

BOM Cost Rollup

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

mfgcalcs.com



BOM Cost Rollup

Cost an indented bill of materials line by line, roll material, labour and overhead up through every assembly, and see the unit cost and price at your margin.

For: Cost and manufacturing engineers, estimators, product managers, buyers and small-manufacturer owners.

Version 1.0.0 · updated 15 October 2026

Quick start

1. On Setup, set the currency, the product code and name, your labour rate, overhead and material burden rates, target margin and annual volume.
2. On BOM, paste or type one row per part: part number, parent (the product code for top-level items), quantity per parent, make or buy, commodity, unit cost, scrap and labour minutes.
3. Fix anything the Check column reports: duplicate part numbers, parents missing from the BOM, more than four levels.
4. Read each assembly's rolled-up unit cost on the BOM sheet, then the Dashboard: unit cost, price at your margin, cost by top-level item and by commodity.

What is in the workbook

Start Here	Read this first: what the workbook does and how to use it.
Setup	Currency, the product, labour and overhead rates, target margin, annual volume and the commodity list.
BOM	One row per part: what it is, where it goes and what it costs. Quantities and costs roll up to one finished product.
Dashboard	Unit cost, price at your margin, cost by top-level item and by commodity, and the cost elements.
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
Grandparent, great-grandparent	Helper columns: the parent's parent and the next level up, by INDEX/MATCH on part number (the product code at the top; ? when a parent is missing).	-

Quantity	How it is calculated	Units
Level	1 + one for each ancestor that is not the product: 1 for items directly in the product, up to 4.	-
Quantity per product	Quantity per parent x the quantity per parent of each assembly above it.	UoM
Material	Quantity per product x unit cost x (1 + scrap).	currency
Labour	Quantity per product x labour minutes / 60 x labour rate.	currency
Overhead	Labour x overhead rate + material x material burden.	currency
Total	Material + labour + overhead for the line, per finished product. The sum of all lines is the unit cost.	currency
Rolled-up cost	The line's total plus the totals of every line whose parent, grandparent or great-grandparent is this part (SUMIFS).	currency
Rolled-up unit cost	Rolled-up cost / quantity per product: the cost of one unit of the item with everything in it.	currency/UoM
Price at target margin	Unit cost / (1 - target gross margin).	currency
Top-level ranking and Pareto	Top-level items ranked by rolled-up cost (COUNTIFS rank, ties by part number); commodity totals ranked largest first with cumulative share (helper columns AO:AQ).	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 Lindqvist Instruments, 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.

BOM Cost Rollup

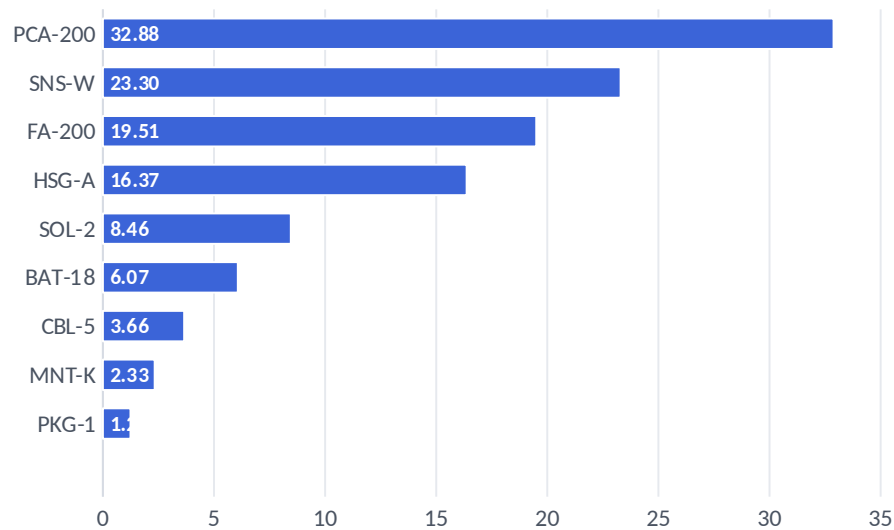
Unit cost, price at your margin, cost by top-level item and by commodity, and the cost elements.

mfgcalcs.com

WX-200 Weather station, solar powered: 26 BOM lines, 26 with Check OK. Costs per finished product in EUR.

UNIT COST (EUR)	MATERIAL SHARE OF COST	PRICE AT TARGET MARGIN (EUR)	COSTLIEST TOP-LEVEL ITEM
113.83	53.9%	175.12	PCA-200
Material + labour + overhead	Bought parts incl. scrap	Unit cost / (1 - target margin)	Rolled up, see the ranking

Cost per product by top-level item



Cost by commodity

