

Field IQ on Genesis

From Static Scans to Live Field Guidance

The brain meets the body. Genesis sees what the worker sees and answers in under three seconds through image, voice, and guided overlay on every job.

11 STEPS · 3 PHASES · CAPTURE → THINK → GUIDE · ≤ 3-SECOND ROUND-TRIP



The Iceberg Principle

Field Edition

The worker sees a calm answer. The system hides the complexity.

WHAT THE WORKER SEES

A photo of the right valve on the HUD. A calm voice in the ear. A green check when the step is done. A wrist vibration when something is wrong.

WHAT FIELD IQ + GENESIS DOES

Capture frame and voice. Match equipment against the digital twin. Pull the right procedure step for this worker. Update session state. Check confidence. Render image, voice, and proof trail.

All of that happens in under three seconds.

11 Steps. 3 Phases. One Invisible Loop.

Each step has one job. The worker never sees the seams.

CAPTURE

- 1 Worker invokes
- 2 Glasses capture
- 3 Phone forwards

THINK

- 4 Recognize context
- 5 Correlate to twin
- 6 Look up procedure
- 7 Update session state
- 8 Check confidence
- 9 Render media packet

GUIDE

- 10 Phone repackages
- 11 Glasses deliver

The worker experiences one answer, not eleven subsystems.

The Loop Only Works Because It Closes

Capture becomes understanding. Understanding becomes guidance. Guidance creates proof. Proof restarts the loop with better context.



Guidance without verification is incomplete. Verification without guidance is too late.

1

Worker Invokes

How does the loop start?

Every round-trip begins with the worker. A voice command or wrist gesture wakes the system and creates the timestamped intent for the next steps.

- Voice command via smart-glasses wake word
- Neural Band gesture for high-noise zones
- Automatic advance after a proof submission

Result: an intent and a timestamp.



2

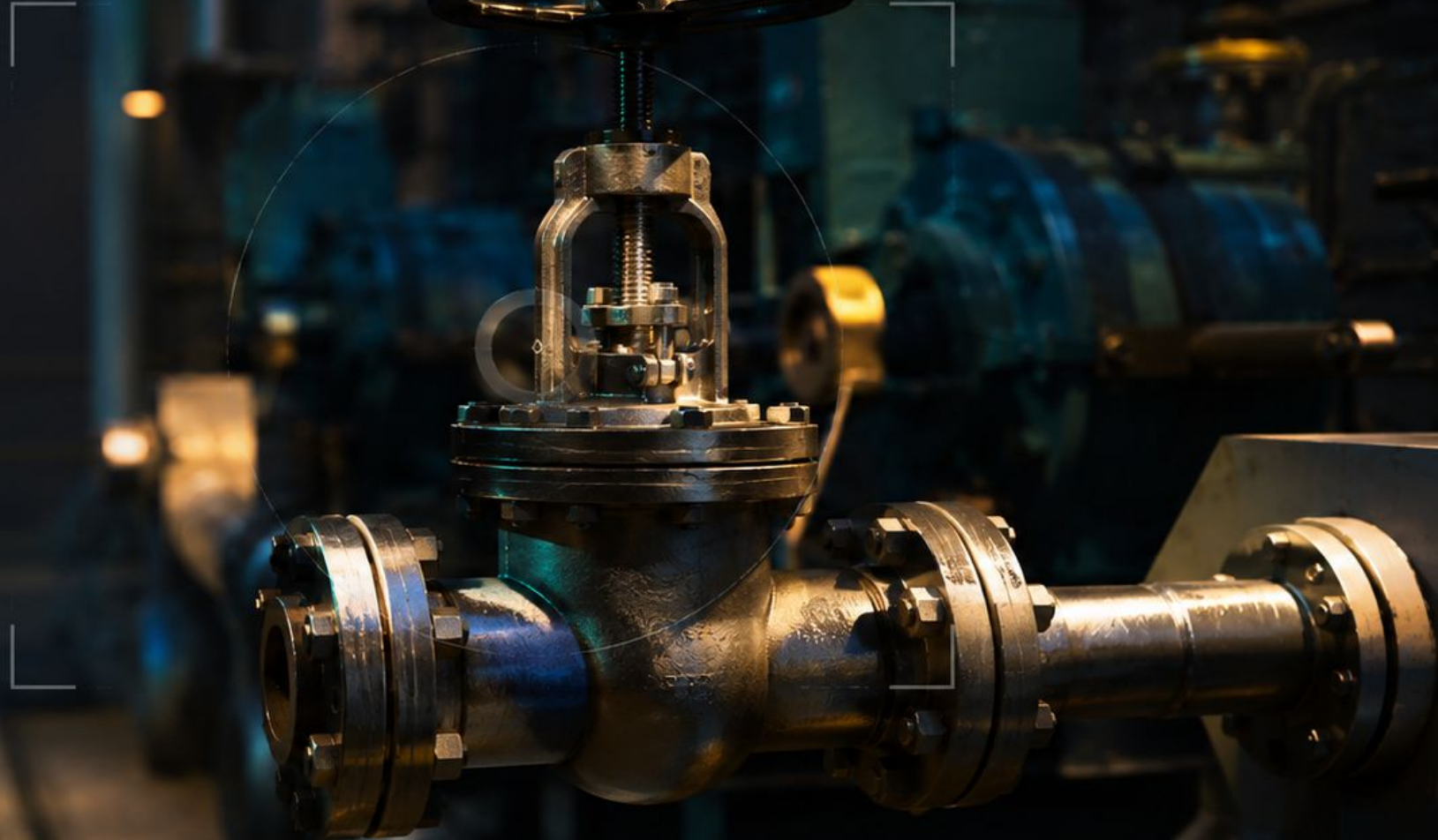
Glasses Capture

What does the worker actually see?

The glasses grab the still frame or short clip and collect the audio. They see, hear, and display. They do not think. That happens in the cloud.

- Still frame is the default fast capture mode
- Short clip handles dynamic verification steps
- Audio-only works when the worker is asking a question

Result: a frame and an audio clip reach the phone.



3

Phone Forwards

Where does the data go?

The Field IQ app is a thin client. It receives the payload over Bluetooth, packages frame plus audio plus identity context, and forwards it to Genesis.

- LTE or 5G is the primary path on most sites
- Site Wi-Fi is preferred when latency is lower
- Edge mode supports offline and controlled zones

Result: payload in Genesis' queue. Clock is around 600 ms.

4

Recognize Context

What is the worker looking at?

Genesis checks QR, NFC, and computer vision in parallel to identify the exact equipment and catch wrong-target views before the worker acts.

- QR is cheap, fast, and training-friendly
- NFC is rugged in greasy or gloved conditions
- Computer vision adds a field safety net

Result: equipment ID plus a confidence score.



5

Correlate to Digital Twin

Where in the world is this?

Genesis maps what the worker sees to its exact location in the 3D scan so the system knows both the equipment and its spatial context.

- Pose match compares the frame against the scan
- Feature anchors re-localize against known skid points
- Low confidence hands off instead of guessing

Result: spatial position within the scan and a 3D context vector.



6

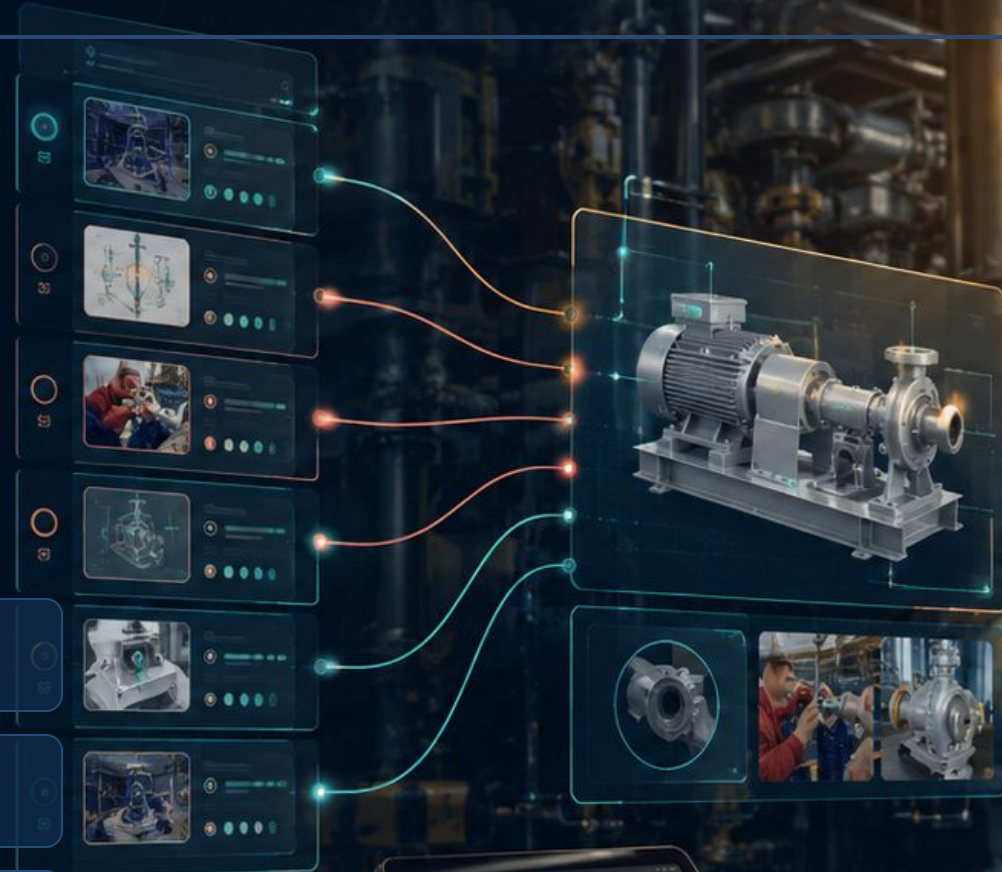
Look Up Procedure

What step is this worker on?

Genesis pulls the active session and the current procedure step from the same Genesis-authored content library that already powers the VR training module.

- Active session knows who, where, and what step is live
- Procedure record includes expected proof and asset links
- Narration can change for novice versus expert workers

Result: step record with text, asset references, and expected proof.



7

Update Session State

What has this worker done so far?

Genesis writes every event into the live session so guidance becomes personal, traceable, and measurable instead of generic and stateless.

- Event log appends each capture, verify, and escalation
- Live state tracks current step, pace, and confidence
- Derived metrics expose hesitation and baseline gaps

Result: session record updated and audit log written.

8

Check Confidence

Should the system trust itself right now?

Before Genesis answers, it checks recognition, position, procedure fit, and proof expectations. If confidence is low, it does not bluff. It escalates.

- High confidence proceeds automatically
- Medium confidence asks for another photo or re-explains
- Low confidence escalates to a human expert

Result: a score and an action: proceed, re-prompt, or escalate.



9

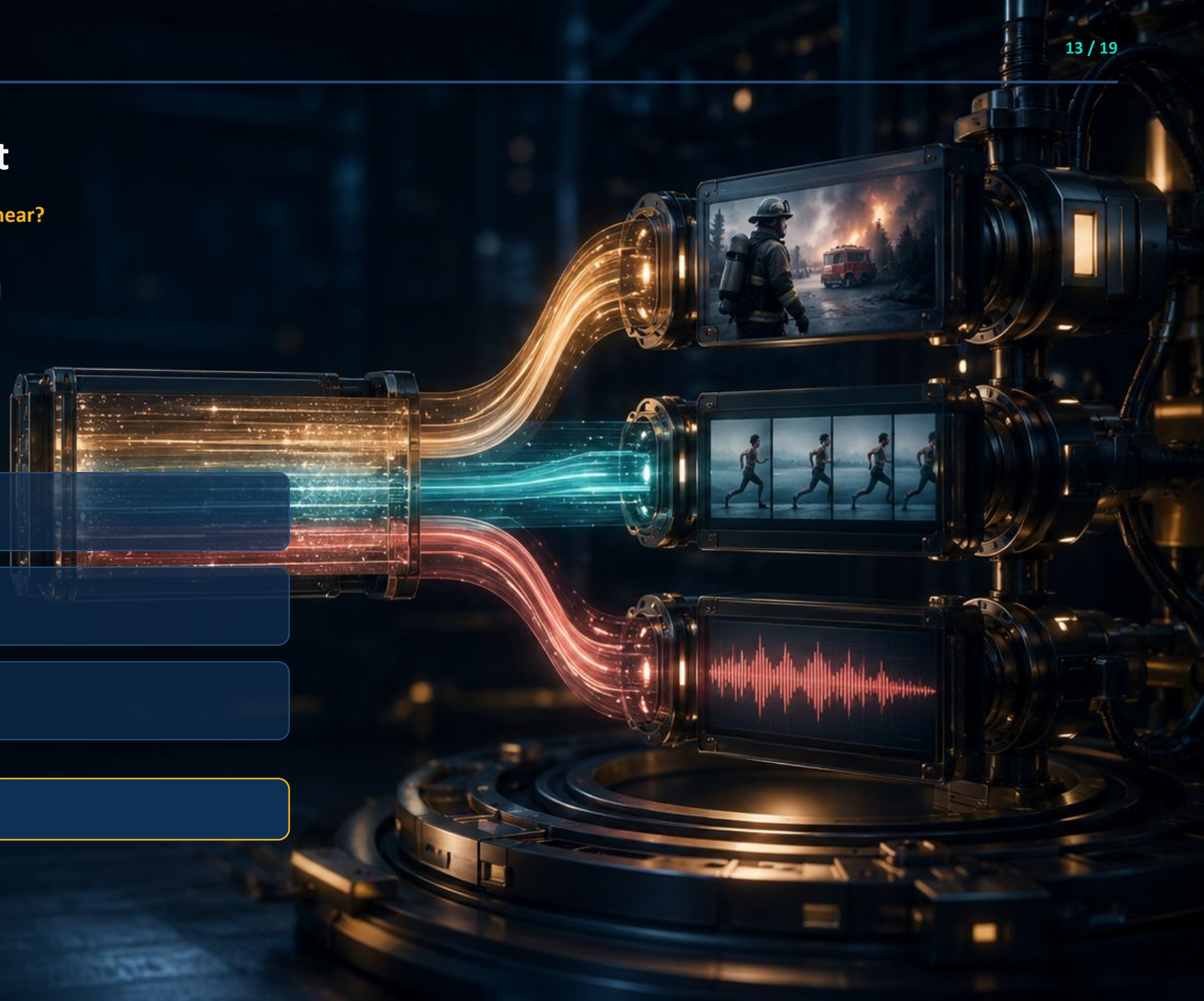
Render Media Packet

What does the worker need to see and hear?

Genesis renders the guidance payload: a HUD-sized image, a short motion asset for dynamic steps, and a calm audio instruction in the worker's language.

- High-contrast image card for the HUD
- Short looping motion for physical actions
- TTS voice matched to the worker's language

Result: a media packet ready to send back to the phone.



10

Phone Repackages

How does the reply reach the glasses?

The phone receives the packet from Genesis and routes it through the channels the hardware already supports today: image, voice, and haptic.

- Message channel handles the visual card
- Open-ear speakers handle the voice cue
- Neural Band handles safety pulses and confirmations

Result: rendered output reaches the worker through current channels.



11

Glasses Deliver

What does the worker experience?

The worker gets a clear image on the HUD, a calm voice in the ear, and a haptic confirmation on the wrist. The loop lands and action begins.

- Highlighted image of the correct target
- Voice cue names the exact action
- Single or double pulse confirms safety state

Result: the worker is informed, confident, and ready to act.



12

Verification Photo

How does Genesis know the step was done?

After acting, the worker submits a verification photo. Genesis checks it against the expected proof, advances the worker, asks for another try, or escalates.

- Proof submission uses the same payload shape as capture
- verify_step compares image to expected end state
- Every proof photo doubles as the audit record

Result: proof recorded, next step issued, or escalation triggered.



Same Data. Two Stories.

The audit trail compliance wants is the analytics trail L&D wants. It is one record, read two ways.

WHAT L&D LEADERSHIP SEES

- Time-to-competency against the master baseline
- Hesitation map by step and skill gap
- Population view that shows where the procedure itself needs work

WHAT PROCESS SAFETY SEES

- Full timestamped audit trail with proof photos
- Interventions and near-misses captured as saved events
- Regulator-ready compliance pack generated at close

One field record serves training insight and regulator proof at the same time.



From Master Procedure to Junior Worker's HUD

The same Genesis brain turns authored training content into live field guidance automatically, in under three seconds, every time.

CAPTURE

1 Worker Invokes 2 Glasses Capture 3 Phone Forwards

THINK

4 Recognize 5 Correlate Twin 6 Look Up 7 Update State 8 Confidence 9 Render

GUIDE

10 Phone Repackages 11 Glasses Deliver



Available Today. Built for Tomorrow.

Same architecture. Same Genesis brain. As the glasses improve, Field IQ improves with them. No rebuild required.

AVAILABLE TODAY

- Meta smart glasses + Neural Band
- Image cards, voice, and haptic through current native channels
- QR / NFC identification with computer-vision matching
- Training environments and controlled operational areas
- Use cases: lockout-tagout, valve operations, inspections, maintenance

COMING SOON

- Display-SDK glasses and intrinsically-safe field devices
- True AR overlay anchored to real equipment
- Computer-vision-on-scan correlation as the primary path
- Deployment in live operations and hazardous-area zones
- Outcome: every procedure, every worker, every shift, every site