

ELOTEST PL500



High-End Sorting Module

Modern Multi-Frequency Sorting Inspection

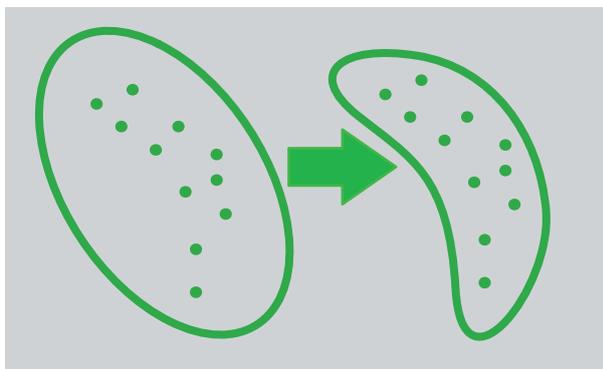


Multi-frequency sorting inspection using the PL500Q has proven itself in practice. It combines simple operation by means of an automatic learning process with the security that nothing will be overlooked. A "fingerprint" of the learned good parts is generated using up to eight test frequencies. All other parts are compared to this, ensuring that deviations are found in terms of material, heat treatment or other test object properties that can be detected by electromagnetic means.



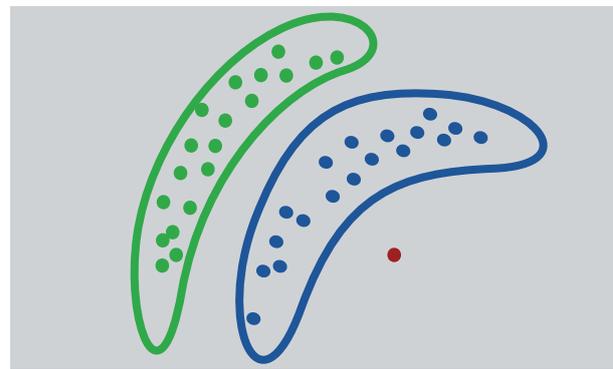
Improvements on a Good Principle

The **ELOTES PL500Q** can automatically generate the elliptical tolerance fields established as the default in the multi-frequency sorting inspection, of course. In practice, however, it is often seen that an ellipse is not the optimum form for parts with relatively high variance. By activating its bubble gates, **ELOTES PL500Q** can achieve better selectivity for those parts. Even curved and other irregular variance clouds can be displayed in this way.



Mixed Lots Allowed

The classic multi-frequency sorting inspection pushes its limits if slightly different lots of raw material are used or the parts are presented in a different orientation. With its MultiLot feature, the **ELOTES PL500Q** can score points in these cases. The **ELOTES PL500Q** can learn up to eight different lots or other deviations in the characteristics of the parts. Mixed lots are no longer a problem. This does not hinder the reliability of the inspection, because each part will only be evaluated as good if it is to be assigned to a lot.



The Time Machine of Sorting Inspection

Unforeseen effects often occur in daily inspection work. Suddenly the output rate increases. The cause is unclear at first. Parts are removed and tested in the laboratory. It often turns out that the parts were good after all. They were destroyed during the laboratory testing, however, and can no longer be used to teach a new lot. With its RetroTeach feature, the **ELOTES PL500Q** can help in these situations. The data is recorded for the suspect part. After the laboratory tests, the data from the parts that were identified as good can simply be applied to a new lot or an already existing one. Parts of the same type are then immediately recognised as good from that point on. Only a time machine would be more practical.

Flexible Assembly for All Applications

The **ELOTES PL500Q** sorting instrument is based on the proven technology of the ELOTES PL500 platform. Up to 8 multi-frequency sorting channels or up to 16 classic eddy current test channels (for crack inspection, for example) can be housed in a casing and can be operated using a shared user interface. Any number of mixed assemblies can also be chosen. With up to 32 frequencies at a testing station together with an external multiplexer, the sorting channel can inspect parts in up to 8 testing positions (8 coil pairs) at the same time. The sorting channels can be incorporated into an external control system or can self-sufficiently control a sorting switch with automatic part feeding. Information retrieval from all of the relevant position sensors guarantees the highest possible intrinsic safety. The crack inspection channels can also be set with up to 32 frequencies or parameter settings in multiplex operation or be used in high-speed operation (bandwidth up to 100 kHz) with 250,000 data points per second. Even modern probe array technology can be used. The system can, of course, be equipped with all of the necessary interfaces (TCP/IP, fieldbuses, 24 V I/Os, etc.).

Your inspection task can be solved as well using this modern system based on FPGA technology. Put us to the test!