Static dimensional control, run-out and machined surfaces control.

The quality control solutions for automotive valves
The compact, quick and cheap dimensional control

PP6
Pick and place system for the dimensional control for automotive valves with a rate of 600 valves/hour.

The machine allows the valves metrological inspection by means of a vision system based on two lenses that detect measurements of the piece.

The application can be integrated in production line with automatic loading and unloading of the piece to be measured.

The equipment guarantees extreme accuracy (+/- 1.5 micron) and repeatability of measurement detected in a very limited cycle time and taking measurements of length, width, distance, diameter, bend radius and angles.

A compact, quick and cheap solution that allows the control of 100% of production.

RUN-OUT control quick and versatile.

VRO 600
The system allows to execute the control of all the dimensional parameters of the valves from static measurements such as lengths, diameters and radius, to run-out measurements with valve in rotation.

Valves are picked up from transport line one by one, by a manipulator and subjected to various checks:
- external dimensional control
- seat run-out control
- stem bow control
- tip-end run-out control

An independent reject station is arranged for each valve’s feature checked

The equipment is available in 2 versions with or without static dimensional control.

VRO is a solution able to process up to 600 valves/hour with extremely reduced retooling times with type changing, ideal to process batches of small dimensions such as lorry valves.
The faultiness control for valve surface quick, objective and effective

MVI 600 - MVI 1000
It is an inspection machine for processed surfaces of automotive valves (head, tip-end, stem-bow and seat) with the purpose to find specific faultiness that may arise during the manufacturing process of automotive valves.

The machine consists of 5 surface control stations, with on option the sixth station for static dimensional control.

The station for static dimensional control effects a measurement of the valve with accuracy to micron on diameters, lengths, radius etc.

Surface control stations check possible defectiveness on the length of the valve.

Each station carries out the control on a specific section of the valve whose complete scanning is assured from rotating system on its axis.

Between each control station stands a reject station that allows the pieces to be divided according to their defect

An ALL-IN-ONE solution for the quality control of the final product with a rapid recover of the capital outlay.
Pick and place system for valves, for any manufacturing process to be executed off line

VPD 600
Quick pick and place system realized to take valves from production line and collect them in pallets suitable for nitriding. Collected valves are replaced immediately in line with others that have already been processed.

A double vision system in the pick-up and deposit area guides the robot in filling up and emptying the pallet checking the number of valves contained in each pallet.

A roller-ways system with double level provides pallets running.

The speed of the system allows it to be used on lines with a rate of 600 valves/hour.

Good for any operation executed off line, it permits with a moderate purchasing price to speed up cycles to those that usually subcontract certain processes or production phases.

End line palletization and check of right completion

VP 600 - VP 1000
Automatic palletizing system for automotive valves in proper plastic trays.

The application, through a vision system, fix with precision, deposit hole position of the valves into containers.

The robot picks up valves from the line and provide their correct positioning into deposit holes.

At the end of the palletizing process, the system acquires an image of the container and certify its full filling.

A solution extremely flexible, to palletize into recipients with changeable shape up to 600 or 1000 valves/hour also with different center-distances in the same tray.