Find the report for your problem

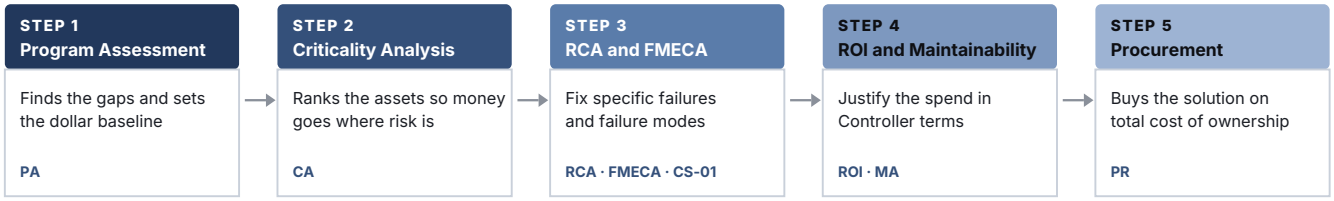
Each sample is a complete report, written for the plant manager and the controller as well as the maintenance team. Start with the problem you recognize.

THE PROBLEM YOU HAVE	REPORT AND WHAT IT ANSWERS	WHAT YOU GET	BEST FOR · SCOPE
"Downtime is killing us and I don't know where to start; my funding requests keep getting turned down"	**Maintenance & Reliability Program Assessment** **PA-2027-001** · 10 pages Where the program stands, what unreliability costs in dollars, and what to fund first	Maturity scores on 10 elements; cost-of-unreliability baseline; gated 18-month roadmap with NPV	**Plant manager, controller** **Typical duration:** 3–4 weeks **We need:** 12 months of CMMS, downtime log, and maintenance GL; 3 days on site; interviews
"Everything is a priority, so nothing is"	**Asset Criticality Analysis** **CA-2026-003** · 10 pages Which assets deserve PM, PdM, and spares money, and which don't	Ranked asset register with tiers; PM hours and spares reallocated; review gate	**Maintenance manager** **Typical duration:** 2–3 weeks **We need:** Asset list, failure history, production rates; one cross-functional workshop
"We keep fixing the same failure"	**Root Cause Analysis (RCA/RCFA)** **RCA-2026-014** · 11 pages Why it failed, the physical, human, and latent causes, and what stops it recurring	Evidence register; logic tree; corrective-action plan with owners; cost of the failure and NPV of the fix	**Maintenance manager, plant manager** **Typical duration:** 1–3 weeks **We need:** Failed parts (kept), work orders, operator accounts, access to the asset
"We've accepted failures as 'just how it is here'"	**Case Study: VFD-Induced Bearing EDM** **CS-01** · 8 pages What a real investigation looks like when the plant has normalized failures	Sanitized real RCA: teardown evidence, shaft-voltage measurements, red-flag screening, recommendations	**Maintenance manager** Real investigation, sanitized. Shows the method on a problem the plant had normalized.
"This line or machine is our worst performer"	**FMEA/FMECA** **FMECA-2026-007** · 11 pages Every way the system can fail, ranked by dollar risk, and which tasks address it	Failure-mode register ranked in $/yr; task package; break-even; food-safety and safety overrides	**Maintenance manager, reliability engineer** **Typical duration:** 3–5 weeks **We need:** Drawings, failure history, OEM manuals; 3–4 workshop sessions with crafts and operators
"Should we rebuild, monitor, or replace this asset?"	**Single-Asset Reliability ROI** **ROI-2026-005** · 10 pages Which option returns the most, and when replacement would become justified	Weibull analysis; option NPVs with scenarios; replace trigger; decision tree	**Controller, plant manager** **Typical duration:** 2–3 weeks **We need:** Failure and repair history, costs, OEM quotes
"Repairs take too long and eat into production"	**Maintainability Analysis** **MA-2026-006** · 10 pages Where repair time goes and which fixes pay back	Repair-time breakdown by element; levers ranked by return; design-for-maintainability standard	**Maintenance manager, engineering** **Typical duration:** 2–3 weeks **We need:** Observed repairs or video, work orders, sanitation and production windows
"We bought the cheapest option and paid for it later"	**Procurement Recommendation** **PR-2026-008** · 9 pages Which bid to award on total cost of ownership, not purchase price	Pass/fail gates; weighted scoring; 10-year TCO; contract terms and acceptance tests	**Controller, purchasing** **Typical duration:** 1–2 weeks **We need:** Bids, specifications, the approved business case

Durations are typical for one plant and one asset or system. Scope is confirmed with each client before work starts.

How the reports fit together

One method, applied in the order a plant usually needs it.



Most plants start at step 1 or step 3. Every report stands on its own, and each one feeds the next.

WHAT EVERY REPORT HAS IN COMMON

STANDARD	WHAT IT MEANS FOR YOU
Graded evidence	Every finding is marked Confirmed, Supported, or Inference, so you can see what the data supports and what is judgment.
Downtime in dollars	Downtime is valued at lost contribution margin, with recovered volume at its recovery cost, not at sales price.
Controller-ready finance	NPV, IRR, and payback at your hurdle rate, with CAPEX, OPEX, and inventory separated.
Ranges, not single numbers	Conservative, expected, and high-impact cases, plus stress tests and the break-even point.
No double counting	A benefit claimed in one report is excluded from every other, so the totals hold up to Finance review.
Standards cited	Methods reference the governing standards, such as ISO 55001, ISO 14224, IEC 60812, and IEC 61649.

ABOUT THESE SAMPLES

Seven reports describe one fictional cultured-dairy plant, so the numbers reconcile across them: the same downtime rates, and no benefit claimed twice. Names, people, and figures are fictional. CS-01 is a sanitized account of a real investigation, with no names or identifying details.

NEXT STEP

Start with the problem you recognize. Open the report on page 1 that matches it. If more than one fits, the Program Assessment is the usual starting point: it shows which of the others will pay back first.