

Standard Cost Variance

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

mfgcalcs.com



Standard Cost Variance

Compare every closed production order with its standard cost and split the difference into material price and usage, labour rate and efficiency, and overhead variances.

For: Cost accountants, plant controllers, operations and production managers who close the month and explain why actual cost missed standard.

Version 1.0.0 · updated 15 October 2026

Quick start

1. On Setup, type your currency and the two thresholds that make a variance worth investigating.
2. List each product's standards: material quantity and price, labour hours and rate, and the overhead rate per labour hour.
3. On Orders, add one row per production order closed: good quantity, material used and its cost, labour hours and cost, overhead charged.
4. Read each order's variances and status; the Check column names a product not on Setup or a missing quantity.
5. On the Dashboard, pick a product or a date range to see where the period's variance came from.

What is in the workbook

Start Here	Read this first: what the workbook does and how to use it.
Setup	Currency, the thresholds that make a variance worth investigating, and each product's standard cost.
Orders	One row per production order closed: good output and the actual material, labour and overhead charged to it.
Dashboard	Where the period's variance against standard came from: by type, by month and by product.
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
Standard cost per unit	Std material qty x std material price + std labour hours x (std labour rate + std overhead rate).	currency/unit
Std qty and hours allowed	Good qty x standard material qty; good qty x standard labour hours.	material units, h

Quantity	How it is calculated	Units
Standard cost (order)	Std qty allowed x std price + std hours allowed x (std labour rate + std overhead rate).	currency
Actual cost	Material cost + labour cost + overhead charged.	currency
Material price variance	Material cost - material used x std price (= used x (actual price - std price)).	currency
Material usage variance	(Material used - std qty allowed) x std price.	currency
Labour rate variance	Labour cost - labour hours x std rate.	currency
Labour efficiency variance	(Labour hours - std hours allowed) x std rate.	currency
Overhead variance	Overhead charged - std hours allowed x std overhead rate.	currency
Total variance, % of standard	Actual cost - standard cost (= the five variances added); / standard cost.	currency, %
Status	Out of limits when the total variance is at least both thresholds on Setup in absolute value, Within limits otherwise.	-
Dashboard roll-ups	SUMIFS of the order columns over rows whose View date is filled (inside the product and date filters); percentages = sum of variance / sum of standard cost.	currency, %

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 Keystone Fabrication, a fictional business.

Free from MFG Calcs - keep this credit when you share it.

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

Standard Cost Variance

Where the period's variance against standard came from: by type, by month and by product.

mfgcalcs.com

Product

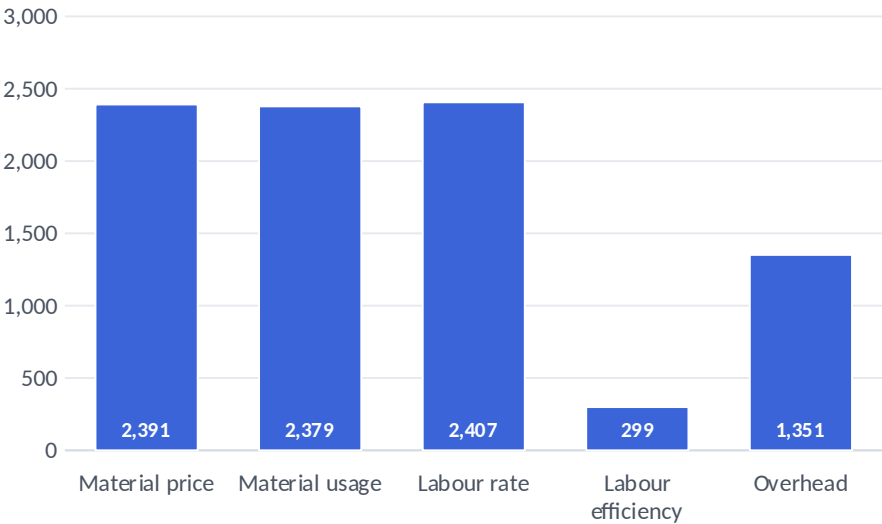
From

To

Showing 60 orders, standard cost 437,206 USD. Variance = actual - standard: positive is unfavourable. Leave the filters blank for everything.

NET VARIANCE (USD)	NET VARIANCE, % OF STANDARD	ORDERS OUT OF LIMITS	BIGGEST UNFAVOURABLE (USD)
8,827	2.0%	9	Labour rate 2,407
Actual - standard; + is unfavourable	Total variance / standard cost in view	Both thresholds on Setup exceeded	Variance type, orders in view

Variance by type (+ unfavourable, - favourable)



Variance by month and element

