



ATS Global B.V.

ATS Inspect

Case Study

Whirlpool



www.ats-inspect.com

ATS Inspect Helps Whirlpool Meet its Customers' Quality Expectations

See how ATS Inspect is saving Whirlpool time and money by streamlining the visual defect identification and repair process.

Eliminating Cosmetic Defects

Buying a brand-new refrigerator with a stainless steel exterior is a big investment, so the customer expects perfection when unpacking the product. Cosmetic defects are simply unacceptable, so Whirlpool has embarked on a project striving to completely eliminate them during the manufacturing process.

The Old Ways

A refrigerator facility in Mexico produces export-only products, where the customer expectations are highest. In the past the paperwork that travelled with each manufactured unit was created manually. Given the multitude of options available in their products this could create many additional problems.

Defects were marked on a tick sheet, so the repair teams had to guess exactly where the problem was located. Stamps on the paperwork indicated corrected issues, but additional information was not provided.



Supervisors attempted to gauge the current quality status by walking over the different inspection points, then the repair areas to look at the paperwork to see what the top issues were.

Quality reports took hours to be created after the paperwork was completed, but even then the information didn't contain enough detail for the process to be improved. Then, Whirlpool decided to implement ATS Inspect.

The ATS Inspect Solution

The system administrators utilize pictures of the different models in production. When the inspector enters a particular serial number on screen, the appropriate images and options are displayed. The inspectors can then precisely indicate the location of the cosmetic defects on an image of the unit.



The repair person can see the same image with the exact location marked by the inspector, along with defect details such as size, severity and responsibility. It is even possible to take a photo of the defect and store it in that unit's repair history.

Production personnel manually enter the results of functional tests against each unit, although soon the test equipment will be linked directly to ATS Inspect.

Inspectors in the assembly area use mobile tablets to perform their job while walking around each unit. Repair personnel use touch screens to see what the open issues are and to enter their own repairs, including the time taken for the repair, if necessary, to estimate the cost of quality issues.

Instant In-depth Reporting and Analysis

Quality engineers run trend reports on historic data to validate the effectiveness of the improvement actions implemented on the shop floor. Supervisors can also run a Top Issues report at any given time to see what the top problems are at that moment.

The feedback is given to the production teams in real time and specific checks are put in place for particular issues that need to be contained immediately.

Even while traveling, managers can keep an eye on the process by running reports from a different location. In the next phase of the project, real-time alarms to notify key personnel on critical issues or defect trends will be introduced.

Having their key process indicators available in real time has proven to be invaluable at Whirlpool. Unit traceability includes comprehensive history – who did what, when and where – that can be checked after receiving a warranty complaint from the field. In the remote possibility of a product recall, all part numbers are stored electronically, so it would be straightforward to limit the number of units affected.

Building Success Upon Success

The refrigerators facility implemented the project at the back end of the process – Assembly and Repairs. The next phase involves expansion to the Laminating and Insulation areas.

After witnessing the quality solution in place at this facility, another washer and dryer facility in Mexico has taken the first steps in the implementation process. In our experience, a global deployment begins with the first plant and success is contagious.

About Whirlpool

Whirlpool Corporation is a leader in the \$120 billion global home appliance industry. Their appliances are marketed in nearly every country around the world.



Whirlpool manufactures appliances across all major categories, including fabric care, cooking, refrigeration, dishwashers, countertop appliances, garage organization and water filtration.

Whirlpool markets some of the world's most recognized appliance brands, including Whirlpool, Maytag, KitchenAid, Jenn-Air, Amana, Bauknecht, Brastemp and Consul.

ATS is an **Independent Solution Provider**, with over 30 years' experience in the manufacturing systems arena and a wealth of experience undertaking Continuous Improvement initiatives and Manufacturing IT solution design, deployments and 24/7 support assignments.

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