

Application Notes: In-Line Closing Efforts Inspection Station

Innovation

PLS is a fully integrated solution enabling to do 100% inspection for a vehicle production line. It ensures to capture any out of tolerance product and flag the part for rework to ensure a maximum of customer satisfaction. The smooth flow, automation and integration makes it possible to perform this task in the limited time frame.

“100% In-Line Closing Efforts Measurement.”



Application

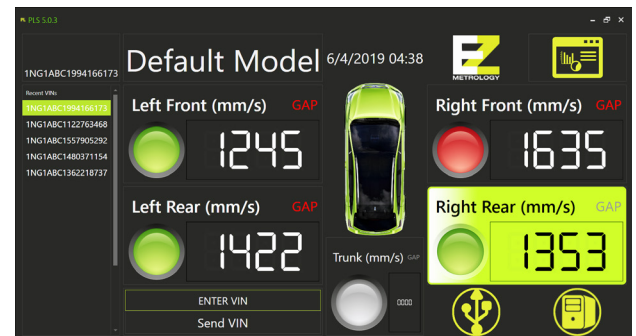
PLS is compatible with both gauges, EZSpeed, which is used to capture closing speed or EZEnergy, which is used to record a minimum closing energy. The software package will integrate all steps of the operations to eliminate any user interaction and maintain streamlined manipulations. Results that have been registered will be uploaded to a quality system for tracking or repair information.

Step 1: Vehicle Identification

The software will retrieve the VIN number followed by decoding for vehicle identification. Optionally the age of the vehicle can be determined and the tolerance can be adjusted based on the age of the seals. Instructions are provided to the operator on which door to measure. All data will be associated with this vehicle and door location.

Step 2: Measurement

A measurement for a Go/NoGo validation can be done within a matter of seconds. Often within two or three trials, it can be determined if the minimum closing speed is inferior to set a tolerance. Alternatively, with a few more datapoints, the absolute minimum closing speed can be determined. It is a choice of operation which method is preferred. A final feedback in the form of a green/yellow/red light will indicate a passing or failing door assembly.



Step 3: Reporting

The results are kept in a database organized by VIN number. While the database can be accessed remotely for review, in most occasions the system will report OK/NOK and the values to a plant-wide quality system for monitoring and review of the data in case of a repair request.

Flexibility

A PLS system offers a wide variety of choices mostly in function of the tact time, required tolerances. These choices will be addressed during the definition of the station. Obvious choices could be if it is better to have an operator for all doors or one operator on the left side and a second one on the right side.

Contact **EZ Metrology** directly to evaluate your specific requirements and the matching options.

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