

Automatic sorting machines

The manual and/or sample quality control of a product is no longer adequate to the standards of the current market and therefore it is essential to provide systems for checking 100% of the production. We respond to this need by designing automatic machines capable of checking and sorting the most varied typologies of pieces in order to guarantee the quality control of the entire production. On our systems we implement multiple technologies such as machine vision, contact measurement systems, laser gauges and

profilometers, non-destructive checks with induced currents and, thanks to our software, we allow the complete management of the machine with a single operator interface

Our systems allow the storage of all statistical control data, organized by work order, and enable the creation of an unlimited number of selection programs in guided mode.

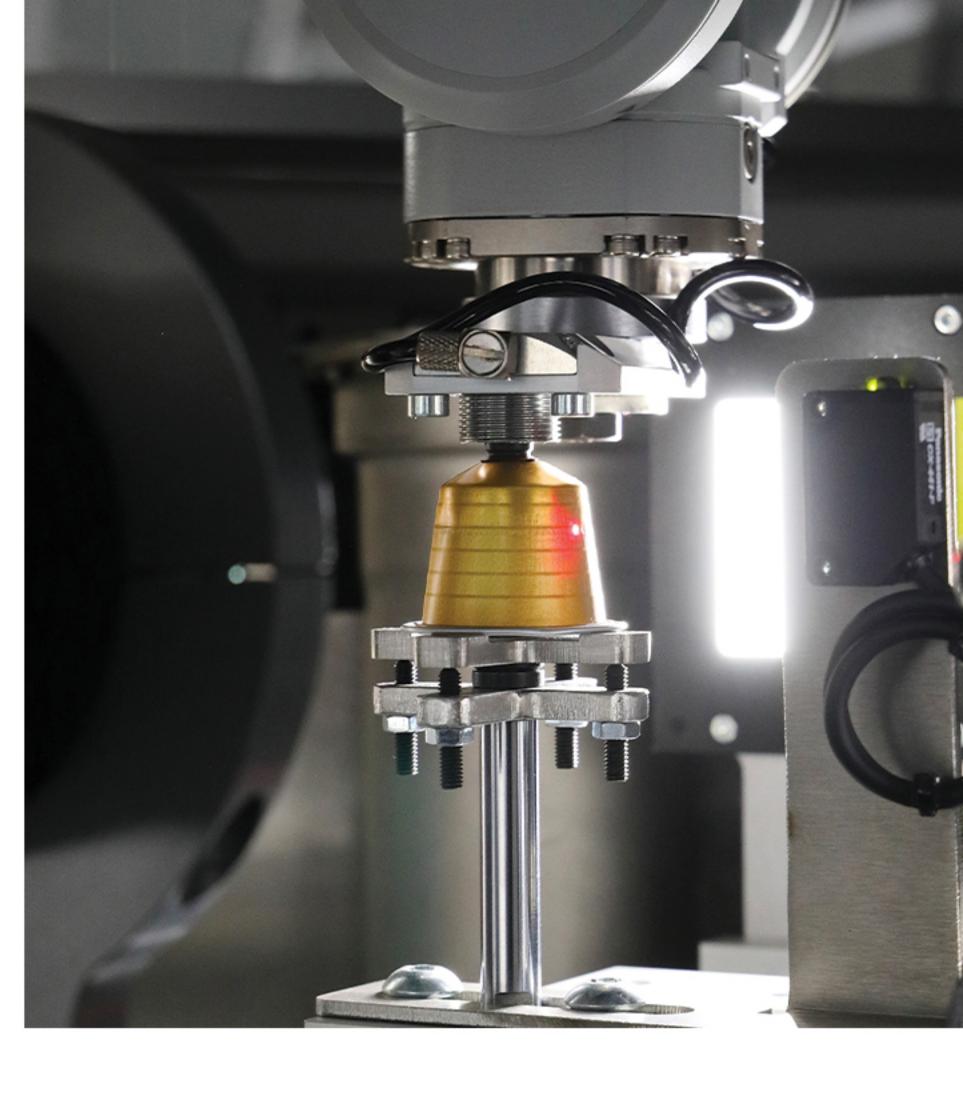
The integration of feeding and packaging systems makes it possible to create real "turnkey" testing systems. For all the solutions offered by Delta Visione, whether standard or custom systems, remote assistance is available, provided by our team of expert technicians.

DV-EFSM - Eye Flex Sorting Machine

As can be seen from the name itself, the DV-EFSM is by far the most flexible and versatile standard selection system. The robust supporting structure, made of welded steel, supports the anthropomorphic robot used for the picking and handling of the parts in the various control stations.

The applicable selection criteria are multiple and based on complementary technologies such as 2D/3D artificial vision with matrix and/or linear cameras, contact controls with measuring gauges and inductive probes, eddy current for the control of heat treatment presence and absence of cracks, laser with profilometers and micrometers.

The system also allows the management of an automatic cycle of master piece verification, aimed at the periodic control of the machine calibration. Non-compliant components can be classified according to the type of defect detected, with logic programmable by the customer.



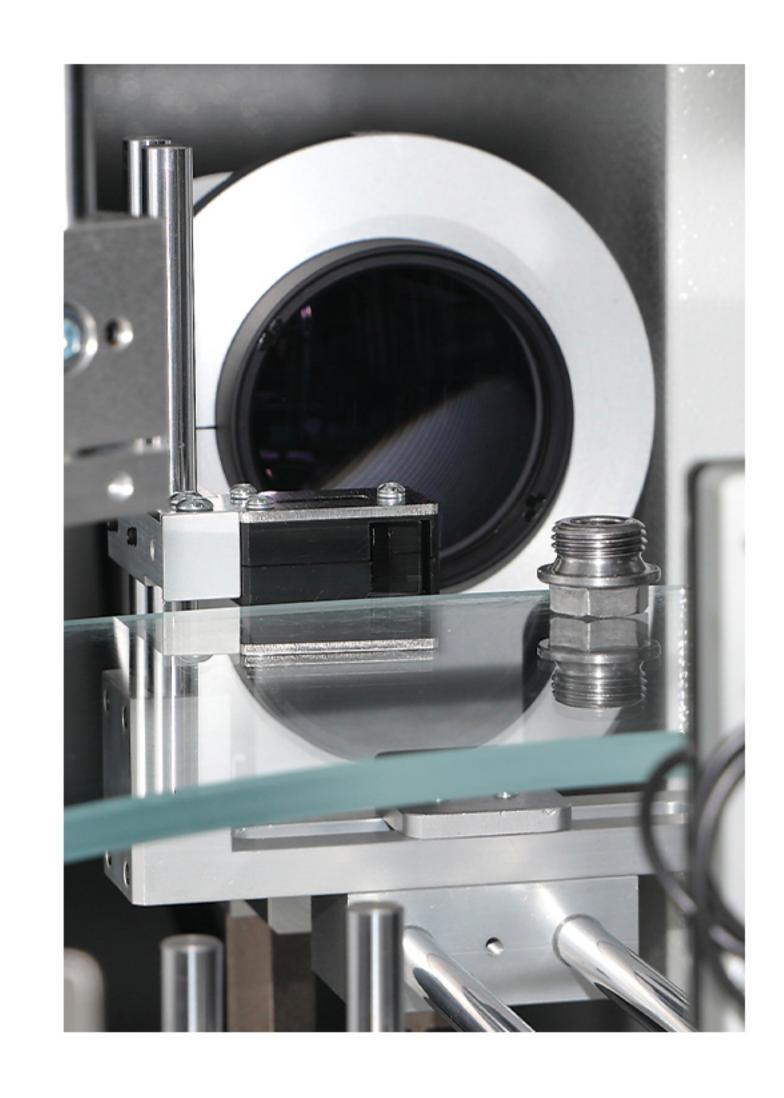
DV-GPSM - Glass Plate Sorting Machine

The characteristic element of the DV-GPSM sorting machine is flexibility, obtained by the use of a glass disc for the transport of the parts, which allows to inspect various types of products, minimizing the setup procedures of the machine.

For components with unstable geometry, a milled disc suitable for transporting the parts with a horizontal axis is used. The robust supporting structure, made of welded steel, houses a number of control stations configurable and expandable over time based on customer needs. The DV-GPSM sorting machines allow to carry out optical dimensional and surface controls, verify the presence of heat treatment and possibly divide the compliant products into classes with high productivity.

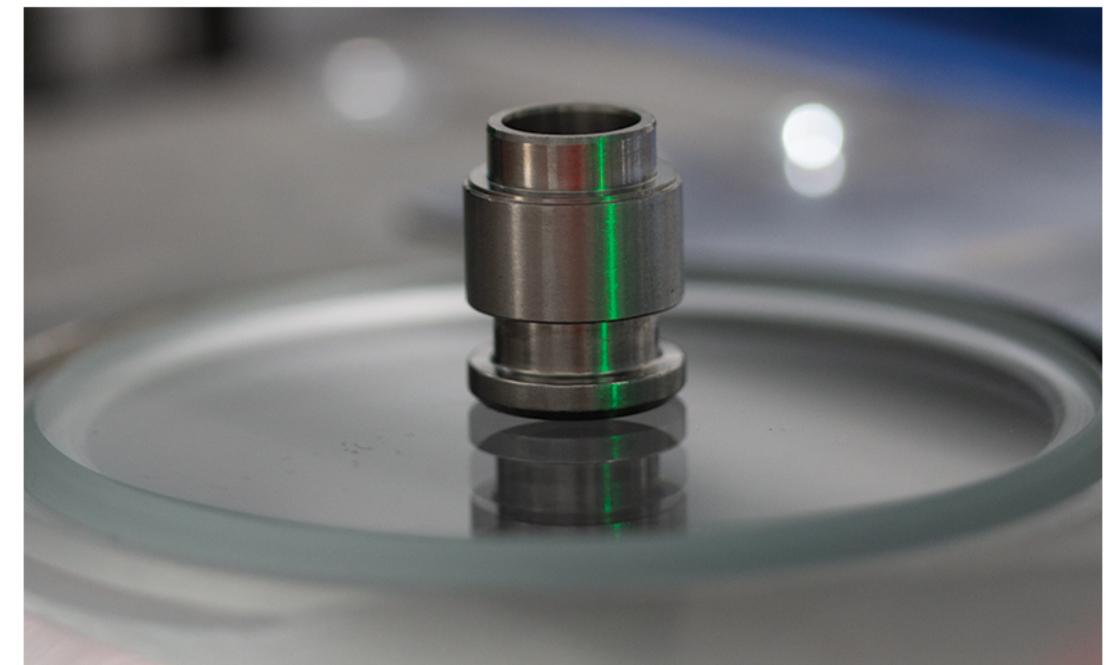
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Delta Visione offers two simplified versions of this machine: a Light version, which allows the configuration of up to 3 inspection stations and only two discharge channels (OK/Reject), and a Smart version, which is our entry-level solution, featuring extremely compact dimensions and equipped with 2 vision stations, lateral and top.



DV-RDSM - Rotary Disc Sorting Machine

The DV-RDSM system is designed to respond to the most complex selection needs that require contact controls with part handling. The robust supporting structure, made of welded steel, houses a mechanical table with controlled rotation, equipped with interchangeable part holders. The applicable selection criteria are multiple and based on complementary technologies such as 2D/3D artificial vision with matrix and/or linear cameras, contact controls with measuring gauges and inductive probes, eddy current for the control of heat treatment presence and absence of cracks, laser with profilometers and micrometers. The stations are equipped with controlled electric axes in order to easily and effectively manage the programming of controls for the different types of parts to be sorted. Non-compliant components can be classified according to the type of defect detected, with logic programmable by the customer.



DV-BSM - Belt Sorting Machine

The DV-BSM automatic sorting machine meets the need for high-frequency control of elongated parts. The motorized conveyor belt of the pieces to be sorted is installed inside a robust supporting structure, made of welded steel.

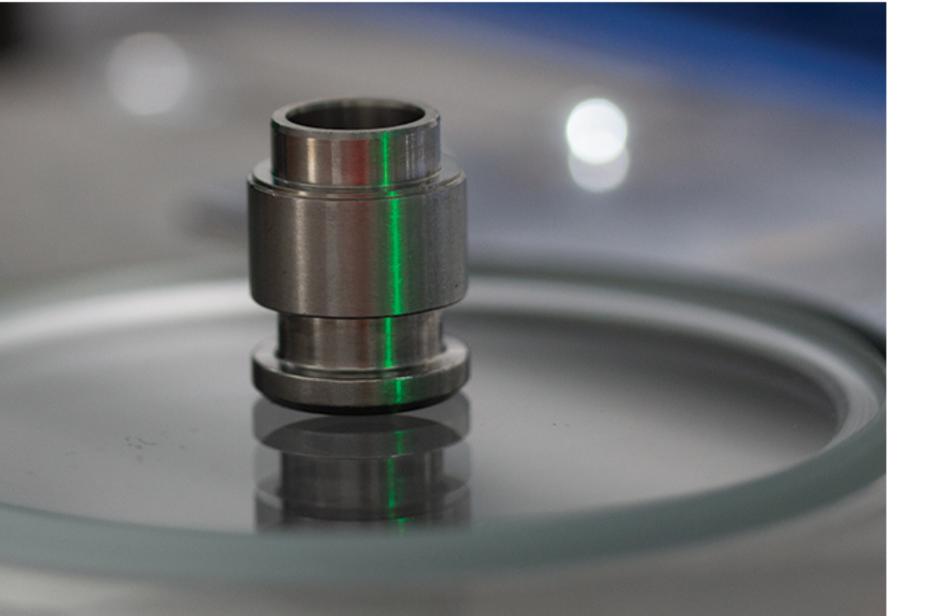
The machine consists of a single dimensional control station, configured according to the geometry of the pieces to be inspected, and does not require any mechanical setup when changing type.



The DV-TSM sorting machine is dedicated to the functional control of internal and external threads.

The robust supporting structure, made of welded steel and extremely compact in size, can accommodate one or two linear rotary actuators depending on the required productivity. Through extremely accurate control of force and position, the system allows to intercept both undersized and oversized threads with a single master pad and to verify their functional length.

The system is designed to be interfaced upstream of any visual sorting system, such as the DV-ASM or the DV-GPSM, in order to create real modular sorting lines.



DV-ASM - All-around Sorting Machine

The DV-ASM automatic sorting machine is designed to meet the needs of customers for a simple but versatile product.

The robust supporting structure, made of welded steel and extremely compact in size, houses a rotating small-size glass plate on which the parts are positioned without specific references, allowing to inspect various types of products and minimizing the setup procedures of the machine.

The base configuration provides a top view and a programmable number of side views on 360° but, optionally, a third bottom camera can also be installed.

