

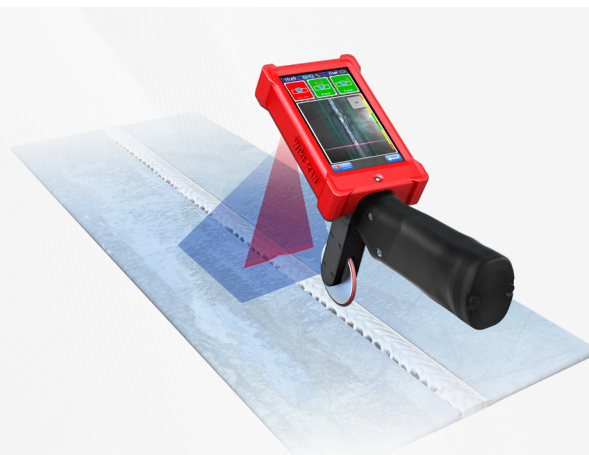
INTRODUCING THE NEW “MAX DEFECT LENGTH” FEATURE FOR WIKI-SCAN 2.0™

In high-precision industries like automotive, aerospace, and structural steel fabrication, quality control is non-negotiable. One of the most critical aspects of weld inspection is identifying when a defect actually matters. Not every minor irregularity needs to halt production — but how do you automate that judgment? That’s where our newest Wiki-SCAN 2.0™ feature comes in: Max Defect Length.

What is the Max Defect Length Feature?

The Max Defect Length feature allows users to set a threshold length for weld inspection parameters (e.g., undercut, lack of fusion, leg size, bead width, etc.) during automatic inspection. If an inspection measurement is outside of the set limits and exceeds the specified length, it’s flagged for review. If it remains below that length, the system can automatically mark it as acceptable based on user-defined criteria.

This adds a critical layer of intelligence to your inspection workflow — helping teams focus on what actually matters, rather than drowning in minor, low-risk indications.



What Problem Does It Solve?

Weld inspection data can be noisy. Vision systems can detect tiny surface irregularities that — while technically defects — do not breach welding code acceptance criteria. For example, per AWS D1.1, undercut may be acceptable if it is no deeper than 1/16” and does not exceed 2 inches in length within a 12-inch weld segment.

Without a filter like Max Defect Length, every small imperfection could trigger unnecessary alerts or slow down the review process. This feature solves the problem of over-flagging by letting users set a maximum allowable length for each defect type, aligned with relevant codes or engineering standards.

Walkthrough: How It Works in Practice

Let’s say you’re inspecting a fillet weld on a structural beam using Wiki-SCAN 2.0™. Your process requires that you conform to AWS D1.1 criteria for static loads for your inspection.

To set up the inspection criteria:

1. Select the default fillet weld inspection template.
2. Select the icon that allows for modifying an inspection template.
3. Swipe until the undercut measurement is shown.
4. Set the max undercut depth to 1/16".
5. Set the max defect length parameter to 2".
6. Select back, save and name the new inspection template.

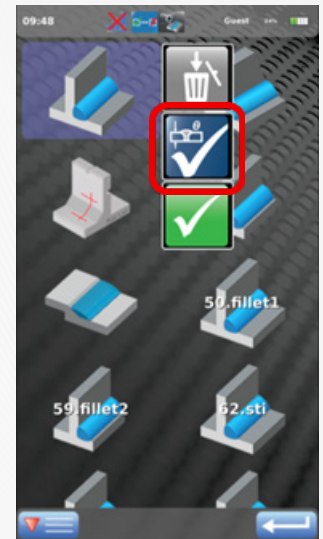
When inspecting a part, let's say that it has two 12" long welds both with under cut that is 1/16" deep. The first weld's undercut is 1.9" long and the second weld's undercut is 2.3" long. In this example the first weld would be marked as acceptable because although the undercut is greater than the set threshold, the length is below the 2" limit. For the second weld this would be marked as a defect because the length is outside of the acceptance criteria.

Smarter Inspection Starts with Context

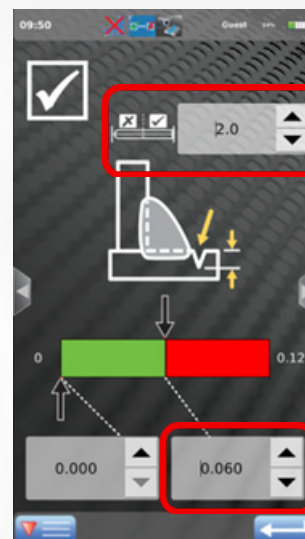
The "Max Defect Length" feature is about context-aware inspection — bringing welding standards directly into your automation logic. It's another step toward making Wiki-SCAN 2.0™ not just a detector of defects, but a decision-support tool for modern fabrication lines.



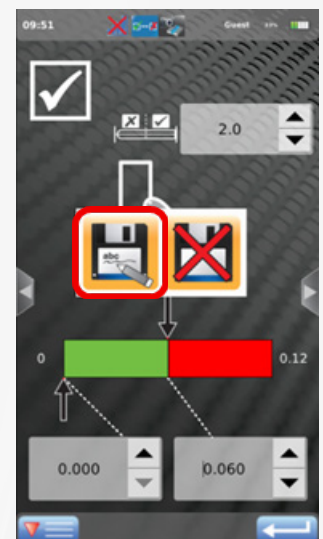
Default fillet weld inspection template



Modifying an inspection template



Set the maximum parameters



Save an inspection template

For more information about the Wiki-SCAN 2.0™, please contact us at sales@servorobot.com.