

Nonconformance (NCR) Log

How-to guide: what the workbook does, how to use it and what every number means.

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Nonconformance (NCR) Log

Log every nonconformance with its disposition and cost, and see what it costs, where it comes from and whether NCRs are being closed as fast as they are raised.

For: Quality engineers and inspectors, MRB members, supplier quality engineers and owners of machine shops and fabrication shops.

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Quick start

1. On Setup, type your company, currency, status date, closure window, handling cost per NCR and clearance target, then replace the example sources, origins and defect types.
2. On NCR Log, add one row per nonconformance report: number, date, source, part, lot, origin, defect type, description and quantity.
3. When the MRB decides, enter the disposition, the unit cost of the part, any rework or repair cost and any amount recovered from the supplier.
4. Type the closed date when the NCR is closed; read the Check column and fix anything that is not OK.
5. Open the Dashboard; use the source, origin and date filters for a supplier review or a monthly quality report.

What is in the workbook

Start Here	Read this first: what the workbook does and how to use it.
Setup	Company, currency, status date, closure window, handling cost, and the source, origin and defect-type lists.
NCR Log	One row per nonconformance report: what, where found, where made, how many, the disposition and its cost.
Dashboard	What nonconformance costs, where it comes from, and whether NCRs are closed as fast as they are raised.
Method	How every number is calculated, with assumptions, limits and sources.
Verify	Self-check: the workbook's formulas recomputed on fixed inputs against an independent reference.

What each number means

Quantity	How it is calculated	Units
Scrap cost	Quantity nonconforming x unit cost when the disposition is Scrap; 0 for any other disposition.	currency

Quantity	How it is calculated	Units
Cost (est.)	Scrap cost + rework or repair cost + handling cost per NCR (Setup) - amount recovered. An estimate: it leaves out lost capacity, expediting and customer penalties.	currency
Days open	Closed - raised; for an open NCR, status date - raised.	days
Status	Complete when closed; Overdue when raised + closure window < status date; Due soon when the window ends within the warning days; else In progress.	-
Clearance ratio	NCRs closed in the dates in view / NCRs raised in the same dates. Closures count even if the NCR was raised earlier, as in the live calculator.	%
Open NCRs	Raised on or before the status date with no closed date (source and origin filters apply, the date filter does not).	NCRs
Average days to close	Sum of days open / count, over NCRs closed in the dates in view.	days
Open at month end	NCRs raised by the month end (or status date) minus NCRs closed by then.	NCRs
Pareto	Estimated cost per defect type, ranked with COUNTIF (ties keep list order). Hidden helper columns AO:AQ hold the unsorted values and ranks.	currency, %
Dashboard filters	Every figure counts rows whose In view column is 1 (inside the source and origin filters); raised and closed dates are tested against From and To (To defaults to the status date).	-

Assumptions, limitations, sources and the self-check (the Verify sheet, which recomputes the workbook's formulas on fixed test inputs) are in the workbook. The last page shows the Dashboard with the example data for Ashgrove Precision, a fictional business.

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Engineering estimates for planning and improvement work. Verify the results against your own process, data and standards before you rely on them.

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What nonconformance costs, where it comes from, and whether NCRs are closed as fast as they are raised.

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Source

Origin

From

To

Status as of 9 Oct 2026 (Setup). Showing 96 NCRs raised in the dates in view. Cost is in USD and includes the handling estimate per NCR.

NCRS RAISED	COST OF NONCONFORMANCE (USD, EST.)	CLEARANCE RATIO	OPEN NCRS OVERDUE
96	39,654	84%	1
In the dates in view	Scrap + rework + handling - recovered	Target 95%	Target 0
		Below target	Above target

