

AI Asterion | Inspecta

Inspection & Integrity Management

Every asset inspected. Every finding closed.



EXECUTIVE SUMMARY

Inspecta runs inspection scheduling, execution and reporting across every equipment class — replacing spreadsheets and paper records with one controlled programme for asset integrity and regulatory compliance.

-  Automated scheduling built on asset type, regulatory intervals and risk-based frequencies keeps every obligation on the calendar.
-  An offline-first mobile app records findings, photos, GPS location and signatures in the field — connectivity or not — then feeds them straight into the register.
-  Structured defect logging with severity classification and corrective-action workflows drives every finding to closure.
-  Compliance dashboards and complete inspection history keep the portfolio audit-ready on demand.





WHAT THE PLATFORM ENABLES

- 1 Programme-wide scheduling and escalation
- 2 Offline-first mobile field capture of findings, photos and checklists
- 3 Defect classification and corrective-action tracking
- 4 Real-time compliance and overdue-item visibility
- 5 Certificate and documentation management
- 6 Alignment to API and ISO inspection standards



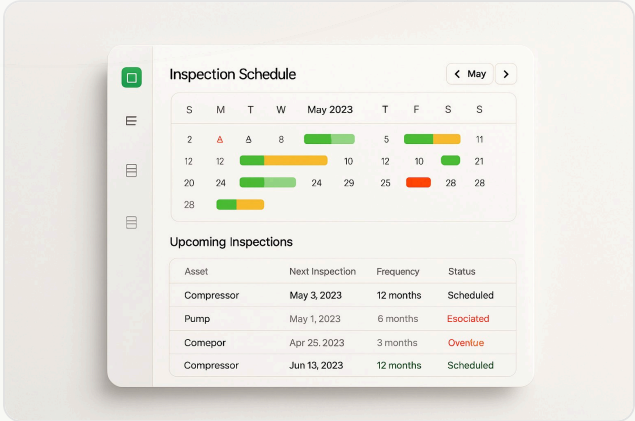
TYPICAL OUTCOMES

-  Statutory inspections met on time
-  Faster defect closure and corrective action
-  Complete audit readiness on demand
-  Reduced regulatory and safety exposure

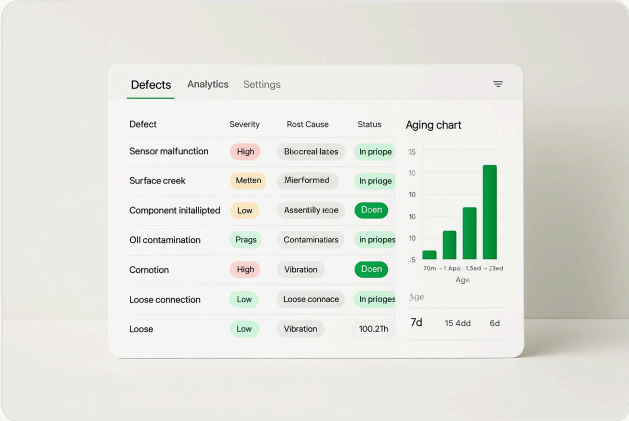
Six Capabilities.

One Inspection Platform.

Inspecta turns scheduling, field capture, defect tracking and compliance reporting into a single controlled workflow — from obligation to sign-off, with a complete record behind every decision.



1 Scheduling & Compliance



2 Defect & Corrective Action



3 Certificates & Records

CAPABILITY		WHAT IT DELIVERS
1	Inspection scheduling engine Asset type, regulatory intervals, risk-based frequencies and operational windows	→ Every obligation scheduled and escalated on time
2	Mobile inspection capture Offline-first app with camera, GPS stamping and a sync queue that survives dead zones	→ Structured, real-time inspection records — online or offline
3	Defect identification & tracking Severity classification, root-cause tagging and corrective workflows	→ Findings logged and driven to closure

CAPABILITY		WHAT IT DELIVERS
4	Corrective action management Assignment, tracking and escalation with configurable SLAs	→ Closure verified, nothing left open
5	Compliance dashboards Completion rates, overdue items and defect ageing — a rule engine auto-flags violations against mandatory fields, photos and thresholds	→ Live view of programme health, enforced automatically
6	Certificate & documentation Inspection certificates and third-party reports linked to assets	→ Audit-ready records on demand

 **CORE DECISIONS SUPPORTED**

 Is every asset inspected on time?

 Which defects need action now?

 Are corrective actions closing?

 Are we audit-ready today?

Built for South Africa's Toughest Environments

South Africa's mining, oil & gas and process industries operate under some of the most demanding statutory inspection regimes in the world. Inspecta extends beyond scheduling and defect tracking into shutdown planning, QC documentation and AI-assisted reporting — built for high-consequence, tightly regulated operations.



42

mining fatalities recorded in South Africa in 2024 — a record low

24%

year-on-year reduction in South African mining fatalities

9 yrs

typical SAQCC-IPE inspector re-certification interval



BEYOND THE INSPECTION

- 1 Shutdown & turnaround campaign management, with plan import and variance tracking
- 2 QC dossier and surveillance management with append-only audit history
- 3 Ready-to-Box-Up readiness snapshots, sign-off chains and issued certificates
- 4 Final Inspection Report compiler — compliance matrix, gap and NCR registers
- 5 AI-assisted gap narratives, daily briefs and photo-to-finding drafting



BUILT FOR HIGH-CONSEQUENCE SECTORS

- ✓ Mining & minerals processing
- ✓ Oil, gas & petrochemicals
- ✓ Power generation
- ✓ Heavy manufacturing



BUILT FOR INSPECTION TEAMS



Inspection Manager



Field Inspector



Integrity Engineer



Compliance Manager

Standards Alignment & Suite Integration



Inspecta is built on recognised international inspection frameworks — also aligned to South Africa's Pressure Equipment Regulations and SAQCC-IPE certification framework — and connects to the wider Asterion suite, so inspection data drives reliability, safety and governance automatically.

0 missed statutory inspections	40–60% faster defect closure	100% audit readiness on demand
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Built on International Inspection Frameworks

 GLOBAL STANDARDS ALIGNMENT

 API 510 — pressure vessel inspection

 API 570 — piping inspection

 API 653 — tank inspection

 ISO 17020 — inspection body competence

 ISO 9712 — NDT qualification

 OHS Act 1993 Pressure Equipment Regulations & SAQCC-IPE (South Africa)

 WITHIN THE ASTERION SUITE

 AssetVault → Inspecta: asset register and hierarchy drive scheduling and compliance automatically.

 Inspecta → ReliCore: inspection findings feed reliability models for continuous calibration.

 Inspecta → SHREQ360: compliance status feeds safety and quality governance.

 EVERY ASSET INSPECTED. EVERY FINDING CLOSED.



Scan to explore Inspecta online →

<https://aiasterion.com/modules/inspecta.html>

