



ATS Global B.V.

ATS Inspect

Paint Industry



Don't Just Collect Data-Use it to Reduce Defects and Rework

*Every paint and coating operation collects data but few use it effectively. Most record their data using paper and pencil and likely key that data into Excel to create a minimal set of reports that are not produced in real time. ATS Inspect replaces this ineffective system with a paperless data collection operator interface. All data entered is immediately made available for analysis via web based reporting. With ATS Inspect you don't just **collect data** - you **use data** to affect true process improvement and reduce costs.*

Capturing Quality Data

ATS Inspect makes light work of the quality control required by your paint/coating processes. The suite of applications provides a number of different approaches to capturing and analyzing defect and rework data:

- ▶ Collects and analyzes paint and coating defect data for issues such as thin, orange peel, overspray, sag, contamination and other common non conformances.
- ▶ Collects and analyzes variable data such as Thickness, DOI, Gloss and other measurements to ensure they stay within specified limits.
- ▶ Utilizes electronic checklists to vastly reduce human error and increase quality control efficiency.

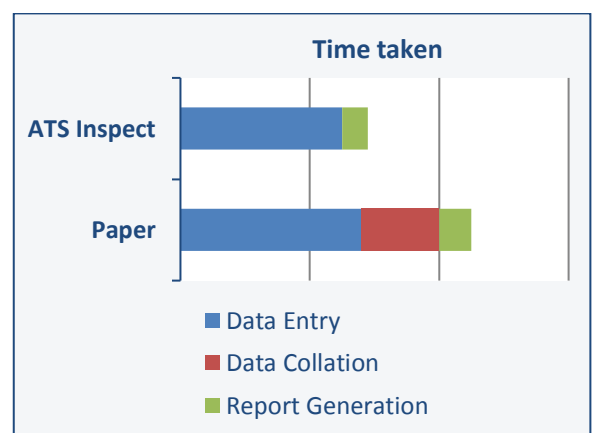
For All Steps of Your Paint Process

ATS Inspect can be adapted to capture quality data in any process used in the application of coatings; including plating, powder coat, liquid coat and electrostatic. It can also be used to perform inspections at any step in your paint process, including:

- Inspection and analysis of defects in primer, base coat, metallic and clearcoat
- After oven visual defect inspections
- Analysis of Measurement data such as thickness, gloss, DOI and other metrics
- Substrate defect analysis
- Rework and touch up tracking
- First Time Through and Tracking Point Pass analysis
- Defect Mapping and Concentration Diagrams
- Paint Contamination Analysis.

Paperless Manufacturing

Human error is reduced to a minimum by removing the requirement of re-entering information from a paper record into the database or Excel for analysis. With ATS Inspect information is entered directly into the system. Time and money are saved by avoiding duplicate data input.

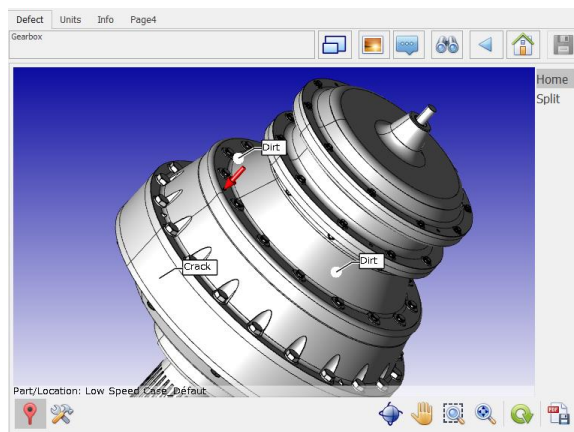


Data can be entered using a PC, tablet or handheld device. Entering data directly into the system reduces the risk of human error.

3D Inspection

Defects can be placed directly onto 3D CAD models. All major CAD formats are supported allowing you to import your existing models.

When you need to add a defect you can smoothly rotate the model, using a mouse or touch-screen, zoom in to the required area and assign the defect.



By bookmarking key positions the operator can jump to preset perspectives with cut-throughs and with components removed so that they can place defects inside the product without the need for multiple views and photos to be taken.

Layered Inspection

The operator can also place defects on multi-layer 2D views. This allows them to strip away information to see *inside* the object being inspected.

This layered approach mimics real-world inspections and speeds up data collection which reduces costs and means no defect can remain hidden for long.

Create a “Digital Thread”

If your parts, batches, carriers or “trees” are serialized, you can easily capture the serial number associated with each part through keyboard entry, barcode scanner or other electronic method. ATS Inspect then creates and builds a “digital thread” for each part as it passes through the production process.

Defects and repairs are collected throughout all your inspection and repair points and combined into one record that is easily accessed. If your customer calls with a question regarding a specific part you supplied, you can retrieve and view the entire part inspection and rework history in a matter of seconds!

If your process allows for repairs such as touch up, spot paint, polish sand and repaint, you can review the entire history of which defects were found, whether they were repaired and whether the repairs were “bought off”.

Simple Defect and Repair Entry

An easy-to-use operator interface is one of ATS Inspect’s principal strengths. When recording defect data ATS Inspect displays digital images of the part or assembly and uses simple touch screen tools. Defects can be found, flagged and automatically routed to rework in a few seconds.

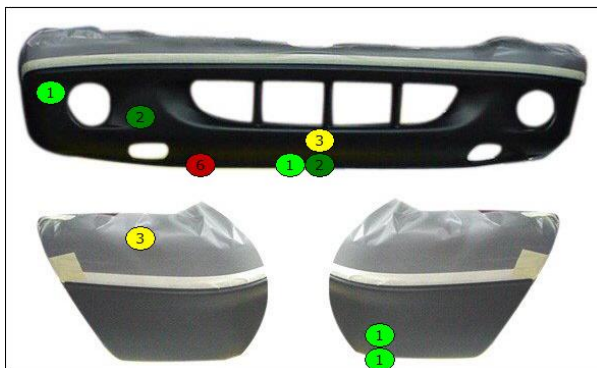
Capture Both the Type and Exact Location of Defects

In paint applications, knowing the *location* of the defect as well as the *type* of defect is critical to making the right process change to eliminate that issue.



Digital photos and CAD drawings can be imported and included in inspection screens for defect location accuracy. When an operator/inspector touches the part image on the ATS Inspect data collection screen, the software captures the exact location of the defect along with the defect type.

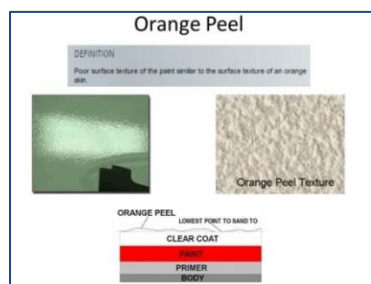
Having the type of defect and the exact location allows you to make the right decision regarding adjustments such as pressure changes, part and nozzle orientations and angles changes, oven temps, cure times, part handling procedure adjustments or other modifications that will reduce the number of defects occurring. Concentration Diagrams and Defect Maps that used to take days to produce are available in real time.



When reviewing repairs at another station the operator can view the same image and easily identify the defects and then record the result of the repairs.

Work Instructions/Visual Aids

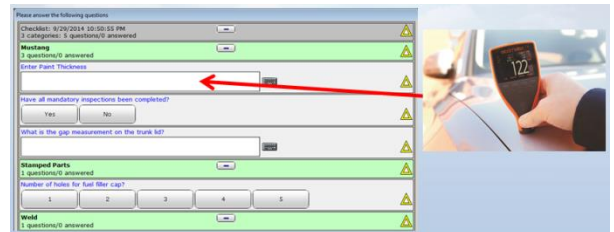
It's often useful to have some extra information about how to carry out an inspection or repair. This is where Reference Documents come in handy. Operator instructions, visual aids or whatever else you may need can be accessed by the operator when they need them most. Having immediate access to job aids and work instructions improve the quality of the data entered and assist in proper defect identification.



Electronic Checklists

ATS Inspect utilizes electronic checklists to record issues and to make sure all required visual checks, measurements and other critical information is captured during an inspection.

Paint thickness measurements, color match, filled hole conditions and other documentation is prompted for as an inspector moves through the checklist. This eliminates paper checklists and the difficulty of preserving, retrieving and using checklist data for later review and analysis.

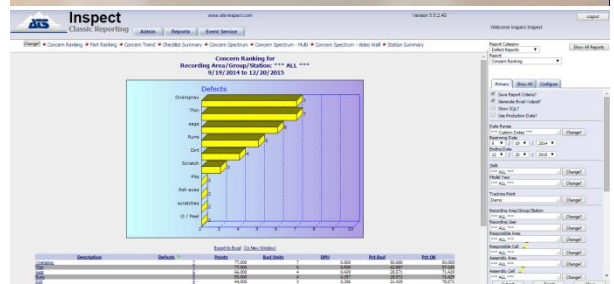


Insert recorded values in checklists

Real Time Analysis That Puts Money in Your Pocket

The powerful reporting abilities of ATS Inspect allow you to fully utilize the recorded data for analyzing trends and process issues over multiple production runs, as well as providing full access to the digital thread for all information related to a single part.

The web-based reports can be viewed anywhere in the world using a web browser. This allows management to review production even while on the road. You can even export reports to spreadsheets and PDFs.



Display recorded data in charts and tables

Reports can be generated for each product tracked in the system, and can be based on factors such as serial number, shift, paint booth, individual painter, oven, color and process parameter values. Any data entered can be used. ATS Inspect provides over eighty out of the box reports including:

- ▶ Pareto Analysis of defect types and defects by part number
- ▶ Concentration Diagrams and Defect Maps
- ▶ Trend Reports for all or designated defects
- ▶ Defects by shift or production hour
- ▶ Management "Dashboard" Reports
- ▶ Single Unit History Reports
- ▶ Many Others

You will also have the ability to create your own fully customized reports using utilizing the power of Microsoft SSRS. Designing reports in-house means you can respond to the needs of your business as soon as they arise.

Automated Report Distribution

Up-to-the-minute reports can also be scheduled to be sent to the relevant people at regular intervals automatically. Do you need that report on your desk first thing Monday morning? It'll be there.

Instant Event Notification

Personnel can be instantly informed of quality issues by utilizing ATS Inspect's automated messaging service that conveys information via e-mail and static display devices. It can even be configured to send out information-based or exception-based messages.



Criteria for event messaging are user defined and may include:

- ▶ Quality thresholds
- ▶ Production thresholds
- ▶ Critical issues
- ▶ Quality statuses
- ▶ Production statuses

Customize User Interfaces

ATS Inspect allows you to design custom screens that will be used by the operator collecting data. This flexibility also allows you to use different data collection platforms as need dictates in your facility.

Fast Installation and Configuration-by Your Personnel

For both attribute and variable data collection the entire setup, from installation through to the first use on the production line, couldn't be simpler. Out of the box ATS Inspect has everything you need to be up and running with the minimum of hassle.

ATS Inspect is designed to be configured, maintained, and modified by your quality personnel, without paying for system modifications or having to know any programming skills. This lowers the long term cost of ownership and results in a flexible system that can be deployed in any painting or coating application.

A Complete Solution

For attribute and variable data ATS Inspect has all bases covered. For further information please go to www.ats-inspect.com or give us a call.

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.

www.ats-global.com