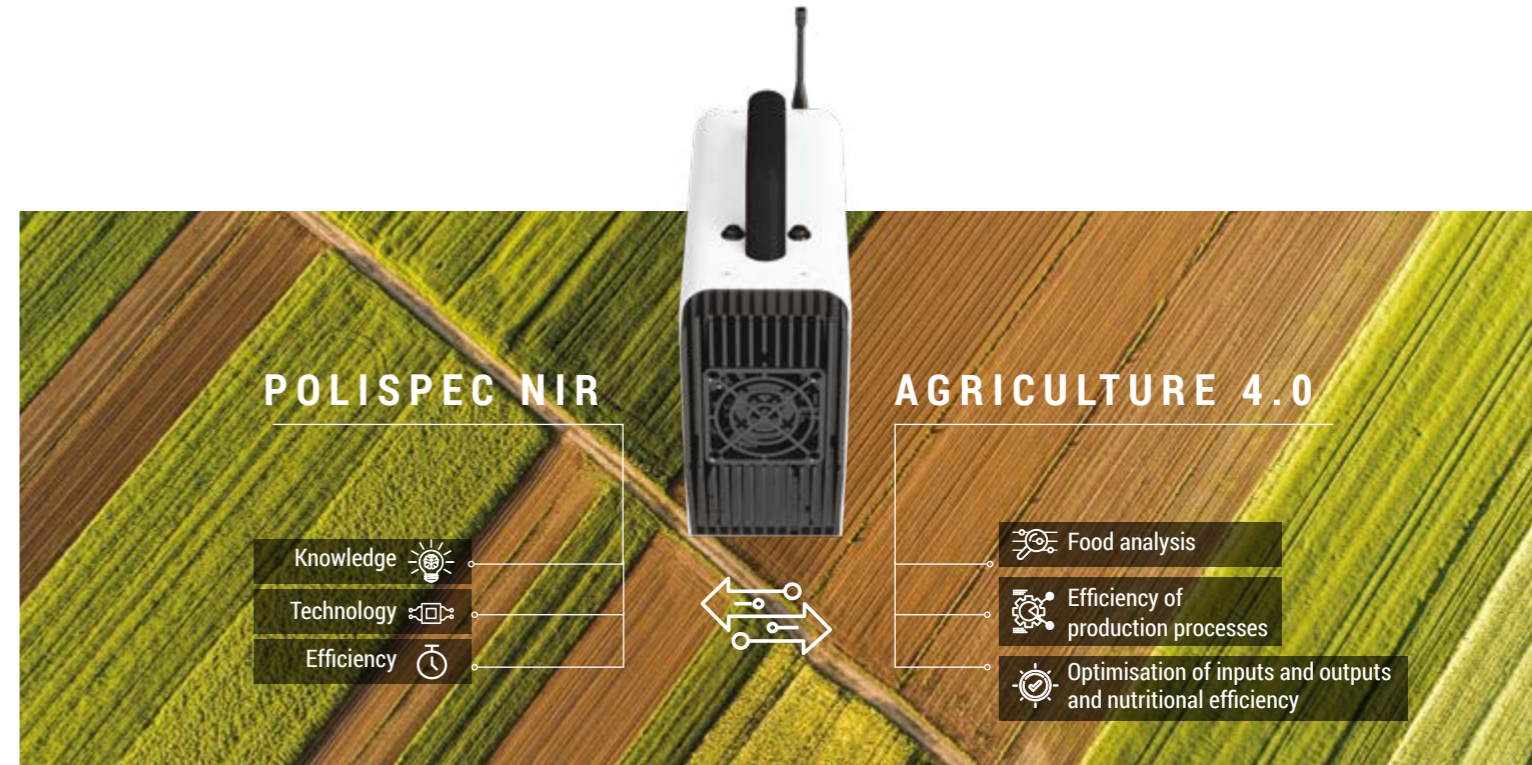


- . TECHNICAL QUALITY .
- . TIME OPTIMISATION .
- . OPERATIONAL CONVENIENCE .

This technology is suitable for use as both a manual tool and applied in-line. Its application versatility is used to measure a multiplicity of products in an immediate and direct way.

**TECHNOLOGICAL  
ADVANTAGES**

Success is the harmonic fusion between power and technology, between strength and intellect. Today in agriculture all this is possible because the entire sector now has the skills and means to make work better, more efficient and more profitable. This is how **Polispec NIR** was conceived, because to know, it is necessary to measure and to act and improve it is necessary to know.



. CHARACTERISTIC

**Polispec NIR** is an innovative tool dedicated to the agriculture and precision feeding sectors.



. TECHNOLOGY

**Polispec NIR** is highly performing in terms of sensitivity, operating dynamics and signal cleanliness.



. SOFTWARE

**Polispec NIR** can be used in a single version for each application area.



# POLISPEC

An innovative range of tools to analyse, monitor and self-check the quality of raw materials and finished products for the feed and milling industry.



FEED INDUSTRY      MILLING INDUSTRY



VIS-NIR



LITE



NIR



You can choose the sensor that best suits your needs, from the simplest measurement of product moisture to the most complete analysis of all nutritional components.

Use



IN THE LABORATORY



IN POINTS DEDICATED TO RECEIVING GOODS



IN LINE INSTALLATION

# TECHNICAL VALUES OF POLISPEC

A solution suitable for every need



Easy installation



Reference tools for the analysis of industrial processes and self-control



Practical integration to the control systems of a plant



## SPECIALIST STAFF

We provide our team of professionals to carry out adequate calibrations for raw materials and feed lines



## CALIBRATION CURVES

For the Polispec NIR model, we provide a wide selection of pre-calibrated calibration curves that are immediately available for use without the need for further interventions



## CUSTOMIZATION

In addition to the wide range of ready-to-use applications, we offer ourselves as a valid partner for the development of customised projects and integration of our technologies

ANALYSIS OF  
THE PROCESSING  
PROCESS



N I R



L I T E



V I S - N I T



F E E D I N D U S T R Y

As a leading company in the production of measurement and control systems for the agri-food industry, we offer an innovative range of tools for the analysis, monitoring and self-control of the quality of raw materials and finished products for the feed and milling industry. Within the **Polispec range** of measuring instruments, you will find the sensor that best suits your needs, from the simplest measurement of product moisture to the most complete analysis of all nutritional components. The entire **Polispec range** is available both for use in the laboratory and in points dedicated to receiving goods, and for in-line installation. Designed

for easy installation and integration with plant control systems, **Polispec systems** are an important reference in the field of process instruments. Alongside our technologies, we make our specialist staff available to carry out calibrations for company products and for its own feed lines. A wide selection of pre-calibrated calibration curves are also available for the **Polispec NIR series** and are immediately available for use without the need for any further intervention.



D E V E L O P M E N T  
A N D I N N O V A T I O N



C U S T O M I Z A T I O N








S P E C I A L I S T  
T E A M



## OUR SOFTWARE

**The Polispec line** is extremely versatile because it is equipped with software systems designed by us that make it possible to make these devices technologically performing and customised on the peculiar characteristics of the activity of each feed mill company.

### poliDATA

-  Different sampling modes
-  Immediate results
-  Archiving system
-  Custom setting
-  Guided diagnostics and calibration

Supplied pre-installed on a touch tablet, the poliDATA software can be installed on any computer with a Windows® 8 or 10 operating system.

**It is our main software for portable use of Polispec instruments and offers an interface designed for use on both tablets and desktops.** It is an application designed for control on touch devices and is particularly simple and intuitive to use.

It is available in several languages and its main features are:




- **Analysis:** by choosing a chemometric model, it is possible to analyse a product with different sampling methods (swiping on the product, multiple swiping, multi-point) designed to reduce the sampling error and to increase the representativeness of the analysis
- **Qualitative indices:** the software has innovative systems for assessing the quality of the analysed product. For example, the index is available to assess the propensity



for ensilage of chopped forage

- **Results:** the analysis results are **instantly visible** and can be **exported in various formats and saved in an archive**
- **Analysis reports:** the analysis results can be exported to customised reports with your logo and company information. Additional parameters calculated on the results can be added to the report
- **Sharing of results:** results can be easily shared using a smartphone and sent via email and Whatsapp
- **Analysis archive:** it is used to keep and consult the data generated and saved, to print reports and to compare analyses on the same type of product
- **Instrument diagnostics:** the software contains tools for instrument diagnostics and remote assistance

### poliPROCESS PLC version

-  Suitable for industrial systems or machines
-  Continuous analysis
-  Modular

**It is our main software for system analysis.** In this configuration, the software user interface is available via the panel and the commands can be set from the PLC and the data collected can be transmitted to it. All PLCs using the modbus protocol (TCP-IP) and Siemens S7 are supported. The configurations of the registers used can be customised as desired.



AGRICULTURAL FIELD

HARVESTING

REARING

STORAGE

SEWAGE

*POLISPEC NIR CAN BE USED WITH EFFECTIVE RESULTS IN ALL PHASES RELATED TO FIELD AND FARM.*

**polispec**  
GETTING INSIGHT

**THE CIRCLE IS COMPLETELY CLOSED**

Directly in the field, during the harvesting of agricultural products, throughout the farming chain or on the materials in storage, **Polispec NIR** is the ideal tool for obtaining valuable data to improve your professional activity.





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