



— SOLUTION BROCHURE • UAE & GCC OPERATIONS

AI Safety & PPE intelligence for industrial operations

Turn compatible camera streams into evidence-backed PPE and hazard alerts — then keep qualified supervisors in control of every response.

01 DETECT

02 VERIFY

03 RESPOND

04 DOCUMENT

What is inside this brochure

A technical and operational overview of NET WIZARDS AI safety video analytics: the workflow, the configured scenarios, the platform view, deployment requirements and the rollout path.

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Existing cameras. Configured intelligence. Accountable people.

Industrial sites across the UAE and wider GCC already have cameras, procedures and responsible teams. What is often missing is consistent awareness: conditions observed the same way on every shift, in every area, with evidence attached.

NET WIZARDS adds a configurable AI layer on top of compatible IP/CCTV streams. It evaluates selected PPE and hazard scenarios, packages the visual evidence, and routes the event to the person responsible for that area.

The objective is not automated enforcement. It is a clear event, a qualified review, a recorded action, and a searchable history that supports HSE investigation and continuous improvement.

HUMAN IN THE LOOP

AI flags a condition. A qualified person verifies the context and decides the response. No autonomous shutdown, lockout or disciplinary action is implied at any point in the workflow.

ONE VIEW

Consistent visibility across selected cameras, zones and sites

EARLIER SIGNAL

Configured safety events surfaced for supervisor review

EVIDENCE

Camera, time, rule and event context retained together

HUMAN DECISION

Qualified teams verify every response and corrective action

Turn selected camera views into reviewable safety events

A

Scenario coverage

Seventeen configurable safety and operational scenarios, each scoped to a camera view, zone boundary and approved response procedure.

B

Evidence packaging

Every event carries the camera, timestamp, triggered rule and the visual frame or clip needed for a person to assess it.

C

Routing and escalation

Alerts reach the supervisor, control room or HSE function responsible for that area and shift, with escalation where required.

D

Single operations view

A dashboard of configured detections with current status, the open event queue and links back to the underlying evidence.

E

Audit and reporting

Decisions, notes and closures stay searchable so HSE teams can investigate incidents and review trends across sites.

F

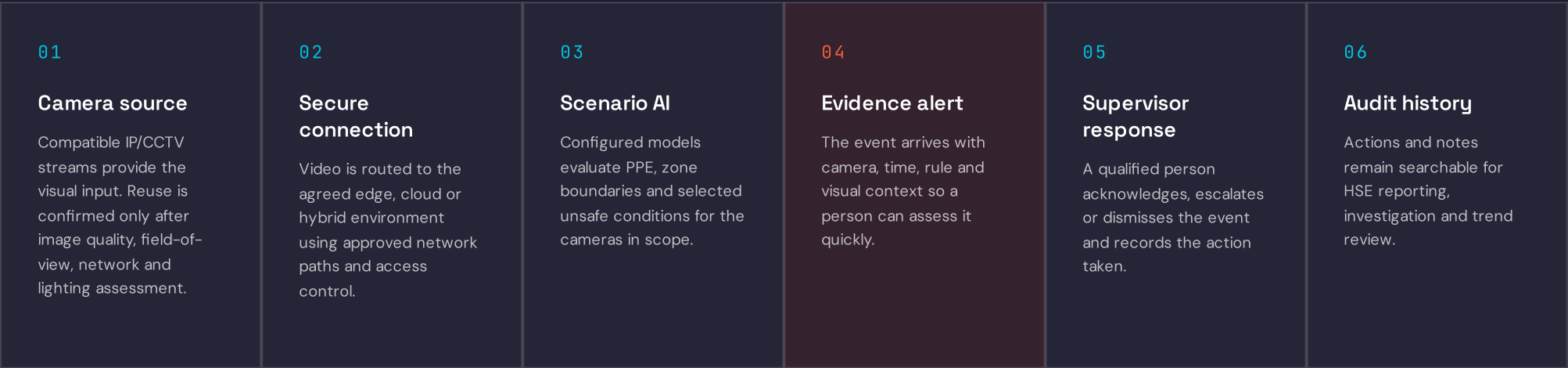
Optional permit workflow

A digital permit-to-work companion can align authorization, qualification checks and signatures with what cameras observe.

Scenario availability, accuracy and alert behaviour are confirmed per site during the technical assessment and pilot. Nothing in this brochure states a guaranteed detection rate.

From existing camera to verified safety action

A traceable workflow connects compatible camera streams to configured AI scenarios, evidence-backed alerts and accountable human response.



Camera reuse: confirmed only after image quality, field-of-view, network and lighting assessment.	Processing: edge, cloud or hybrid deployment is selected around site and security requirements.	Safety boundary: the platform supplements — not replaces — supervision, risk assessment or emergency systems.
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What the platform does — and deliberately does not do

Clear boundaries keep the system credible with HSE, operations and workforce representatives from the first workshop onwards.

Supervision is not replaced

Video analytics adds awareness. It does not replace supervision, risk assessment, permits, method statements or statutory safety systems.

No autonomous enforcement

The platform does not shut down equipment, lock out access or take disciplinary action. It raises an event for a qualified person to judge.

No identity profiling

Scenarios are configured around conditions and zones, not personal identification. Privacy requirements are reviewed before deployment.

Performance is site-specific

Detection quality depends on camera, scene, lighting and scenario. Expectations are set from the assessment and confirmed during the pilot.

Event queue

Open events stay visible until a qualified person records a decision, so nothing closes silently.

Evidence trail

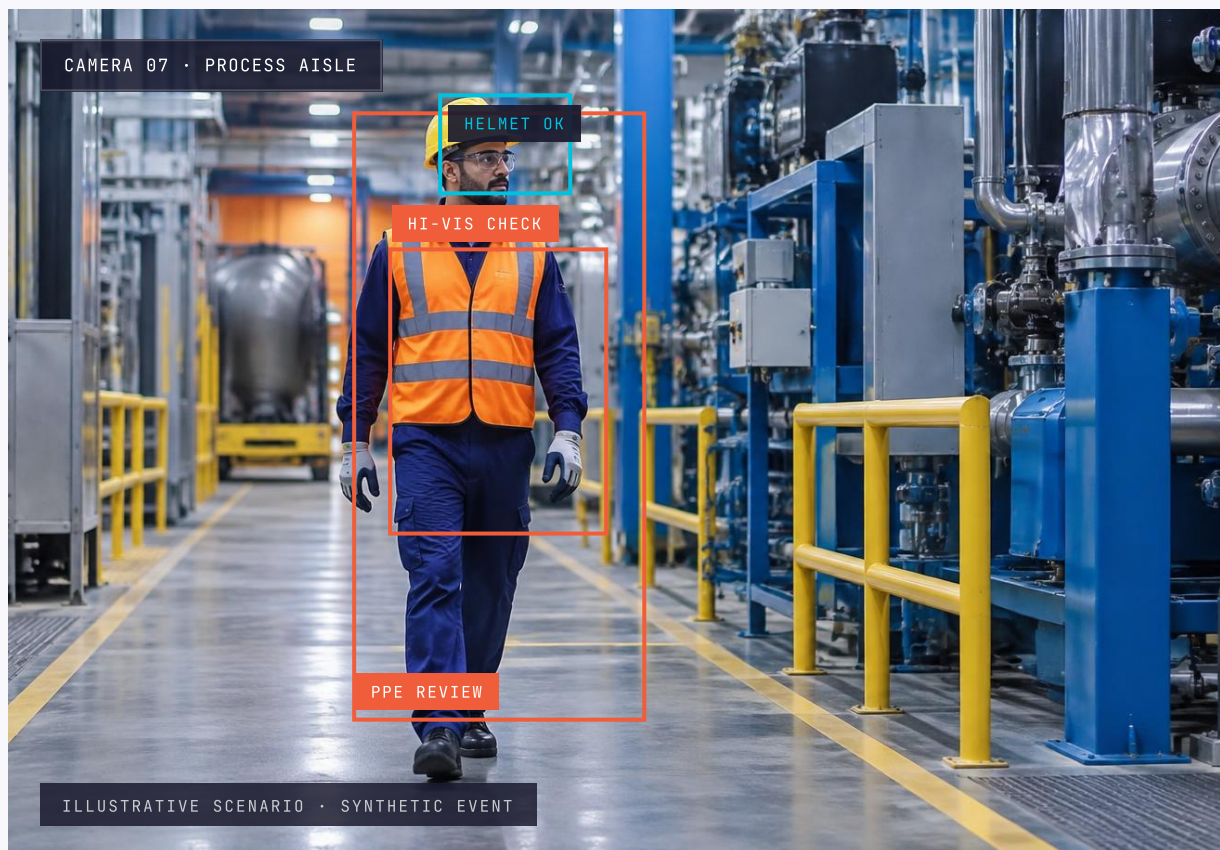
Each event links to the camera, time, rule and visual context behind it for later review.

Reporting

History supports HSE review, incident investigation and trend analysis across areas and sites.

Manufacturing • PPE compliance

A production aisle where helmet and high-visibility requirements apply at all times. The model evaluates each detected person against the PPE classes configured for that camera view.



EVENT SEQUENCE

PPE review • EVT-2407

- 01 Worker enters the monitored process aisle
- 02 Configured helmet and high-visibility checks run
- 03 Evidence frame and rule context are created
- 04 Supervisor verifies and acknowledges the event
- 05 Action and note are stored in the event history

Stage 04 is a human decision. The event is only recorded as closed once a qualified person confirms the action taken.

Oil & gas • Uniform compliance

In a hydrocarbon process area, flame-resistant coveralls and hard hats are mandatory. Two workers are correctly dressed; a third person without the required uniform is flagged for the area authority to verify.



EVENT SEQUENCE

Uniform compliance • EVT-3118

- 01 Three people are detected inside the process area view
- 02 Configured coverall and hard-hat checks run per person
- 03 One person is flagged without the required uniform
- 04 Area authority verifies identity, escort status and access
- 05 Event, evidence frame and corrective note are recorded

Stage 04 is a human decision. The event is only recorded as closed once a qualified person confirms the action taken.

Construction • Helmet & fall

A scaffold work area on a construction site. One worker walks with helmet and vest correctly worn; a second person is detected on the ground with the helmet not worn, combining a fall and a PPE condition in one event.



EVENT SEQUENCE

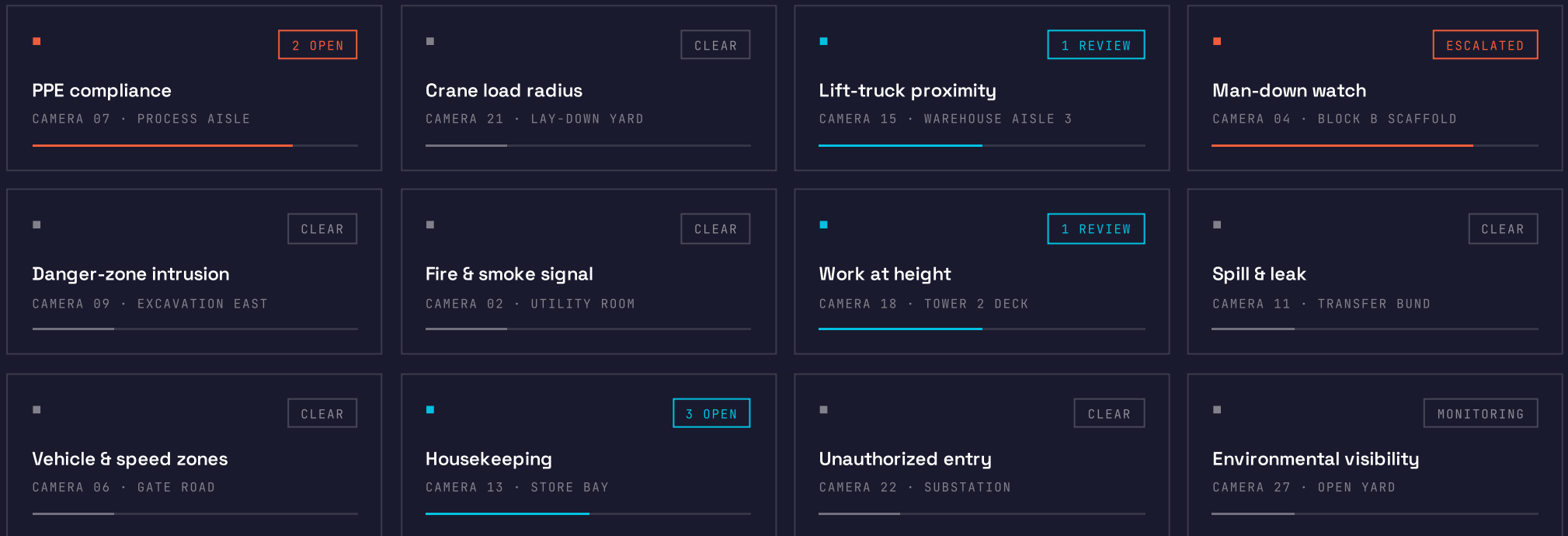
Fall & helmet event • EVT-5042

- 01 Two workers are detected in the scaffold work area
- 02 Helmet checks run and one person is flagged as down
- 03 A prolonged-inactivity condition raises the priority
- 04 Control room triggers the site emergency response
- 05 Timeline, clip and response actions are retained for investigation

Stage 04 is a human decision. The event is only recorded as closed once a qualified person confirms the action taken.

One dashboard for every configured detection

Each tile represents a scenario configured for a specific camera and zone. Tiles, cameras and counts shown here are synthetic examples — your dashboard reflects the scenarios agreed during the site assessment.



Observe selected conditions. Preserve operational context.

Every scenario is scoped to the site, camera view and approved response procedure.

PPE compliance

01

Checks configured items such as helmets and high-visibility clothing within defined camera views.

OBSERVED CONTEXT

Camera view + PPE class

HUMAN RESPONSE

Supervisor reviews the evidence frame and follows site procedure.

Danger-zone intrusion

02

Observes entry into a configured restricted polygon around plant, lifting or excavation areas.

OBSERVED CONTEXT

Person + zone boundary

HUMAN RESPONSE

Confirm the context, contact the responsible team and document action.

Worker-machine proximity

03

Surfaces selected proximity conditions where people and mobile equipment share operating space.

OBSERVED CONTEXT

Worker + vehicle + zone

HUMAN RESPONSE

Assess movement and route the event to the site supervisor.

Scenario library continued

Fire & smoke

04

Provides an additional visual signal for selected smoke or flame patterns in monitored scenes.

OBSERVED CONTEXT

Visual pattern + camera

HUMAN RESPONSE

Verify immediately and follow the approved emergency response plan.

Work at height

05

Supports visual review of configured PPE and access conditions around elevated work areas.

OBSERVED CONTEXT

Worker + harness + area

HUMAN RESPONSE

Validate against the permit, method statement and site controls.

Confined-space visibility

06

Adds camera-based awareness around selected entry points and monitored work areas.

OBSERVED CONTEXT

Entry zone + occupancy

HUMAN RESPONSE

Cross-check authorization and maintain required physical supervision.

Scenario library continued

Housekeeping conditions

07

Can be configured for visible obstructions, spills or unattended objects in defined areas.

OBSERVED CONTEXT

Object + aisle/area

HUMAN RESPONSE

Inspect onsite, remove the condition and record closure.

Unauthorized-area entry

08

Flags a person entering a configured area during defined operating periods.

OBSERVED CONTEXT

Person + schedule + zone

HUMAN RESPONSE

Verify authorization through the approved access process.

Crane & lifting safety monitoring

09

Reviews configured conditions around lifting operations: people entering the load radius, activity under a suspended load and barricade integrity of the exclusion zone.

OBSERVED CONTEXT

Crane zone + load radius + person

HUMAN RESPONSE

Banksman and lifting supervisor verify the lift plan and clear the zone before work continues.

Scenario library continued

Lift-truck collision risk

10

Observes selected forklift and mobile-equipment conditions such as pedestrian intrusion into a travel lane, blind-corner approaches and reversing without a clear path.

OBSERVED CONTEXT

Forklift + pedestrian + travel lane

HUMAN RESPONSE

Traffic marshal or warehouse supervisor reviews the clip and reinforces the segregation rule.

Vehicle movement & speed zones

11

Can be configured to surface vehicle entry into pedestrian areas or movement patterns above the agreed site speed condition.

OBSERVED CONTEXT

Vehicle + zone + direction

HUMAN RESPONSE

Site logistics reviews the event and applies the approved traffic-management control.

Man-down & prolonged inactivity

12

Supports visual awareness of a person remaining down or motionless in a monitored area beyond a configured period.

OBSERVED CONTEXT

Person posture + dwell time

HUMAN RESPONSE

Control room initiates the site emergency and first-aid response immediately.

Scenario library continued

Spill & leak visibility

13

Can flag visible liquid pooling or staining in defined containment, banded or transfer areas.

OBSERVED CONTEXT

Surface change + area

HUMAN RESPONSE

Operations inspect the source and apply spill-response and containment procedure.

Ignition-source & smoking areas

14

Reviews configured no-smoking or hot-work-restricted zones for open-flame and smoking indications.

OBSERVED CONTEXT

Zone + visual indication

HUMAN RESPONSE

Supervisor verifies onsite and applies the permit and site rule.

Conveyor & equipment condition

15

Supports selected visual checks such as material blockage, spillage or a person too close to running equipment.

OBSERVED CONTEXT

Equipment view + object/person

HUMAN RESPONSE

Maintenance and production verify the condition before intervening under isolation rules.

Scenario library continued

Asset & equipment security

16

Flags movement of monitored equipment, material stacks or gate activity outside defined operating hours.

OBSERVED CONTEXT

Object/person + schedule

HUMAN RESPONSE

Security verifies the activity through the approved access and reporting process.

Environmental visibility

17

Camera-based awareness of conditions such as heavy dust or restricted visibility in monitored outdoor areas.

OBSERVED CONTEXT

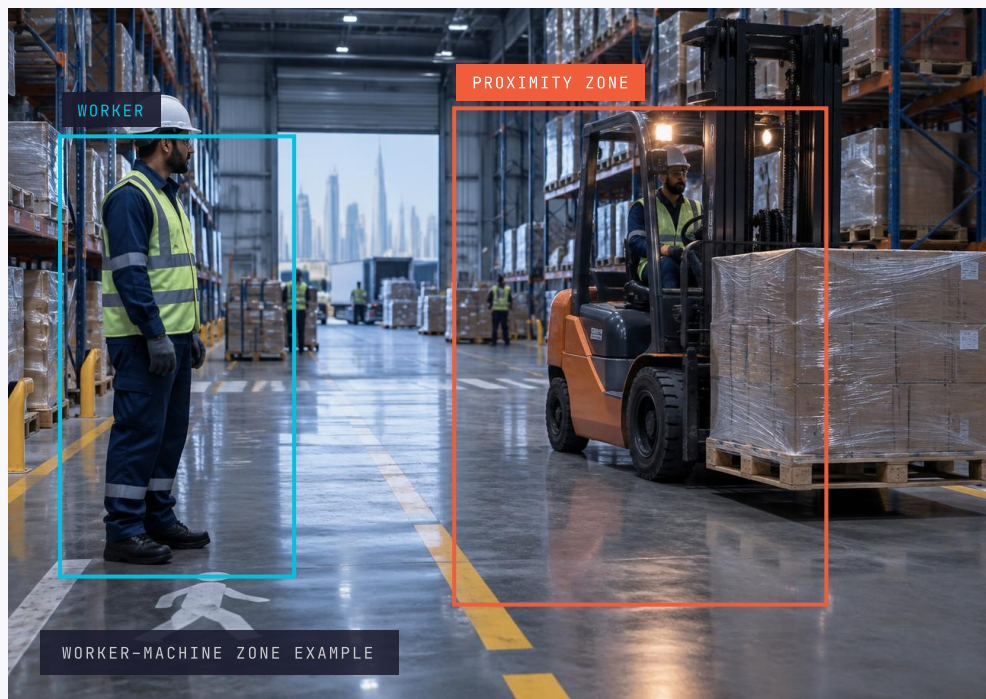
Scene condition + area

HUMAN RESPONSE

HSE reviews with onsite instrumentation before adjusting work arrangements.

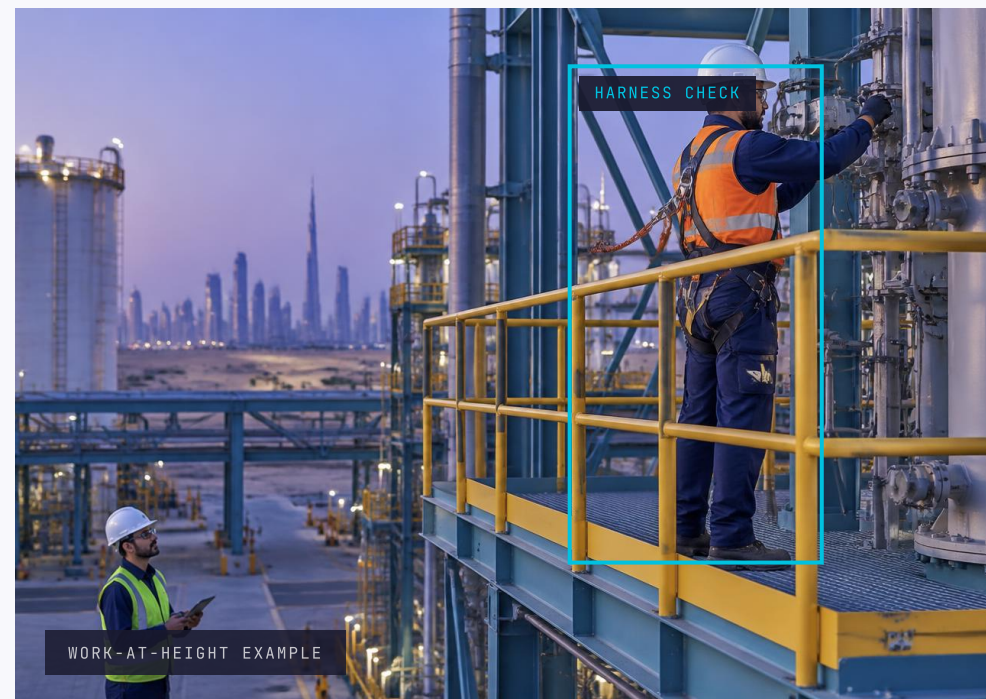
What a supervisor actually sees

Events are designed to be judged in seconds: the zone, the people, the equipment and the rule that fired, in one frame.



Proximity evidence

The event carries the camera and zone context a person needs to assess whether the condition is acceptable, and which control applies.

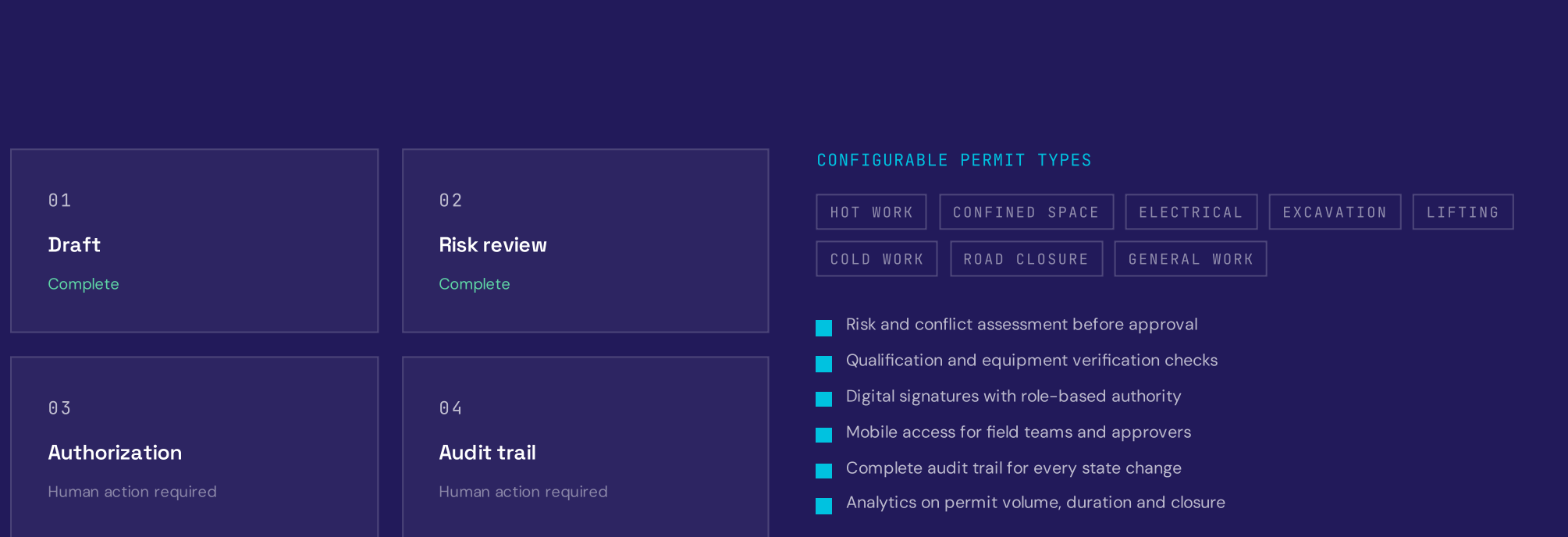


Configured visual checks

Visual monitoring supports the permit, method statement and required onsite supervision. It does not replace any of them.

Digital permits keep authorization separate and accountable

A configurable permit-to-work process can digitize creation, review, qualification checks, equipment records, signatures and audit history. Camera events may inform a workflow, but authorized people retain every approval, revoke and closure decision.



Illustrative workspace · Hot work permit PTW-0184

Designed around the site — not a generic camera promise

Performance depends on the scene, camera, network, scenario and response process. Each deployment begins with a technical assessment.

Camera & scene

- Compatibility with existing IP/CCTV estate
- Placement, field of view and viewing angle
- Resolution and frame rate per scenario
- Lighting, glare, dust and weather conditions
- Obstruction and occlusion review

Network & processing

- RTSP/ONVIF streaming where applicable
- Bandwidth and stream-count planning
- Edge, cloud or hybrid processing design
- Latency targets per safety scenario
- Failover and stream-health monitoring

Security & privacy

- Role-based access to cameras and events
- Alert routing per area and shift
- Evidence retention and deletion rules
- Privacy review before any deployment
- Audit access to all event actions

Validation & operation

- Acceptance testing against agreed criteria
- False-alert review and rule tuning
- Scenario performance review cycles
- Workflow handover and user training
- Change management as the site evolves

Operational detail without losing accountability

HSE leadership

Review event trends, policy coverage and evidence history across selected sites. Report on exposure with consistent, camera-backed records rather than anecdotal observation.

Operations leaders

Compare exposure and response patterns between areas and sites without losing site-level context, and target improvement where it matters most.

Site supervisors

Receive contextual alerts, verify conditions on the ground and record accountable action. Every decision remains with the person responsible for the area.

Systems engineers

Define cameras, networks, processing location, security, retention and integrations, with acceptance criteria agreed before the pilot closes.

From site risk to an accepted operating workflow

01	Discover	Map site risks, operating zones, existing cameras, procedures and stakeholder requirements. Agree which scenarios are worth monitoring and which are not.
02	Assess	Validate camera compatibility, coverage, lighting, network capacity and edge/cloud/hybrid processing options against site and security constraints.
03	Configure	Define scenarios, zone boundaries, operating schedules, users, alert routes, escalation rules and evidence retention periods.
04	Pilot	Calibrate with real site conditions, review false alerts, tune rules and complete acceptance testing with the site team.
05	Operate	Hand over workflows and reporting, monitor performance and review rules as layouts, equipment and work patterns change.



— NEXT STEP

Map the right cameras, scenarios and response process for your site

Our engineers can assess camera coverage, processing options, safety rules, evidence handling and integration requirements before a controlled pilot.

EMAIL

info@netwizards.ae

WEBSITE

www.netwizards.ae

HEAD OFFICE

Dubai, Al Qouz Industrial Area 4, UAE

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All dashboards, events, camera references and detection labels in this brochure are illustrative examples created for explanation. No customer data, guaranteed accuracy figures or automated enforcement behaviour is represented.