

Toyo Seiko's New Coverage Checker is Successful in Field

oyo Seiko introduced the handheld Coverage Checker™ earlier this year and it's proving to be a valuable tool for their customers in several ways.

Reduced Processing Time

A manufacturer shot peens aluminum parts and needs to achieve 98% coverage. With the Coverage Checker, they discovered that their processing time was longer than necessary to achieve the desired coverage. The customer was able to cut the processing time about 15% from 30 min/batch to 25 min/batch. They appreciate the corresponding cost reduction, too.

Eliminates Human Error

An automotive springs manufacturer had a coverage requirement of "85% coverage must be guaranteed." A visual sampling inspection left them vulnerable to human error. Now they use the Coverage Checker. The pictures obtained with its camera are binarized to determine the coverage percentage and the results are displayed clearly. For example, the Coverage Checker's screen reads OK for "Okay" and NG for "No Good." Toyo Seiko's customer can now inspect the peened pieces with confidence that the readings are accurate.



Works in Conjunction with Peenscan Pens Oxide scale, complicated part configuration and hard materials like carburized parts can obscure the peening dimples. Toyo Seiko recommends covering the area to be peened with a fluorescent tracer dye, like Peenscan pens, and then using the Coverage Checker to verify coverage after peening.

Captures Information in Hard-to-Reach Areas
A spring manufacturer was cutting springs in half to conduct coverage tests. They recently purchased a Coverage Checker with the tool for measuring bores. The manufacturer saves time because they no longer

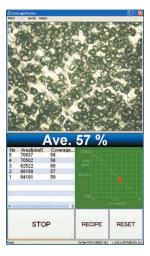
need to conduct trials



and they don't waste products for testing.

Training Tool

Visual coverage inspection requires experience. However, even a novice can obtain accurate coverage information with the Coverage Checker. In addition, the inexperienced shot peening technician can strengthen his visual skills by comparing his coverage percentages to the Coverage Checker results.





A Coverage Checker demonstration at the 2010 U.S. EI Shot Peening Workshop