

AI Hazard Scanner

a photo becomes a cited safety review

How to scan workplace photos or a short clip, read the AI's findings against the OSHA standards, and turn them into assigned work - all in one place.

Version 1.0

User Guide · for end users

Screens captured July 2026

ShieldSphere's AI Hazard Scanner turns a phone photo of your workplace into a first-pass safety review in seconds. Upload one to five photos or a short clip, and each finding comes back tied to a specific OSHA standard with a confidence score and a recommended fix. You verify what is real, then raise corrective actions, seed a Job Hazard Analysis, or pull the scan into a full inspection.

WHAT'S IN THIS GUIDE

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1 What the Hazard Scanner does

The Hazard Scanner turns a phone photo of your workplace into a first-pass safety review - cited to the OSHA standard, ranked by risk, with a suggested fix - in seconds.

Every scan follows the same short arc:

1. **Upload** one to five photos, or a short video clip, of the area you want checked.
2. **Findings** come back, each tied to a specific OSHA standard with a confidence score and a recommended fix.
3. **Verify** each finding against the photo - the AI drafts, you decide.
4. **Act** on what's real: raise corrective actions, seed a Job Hazard Analysis, export a report, or pull the scan into a full Inspect inspection.

It is built to be used on the floor, with the operator, on the spot - fast enough to walk an area and talk through what the camera saw before you have left the room.

Photo scan

Upload up to five stills of a work area. Best for covering a lot of ground quickly - a bench, a bay, a storage room.

Video clip

Upload one clip of up to twenty seconds. Best for a task in motion, where the hazard is in how the work is done, not just the scene.

READ THIS ONCE

Findings are **AI-generated** from the photo you uploaded. They are a first pass, not a citation and not a substitute for a walkthrough. Verify on-site conditions and consult a qualified safety professional before acting on anything the scanner surfaces.

WHERE THE SCANNER SITS

The Hazard Scanner is a **site-level** module - every scan belongs to the site (profile) selected in the left sidebar. Its findings do not have to live in isolation: a scan can be turned into corrective actions, seeded into a **Job Hazard Analysis**, or imported wholesale into an **Inspect** inspection with its findings intact.

2 Words you'll see

TERM	WHAT IT MEANS
Scan	One photo set (or one clip) analyzed on one date, saved to this site.
Potential violation	A hazard the AI spotted, with a severity, an OSHA citation, a confidence score, and a suggested corrective action. Also called a finding.
Risk level	The scan's overall rating - High, Medium or Low - rolled up from its findings.
Confidence	How sure the AI is about a finding, as a percentage. Treat anything low as worth a closer look at the photo.
OSHA framework	Which rule set the AI cites against - General Industry (29 CFR 1910), Construction (1926), and so on.
Corrective action	The assigned task that fixes a finding, with an owner and a due date. Lives in the site's corrective-actions workflow.
JHA	Job Hazard Analysis - a separate module that breaks a task into steps and controls. A scan can seed one.

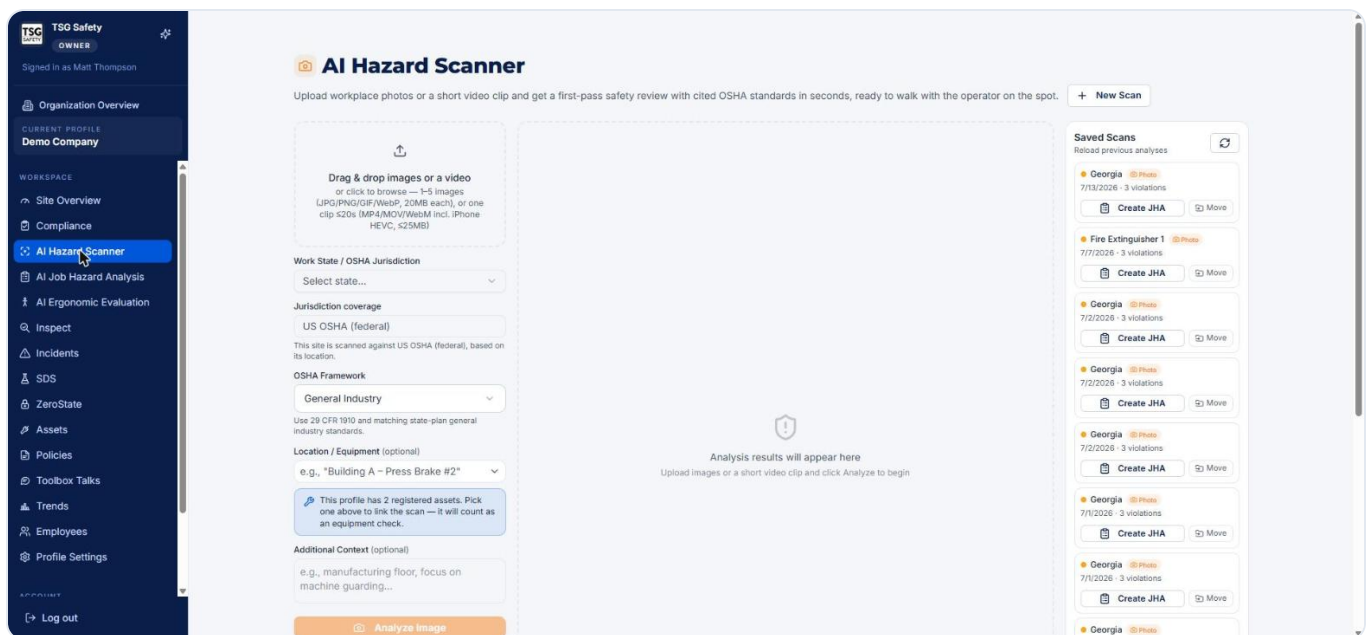
3 Run a scan

From photo to cited findings in about the time it takes to describe what you are looking at.

AI Hazard Scanner → **New Scan**

1 Add your photos or clip

Drag images onto the upload box, or click it to browse. You can add **one to five images** (JPG, PNG, GIF or WebP, up to 20 MB each), or **one video clip** of twenty seconds or less (MP4, MOV or WebM, including iPhone HEVC, up to 25 MB).



The scan screen. Upload on the left, results appear in the middle, and every previous scan for this site sits in **Saved Scans** on the right.

2 Set the state and framework

Work State decides which jurisdiction's standards the AI cites, so get it right. **Jurisdiction coverage** then shows what the site is scanned against (for most sites, US OSHA federal). **OSHA Framework** - General Industry, Construction, and so on - narrows it further to the rules that fit the work.

3

Link a location or asset, and add context

Both are optional but both pay off. Picking a registered asset under **Location / Equipment** links the scan to that equipment and logs it as an equipment check. **Additional Context** - a line like "manufacturing floor, focus on machine guarding" - points the AI at what you actually care about.

WHERE THE EQUIPMENT LIST COMES FROM

The *Location / Equipment* dropdown is populated by the **Assets** module. If it is empty, this site has no assets registered yet.

4

Click Analyze Image

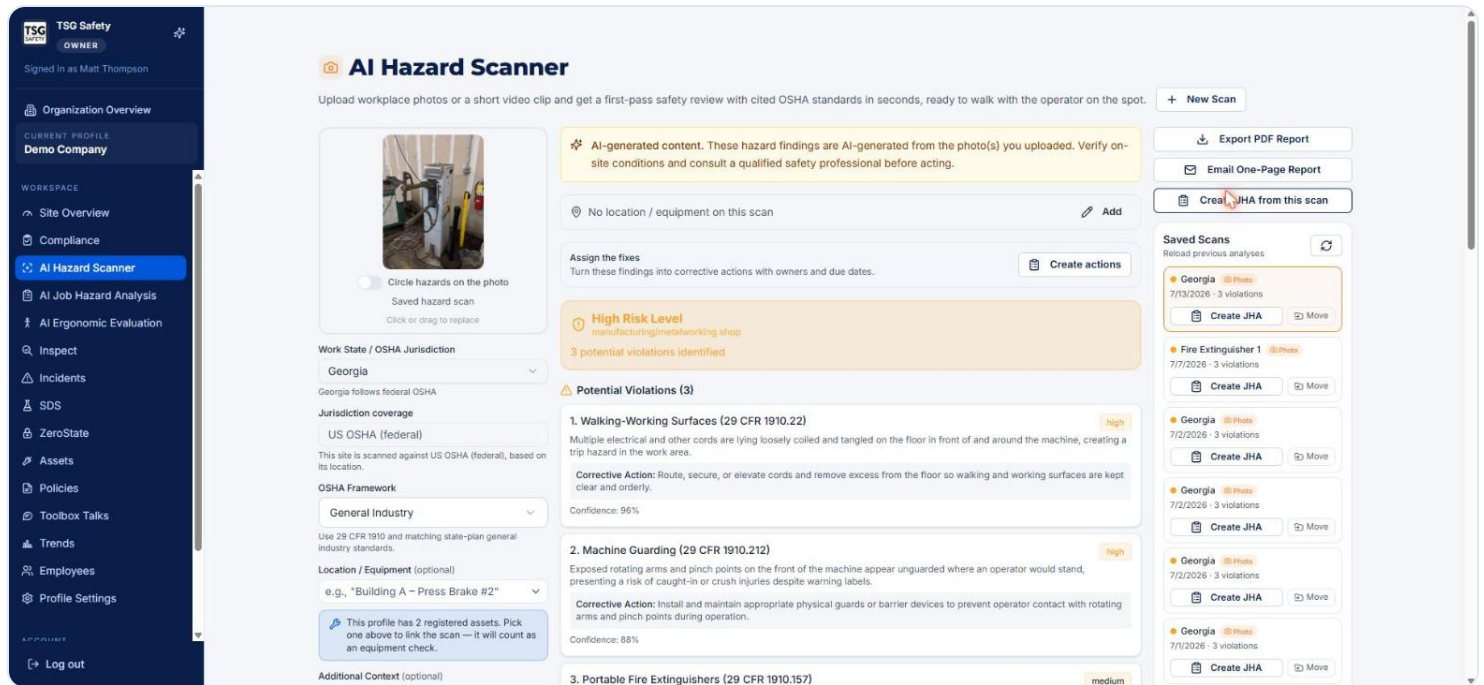
The AI reviews the photo and the results appear in the center panel in a few seconds. The scan saves itself as it completes - you will see it drop into **Saved Scans** on the right, and a "Scan saved" confirmation with its ID.

TIPS FOR A BETTER SCAN

Clear, well-lit shots of the work area. Include the full workspace, not just the hazard. Capture equipment, signage and PPE in frame. Multiple angles give a more thorough review. For a clip, hold the camera steady and keep it under twenty seconds while the task is performed.

4 Read the results

The AI drafts. You verify. Nothing here is a finding until you have eyeballed the photo against it.



Results, top. The risk-level banner and violation count sit above the findings. The buttons top-right - **Export PDF Report**, **Email One-Page Report**, **Create JHA from this scan** - are the exits from a scan.

Each **potential violation** gives you four things to weigh:

- **Standard and severity** - the specific OSHA citation (for example `29 CFR 1910.212`) and a *high / medium / low* badge.
- **The observation** - a plain-language description of what the camera saw and why it is a hazard.
- **Corrective Action** - the recommended fix. This text carries through if you turn the finding into an assigned action, so it is worth reading closely.
- **Confidence** - how sure the AI is. Treat anything under about 70% as worth a second look at the photo.

See exactly what it flagged

Flip on **Circle hazards on the photo** and the scanner overlays a numbered box on each hazard, matched to the numbered findings below. It is the fastest way to confirm the AI is looking at the thing you think it is.

AI Hazard Scanner

Upload workplace photos or a short video clip and get a first-pass safety review with cited OSHA standards in seconds, ready to walk with the operator on the spot.

AI-generated content. These hazard findings are AI-generated from the photo(s) you uploaded. Verify on-site conditions and consult a qualified safety professional before acting.

No location / equipment on this scan

Assign the fixes
Turn these findings into corrective actions with owners and due dates.

High Risk Level
manufacturing/metalworking shop
3 potential violations identified

Potential Violations (3)

- Walking-Working Surfaces (29 CFR 1910.22)** high
Multiple electrical and other cords are lying loosely coiled and tangled on the floor in front of and around the machine, creating a trip hazard in the work area.
Corrective Action: Route, secure, or elevate cords and remove excess from the floor so walking and working surfaces are kept clear and orderly.
Confidence: 96%
- Machine Guarding (29 CFR 1910.212)** high
Exposed rotating arms and pinch points on the front of the machine appear unguarded where an operator would stand, presenting a risk of caught-in or crush injuries despite warning labels.
Corrective Action: Install and maintain appropriate physical guards or barrier devices to prevent operator contact with rotating arms and pinch points during operation.
Confidence: 88%
- Portable Fire Extinguishers (29 CFR 1910.157)** medium
Fire extinguisher is mounted low and partially obstructed by a yellow bollard and nearby equipment, which could delay quick access in an emergency.
Corrective Action: Reposition the fire extinguisher so that it is clearly visible, unobstructed, and readily accessible along the normal path of travel.
Confidence: 80%

Jurisdiction-specific Guidance
Georgia — Federal OSHA - Federal OSHA fallback
The strongest applicable federal requirements here are for machine guarding, keeping walking-working surfaces free of trip hazards, and ensuring portable fire extinguishers are readily accessible. In this Georgia manufacturing shop, the visible conditions suggest immediate correction is needed to prevent caught-in, trip, and emergency-access delays.

Machine Guarding Federal
Exposed rotating arms and pinch points on the front of the machine appear unguarded where an operator would stand, creating a caught-in and crush hazard.
Location: Front of the machine at the operator position
The machine has exposed rotating parts and pinch points in the operator area, which are hazards that must be guarded. The cited rule requires guarding to protect operators and other employees from point-of-operation and rotating-part injuries.
CITATIONS
29 CFR 1910.212(a)(1)
29 CFR 1910.212(a)(2)
29 CFR 1910.212(a)(3)(ii)
29 CFR 1910.147

Circle hazards, on. Boxes 1, 2 and 3 map to the three findings. If a box is around the wrong thing, that is your cue to lower its severity or drop it.

Jurisdiction-specific guidance

Below the findings, the scanner spells out the exact citations behind each hazard - the specific subparagraphs of the standard - and the controls that satisfy them, tuned to the state and framework you chose. This is the part to copy into a report or hand to whoever owns the fix.

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29 CFR 1910.212(a)(3)(ii)
29 CFR 1910.147

The full standard, not just the headline. Detailed citations like **29 CFR 1910.212(a)(3)(ii)** and the matching controls, drawn from the jurisdiction on the left.

VERIFY BEFORE YOU ACT

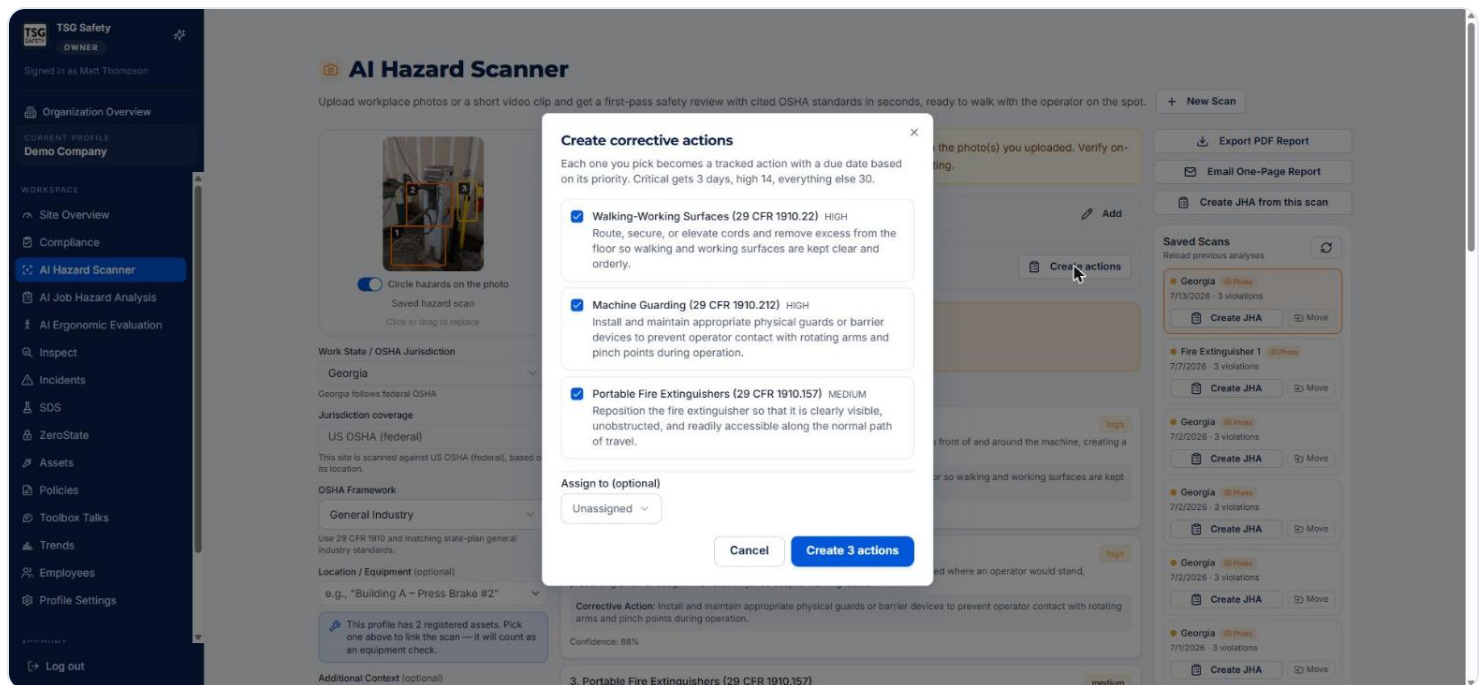
The banner at the top of every result says it plainly: these findings are AI-generated from the photo. A photo cannot see a locked-out breaker, a permit on file, or a guard that is off for maintenance. Walk the area before you treat a finding as fact.

5 Turn findings into work

A scan that ends at "we photographed it" does not reduce risk. Every result has exits that turn findings into something that gets done.

Create corrective actions

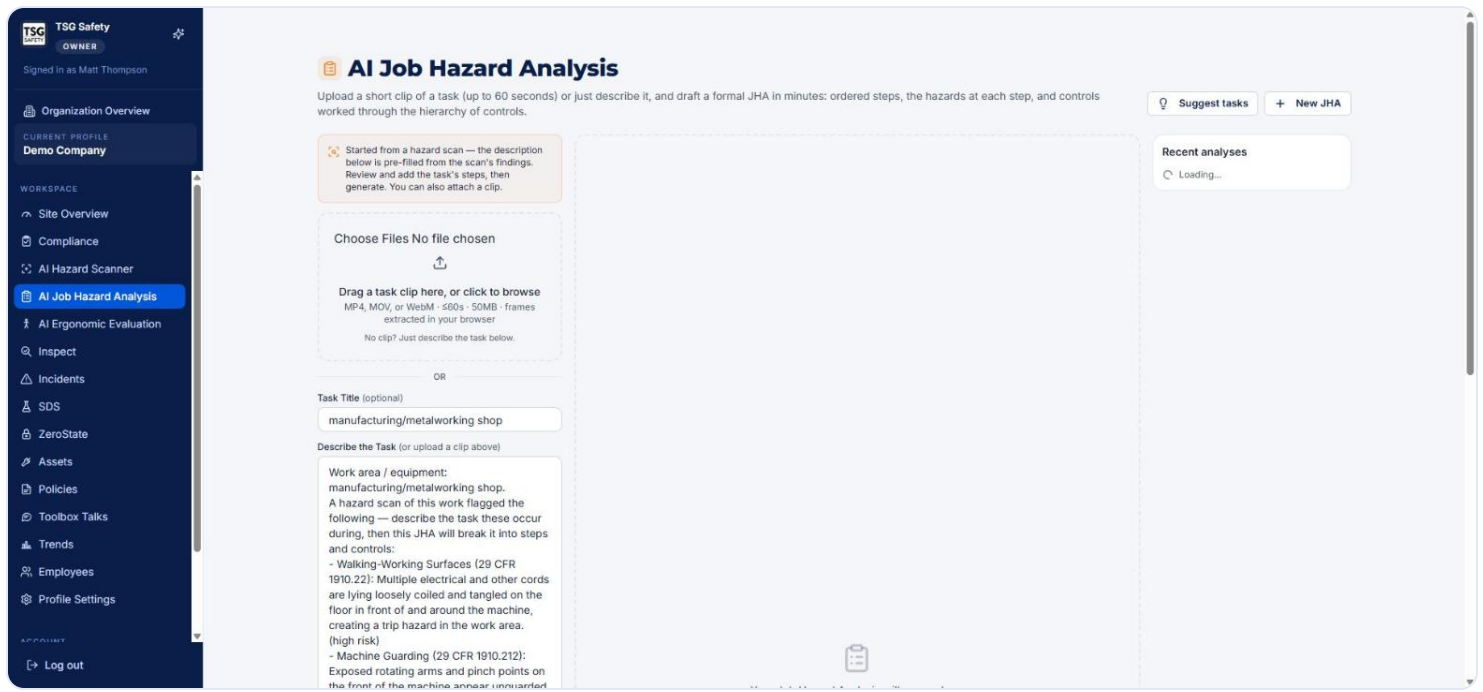
Click **Create actions**. Every finding is pre-selected and becomes a tracked corrective action with a due date set from its priority - Critical gets 3 days, high 14, everything else 30. Untick anything you do not want raised, set an optional assignee, and confirm.



Create corrective actions. These land in the same corrective-actions workflow that Inspect feeds, so all your open safety work sits in one queue regardless of where it started.

Create a Job Hazard Analysis from the scan

When the risk is in *how a task is done*, click **Create JHA from this scan**. It opens the Job Hazard Analysis module with the task description already filled in from the scan's findings - you review the steps, add the clip if you have one, and generate.



A running start on a JHA. The findings become the starting description. From here you are in the JHA module - its own guide covers the rest.

Export or email a report

Export PDF Report

The full scan - photo, findings, citations and guidance - as a client-ready PDF for sending or filing.

Email One-Page Report

A short summary sent straight from the app, sized for the crew or a supervisor who just needs the headline.

ALREADY SCANNING IN THE FIELD? FEED INSPECT

Photos you scan here can be pulled straight into an **Inspect** inspection, bringing their saved findings with them - no second AI scan. If your team scans as they walk, the inspection almost builds itself. See the Inspect User Guide, "Run a photo inspection".

6 Saved scans

Every scan for the current site is listed under **Saved Scans** on the right of the module, newest first. Each row shows a risk dot, a photo or video badge, the date, and the violation count.

CONTROL	WHAT IT DOES
Open a scan	Click the row to reload its full results in the center panel - findings, guidance and all.
Reload previous analyses	The refresh icon at the top of the list pulls in scans saved since you opened the page.
Create JHA	Seed a Job Hazard Analysis straight from the saved scan, without opening it first.
Move	Send a scan to a different site or profile - useful when it was captured under the wrong one.

7 Troubleshooting

SYMPTOM	CAUSE AND FIX
Analyze Image does nothing	No file has been added yet, or the file is too large or an unsupported type. Add one to five images (20 MB each) or one clip of twenty seconds or less.
A finding looks wrong or has low confidence	It is a first pass. Verify it against the photo using <i>Circle hazards</i> , and drop or downgrade it when you create actions.
The wrong standards are being cited	Check the Work State and OSHA Framework - they decide the jurisdiction and rule set the AI cites from.
The Location / Equipment dropdown is empty	No assets are registered for this site yet. Add them in the Assets module.
I need a formal step-by-step task analysis	Use Create JHA from this scan - the Job Hazard Analysis module breaks the task into steps and controls.
I want this on the official inspection record	Import the scan into Inspect and finalize it there - a finalized inspection is the defensible record.