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Eoptis- Fava
Una collaborazione vincente

FAVA, LEADER MONDIALE NELLE TECNOLOGIE PER PASTA ARTIGIANALE E INDUSTRIALE, SECCA E FRESCA, HA INDIVIDUATO NEL COLORIMETRO INDUSTRIALE CLM-195 NON A CONTATTO DI EOPTIS LA TECNOLOGIA IDEALE PER MISURARE IL COLORE IN TEMPO REALE, ELIMINANDO IN CAPO AL CLIENTE LA NECESSITÀ DI RIVOLGERSI AL LABORATORIO PER SPECIFICHE MISURAZIONI A BANCO.

Il colorimetro industriale CLM-195 di Eoptis

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Eoptis-Fava
A winning combination

Cutting-edge innovations are often the result of synergies between leading companies. This is why Fava, a company based in Cento (Ferrara) and a world leader in technologies for artisan and industrial pasta, both dry and fresh, turned to Eoptis, a high-tech company based in Trentino and specialised in solutions for production quality control processes, when it was faced with the great challenge of enabling its customers to carry out one of the fundamental quality analyses in pasta production: the in-line, non-stop measurement of the colour of semolina, the ingredient obtained by grinding durum wheat and used in a wide range of pasta products.

In the CLM-195 non-contact industrial colourimeter from Eoptis, Fava has found the ideal technology to measure colour in real time and avoid the need for its customers to go to the laboratory for specific bench-top measurements. In fact, compared to other solutions on the market, the Trentino-based company's colourimeter is available for both bench-top and in-line installation, for intensive 24-hour use.

To validate the Eoptis sensor, Fava carried out a series of laboratory tests, comparing the CLM-195's measurements on a semolina sample with those of a well-known technology for bench-top measurement from Japan. The performance of the Eoptis colourimeter was found to be comparable to that of the more widely used technology, with a perfectly acceptable margin of error. For this reason, Fava decided to replace the previous technology with the Eoptis colourimeter in order to offer its customers a solution for both in-line and bench-top measurements.

The perfect solution.
In the plant, the CLM-195 is installed in the dosing area of the line; the semolina is poured vertically, passes through the hopper, enters the press and - before it is mixed with water and becomes dough - is subjected to colour measurement. The measurement, which allows the traditional L*a*b* parameters to be analysed, is carried out through a borosilicate glass calibrated on the colourimeter; this type of glass has mechanical properties that make it resistant to the scratches caused by the semolina, a very aggressive raw material. Other particularly challenging elements in the integration of the Eoptis industrial colourimeter were, for example, the brackets and the calibrations.
The data collected by the colourimeter is very important for large pasta producers, who are increasingly using data analysis and blockchain, and want to track the semolina from the mill, where it is ground and the first colour measurement is made.

It is essential to ensure that the colour of the semolina measured immediately after grinding is identical to the colour of the semolina when it arrives at the pasta factory. This is an effective way of contributing to guarantee the highest level of quality for the end consumer, knowing that the colour of the raw material affects the finished product. Each recipe and type of pasta requires semolina of a specific colour, and although there is a range of tolerance, it is necessary to ensure this specific colour because, among other reasons, the consumer in the supermarket or bakery has precise expectations in this respect.

One of the strengths of the Eoptis colourimeter is that it is very easy to use. It also provides a value in terms of CIELAB colour space coordinates comparable to that of the standard Japanese technology mentioned above (which is only available for bench-top measurement though). Thanks to the sophisticated sensor developed by Eoptis, Fava is now able to offer laboratory quality in-line measurements that are fully compatible with historical data series and those of pasta factories around the world, allowing full standardisation of the measurements carried out.

Eoptis has always placed the customisation of its technology at the heart of its value proposition. An example of this is the customisation of the CLM-195, based on Fava's needs, to comply with the industrial communication standards (PROFINET or Ethernet/IP) used by the Emilian company. The support provided by Eoptis was characterised by maximum availability, attentiveness and timeliness, which are essential when carrying out cutting-edge innovations.

Of course, Fava's innovation does not end here, nor does that of Eoptis. The former is increasingly focused on the widespread use of Artificial Intelligence to provide advanced digital services, based on the analysis of all the 1200 process variables, in order to make the pasta production line much more responsive and advanced: the aim is to provide the pasta makers using a Fava line with all the information they need to achieve their goals. For its part, Eoptis is expanding its range of colorimetric products, both for use in production lines, as in the case of FAVA, and for laboratory quality control of the finished product.

eoptis

electro optical systems

Eoptis is a highly innovative Italian company specialising in the design and manufacture of vision systems and optoelectronic instruments for in-line control of products and manufacturing processes. For more than 10 years, it has been developing a family of sensors and instruments for colour measurement that effectively support food machinery manufacturers and enable them to have full control over their production. Multidisciplinary expertise in electronics, optics, mechanics and analysis algorithms is used every day to develop products that are available off-the-shelf or for customised OEM solutions. Eoptis integrates highly innovative technologies with industrial-grade, long-term available components to manufacture reliable products that meet the quality standards required by its customers.

FAVA

pasta equipment *Storci*

FAVA S.p.A. has been operating in Italy and worldwide since 1937. With a turnover of over 100 million euros, net assets of 35 million euros, 26,000 square metres covered area in two factories and 330 employees, including more than 50 in the after-sales service, FAVA S.p.A. is the world's largest company specialising in the research, design, manufacture and marketing of pasta production plants. With more than 1500 pasta lines installed in the most important pasta factories in the world, representing 40% of the world market share and about 80% of the Italian market share, Fava S.p.A. looks to the future with confidence, aware that it is contributing to feeding the world, always driven by the motto of its Chairman eng. Enrico Fava: «always one step ahead of the competition».