Six Big Losses Tracker

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

Six Big Losses Tracker

Log each machine's shift and see how much planned time went to each of the six big losses, with an OEE waterfall and a loss Pareto.

For: TPM and continuous-improvement teams, production supervisors, maintenance leads and plant managers working on OEE.

Version 1.0.0 · updated 24 November 2026

Quick start

1. On Setup, type your plant name and targets, then replace the example machines, shifts and products (with their ideal cycle times).
2. On Production Log, add one row per machine per shift: planned minutes, breakdown, setup and minor-stop minutes, total units and the two kinds of reject.
3. Read the Check column: anything other than OK names the problem in words.
4. Open the Dashboard to see where planned time went, then filter by machine or dates to find the biggest loss to attack.

What is in the workbook

Start Here	Read this first: what the workbook does and how to use it.
Setup	Your plant, the targets and the lists the Production Log dropdowns read.
Production Log	One row per machine per shift: planned time, the losses you log, and the counts.
Dashboard	Where planned time went: OEE and the six big losses, for the machine and dates you choose.
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.
About MFG Calcs	Everything MFG Calcs offers, free: calculators, templates, tariff tools, data and the Calkee AI helper.

What each number means

Quantity	How it is calculated	Units
Planned time	Typed per row: shift length minus planned stops (breaks, meetings, no-demand time).	min
Breakdowns, setup and adjustments	Typed per row. Run time = planned time - breakdowns - setup and adjustments.	min

Quantity	How it is calculated	Units
Minor stops	Typed per row: short stops not logged as breakdowns. They fall inside run time, so they are a performance loss.	min
Net run time	Ideal cycle time x total units / 60: the time the units made would take at the ideal rate. The ideal cycle comes from the Products list on Setup.	min
Reduced speed	Run time - minor stops - net run time: the speed loss left after minor stops.	min
Startup and production rejects	Typed in units; in minutes, ideal cycle time x rejects / 60. Good units = total - startup rejects - production rejects.	units, min
Productive time	Ideal cycle time x good units / 60 = net run time - both reject losses.	min
Availability, performance, quality	Run time / planned time; net run time / run time; productive time / net run time (good / total for one row).	%
OEE	Productive time / planned time = availability x performance x quality. Planned time - productive time = the six losses added up.	%
Dashboard roll-ups	SUMIFS over the log restricted to rows whose View date is filled in (inside the filters); ratios are formed from the sums. The Pareto ranks the six losses by COUNTIF ranks; helper columns AO:AQ on the Dashboard are hidden.	h, %

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 Calderwood Stamping, 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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Where planned time went: OEE and the six big losses, for the machine and dates you choose.

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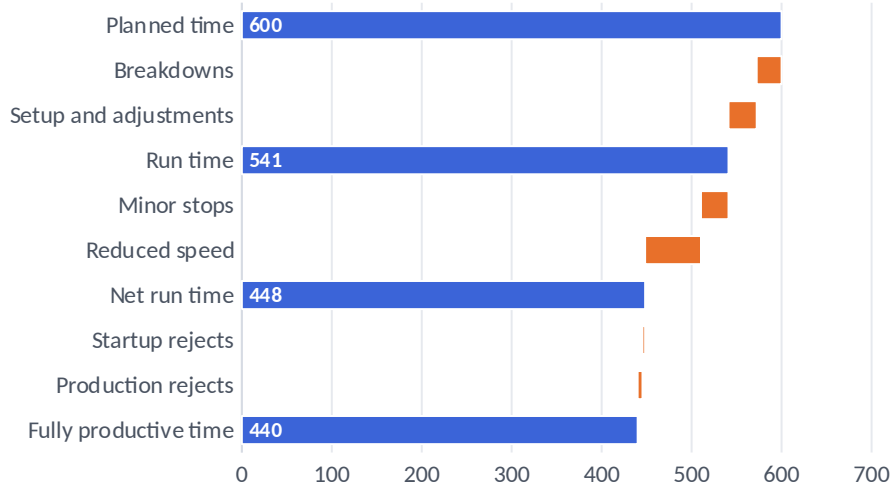
Machine | From | To

Showing 80 machine-shifts. Leave the filters blank to include everything; dates are inclusive.

OEE	AVAILABILITY	PERFORMANCE	QUALITY
73.3%	90.2%	82.9%	98.1%
Target 75.0%	Target 90.0%	Target 90.0%	Target 98.0%
Near target	On target	Below target	On target

Where planned time went (hours)



Six big losses Pareto

