

Plant Budget vs Actual

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

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Plant Budget vs Actual

Compare each month's plant spending with a budget flexed to the volume you actually made, and see which cost lines are out of limits and why.

For: Plant managers, plant and cost controllers, and operations managers who own a plant budget.

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Quick start

1. On Setup, type your plant name, currency, volume measure, first month of the year and the two variance thresholds; list your cost lines with the share of each that moves with volume.
2. On Volume, type the budget volume for every month and the actual volume as each month closes.
3. On Monthly Results, add one row per cost line per month with its budget and actual (paste from your ledger export).
4. Read the Check column: a line out of limits asks for a comment. Then open the Dashboard and pick the report month.

What is in the workbook

Start Here	Read this first: what the workbook does and how to use it.
Setup	Plant, currency, volume measure, the year and the variance thresholds, and the cost lines with how each moves with volume.
Monthly Results	One row per cost line per month: budget and actual in; flexed budget, variances and a flag out.
Volume	Budget and actual volume for each month of the year: the ratio flexes every budget line.
Dashboard	The month and the year to date against the flexed budget, by cost line, group and month.
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
Volume ratio	Actual volume / budget volume for the month (Volume sheet).	-

Quantity	How it is calculated	Units
Flexed budget	Budget x (1 - variable share + variable share x volume ratio). A fixed line (0%) keeps its budget; a fully variable line (100%) scales with volume.	currency
Spending variance	Actual - flexed budget. Positive = overspent. Its percentage is divided by the flexed budget.	currency, %
Volume effect	Flexed budget - budget: the change in the allowed spend caused by volume.	currency
Total variance	Actual - budget = spending variance + volume effect.	currency
Variance flag	Out of limits when the spending variance is above both Setup thresholds (amount and share of flexed budget); Check when it is below minus both; otherwise Within limits. The same rule on year-to-date totals gives the by-line flag.	-
Month and year to date	SUMIFS over Monthly Results for the report month, and from the first month of the year to the report month. A blank report month means the latest month with an actual; budget rows for later months can be loaded ahead.	currency
Cost per unit	Year-to-date actual / year-to-date actual volume, against the flexed budget / the same volume.	currency/unit
Biggest overspend	The cost line with the largest positive year-to-date spending variance.	-
By-month budget per unit	Monthly budget / budget volume; actual per unit = monthly actual / actual volume.	currency/unit

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 Ashworth Castings, 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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The month and the year to date against the flexed budget, by cost line, group and month.

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Ashworth Castings (example)

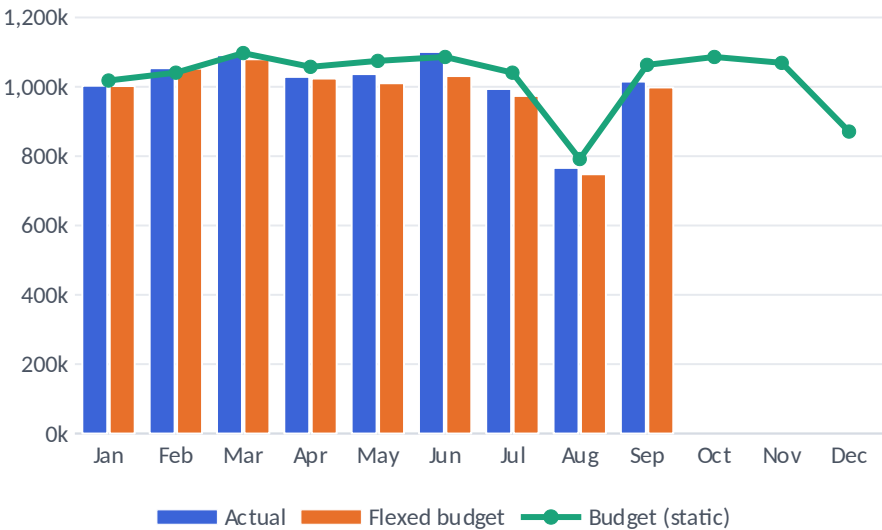
Report month Showing

Sep 2026

Year to date = first month of the year to the report month. Positive variance = overspent. Flexed budget = budget at the volume actually made. Amounts in GBP.

SPEND IN THE MONTH (GBP)	SPEND, YEAR TO DATE (GBP)	COST PER T, YEAR TO DATE (GBP)	BIGGEST OVERSPEND, YEAR TO DATE
1,015,100	9,088,270	758.11	Metallic charge
Flexed budget 998,115	Flexed budget 8,918,771	Flexed budget 743.97	Largest variance over flexed budget
Near target	Near target	Near target	

Spend by month: actual vs flexed and static budget



Spending variance by cost line, year to date

