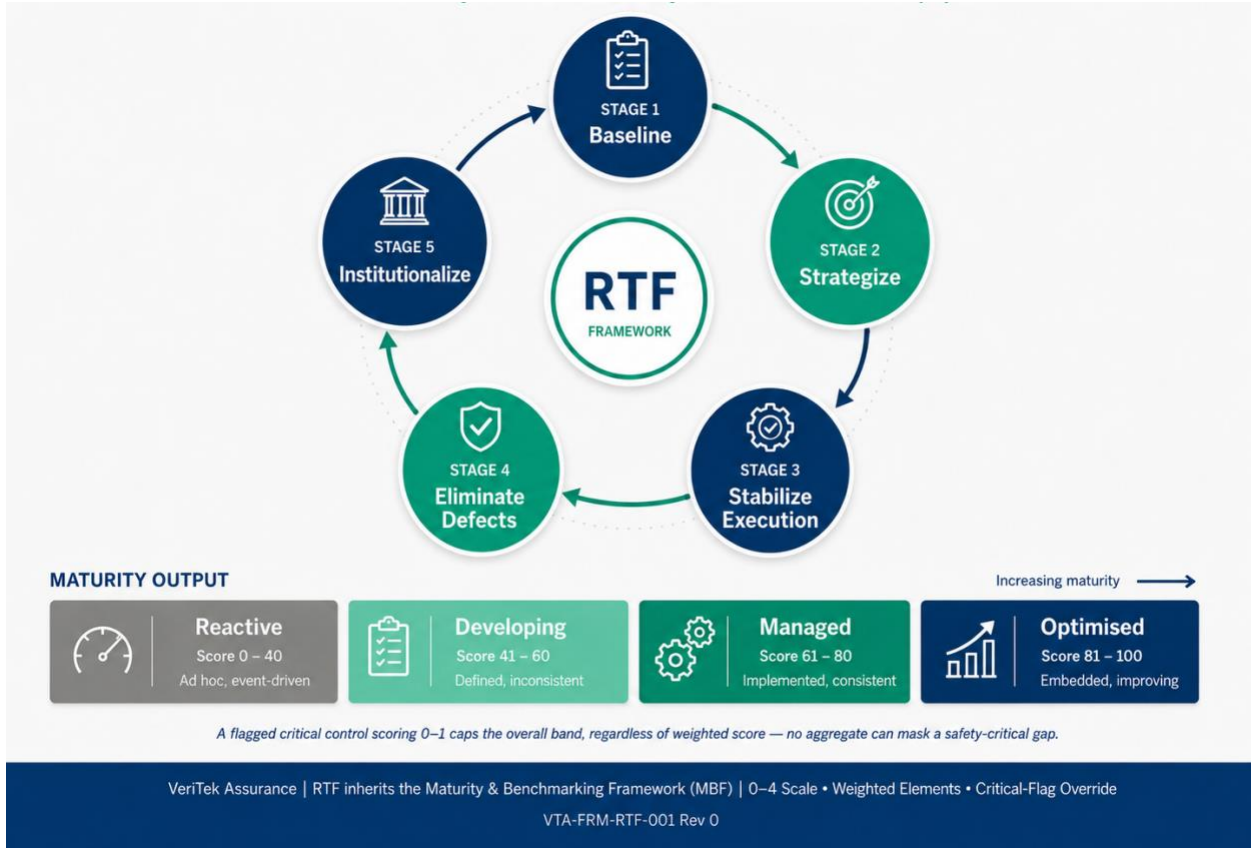


RELIABILITY TRANSFORMATION FRAMEWORK (RTF)

Transforming Maintenance into an Engineered, Data-Driven Reliability System



Overview

RTF governs VeriTek Assurance Reliability and Asset Performance, transforming maintenance from reactive task execution into an engineered, data-driven reliability system. It addresses strategy, criticality, execution discipline, and systematic defect elimination.

The VTA Difference

RTF treats reliability and process safety as structurally linked, not separately scored. A maintenance strategy gap on safety-critical equipment is reported simultaneously as a reliability finding and a process safety exposure, reflecting how operators actually experience the consequence.

The 5-Stage Methodology:

Stage	Name	Function
1	Baseline	Apply the RAP instrument (Health Check + Maturity Assessment) to establish current-state reliability maturity across strategy, criticality, and execution.
2	Strategize	Engineer maintenance strategy from failure modes (RP3), not OEM defaults, anchored to RP2 asset criticality and hierarchy.
3	Stabilize Execution	Strengthen work-management discipline (RP5: planning, scheduling, execution) and CMMS/data integrity (RP6).
4	Eliminate Defects	Drive RP7 (RCA and bad-actor management) systematically, converting recurring failures into engineered corrective actions.
5	Institutionalize	Embed KPI-driven performance measurement (RP9) and lifecycle continuous improvement (RP10) so gains are sustained.

Scoring Logic via the AIMS Instrument

RTF inherits MBF through the RAP instrument: 10 weighted elements (RP1 to RP10, 7 to 13 percent range), 40 maturity questions, and 5 critical-flag overrides (RP2.1 criticality basis, RP3.1 strategy derivation, RP4.3 condition-monitoring coverage, RP6.2 data integrity, RP7.1 RCA discipline). A low RP6 data-integrity score is structurally flagged against RBI element R3, and deficient maintenance strategy on safety-critical equipment cross-reports as a PSM exposure.

The VTA Difference:

RTF cross-links reliability findings to process safety and inspection instruments. A data-integrity or strategy gap is not an isolated reliability finding; it is automatically surfaced against the dependent elements of other VeriTek Assurance instruments.

Instrument Family MBF in Production:

This framework deploys the Maturity & Benchmarking Framework (MBF) through the following instrument(s). Each applies the same 0–4 response scale, weighted-element structure, four-band model, and critical-flag override logic, calibrated to the domain.

Code	Instrument	Mat. Q	Elem.	Flags	Codes
RAP	Reliability & Asset Performance	40	10	5	ISO 55001 · SAE JA1011
MMS	Maintenance Management System	36	10	5	ISO 55001 · EN 13306

Engagement:

This framework deploys through a Tier-1 Health Check as the entry diagnostic, followed by the full Tier-2 Maturity Assessment and an engineer-issued Initial Assessment Report. The report delivers the full element profile, the critical-flag register, the maturity band, and a risk-weighted priority-gap list with an improvement roadmap.