

Price Quote with Quantity Breaks

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

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Price Quote with Quantity Breaks

Price every part of an RFQ at five quantities from its cost per part and setup per lot, and print a customer-ready quote with tooling and terms.

For: Estimators, sales engineers and owners in contract manufacturers, injection moulders and machine shops.

Version 1.0.0 · updated 15 October 2026

Quick start

1. On Setup, enter your company details, currency, terms, margin on price, price rounding step and your process rates.
2. On Quote Lines, fill in the RFQ details, then one row per part: process, material per part, run minutes, setup hours, setup scrap and five quantities.
3. List any moulds, fixtures or programming billed separately under Tooling.
4. Check the unit prices, the economic lot and the Check column; pick a line to chart its price build-up.
5. Print the Quote sheet or save it as PDF and send it.

What is in the workbook

Start Here	Read this first: what the workbook does and how to use it.
Setup	Your company, currency, terms, pricing rules and the process rates every quote line uses.
Quote Lines	Everything that sets the prices: RFQ details, one row per part with five quantity breaks, tooling, and two charts.
Quote	The customer-facing quotation. Print it or save it as PDF; it fills itself from Quote Lines.
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

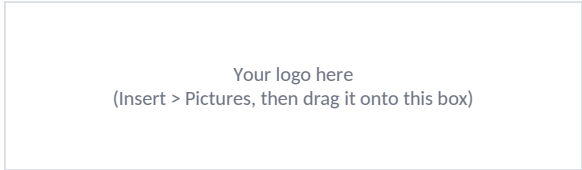
Quantity	How it is calculated	Units
Process rate	Looked up from the Processes list on Setup.	currency/h
Variable cost	Material and bought-in per part + run minutes per part / 60 x process rate.	currency/part
Setup cost per lot	Setup hours x process rate + setup scrap parts x variable cost.	currency/lot

Quantity	How it is calculated	Units
Economic lot	CEILING(setup cost x (1 - setup share target) / (setup share target x variable cost)): the smallest lot at which setup is at most the target share of unit cost.	parts
Unit price	CEILING((variable cost + setup cost / quantity) / (1 - margin), rounding step), at each quantity.	currency/part
Price build-up	For the charted line: variable cost, setup cost / quantity, and price minus both (margin and rounding).	currency/part
Setup share	Setup cost per part / (variable cost + setup cost per part).	%
Price drop	1 - lowest unit price / price at the first quantity, per line.	%
Tooling total	Sum of the tooling and one-off charges, printed on the Quote as separate lines.	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 Quote sheet with the example data for Ridgeway Contract Manufacturing, 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.



QUOTATION

Ridgeway Contract Manufacturing (example)
Unit 12, Ridgeway Business Park, Ridgeway, RW4 7QT
+1 555 0163 sales@example.com

To	Tallis Instruments (example)	Quote number	Q-2026-0388
Attention	Supply chain manager	Date	13 Oct 2026
Your reference	RFQ-T-5521	Valid until	12 Nov 2026
		Prepared by	Estimating

Part number	Description	Quantity (parts) and unit price (USD per part)				
TI-4410-01	Housing, PC/ABS, black, textured	1,000	2,500	5,000	10,000	25,000
	Unit price	3.60	3.34	3.26	3.21	3.19
TI-4410-02	Cover, PC/ABS, black	1,000	2,500	5,000	10,000	25,000
	Unit price	2.24	2.00	1.92	1.88	1.86
TI-4410-05	Battery door, ABS, grey	1,000	2,500	5,000	10,000	25,000
	Unit price	0.59	0.48	0.45	0.43	0.42
TI-4410-08	Light pipe, clear PC	2,500	5,000	10,000	25,000	50,000
	Unit price	0.21	0.17	0.15	0.13	0.13
TI-4410-12	Knob, POM, brass insert	1,000	2,500	5,000	10,000	25,000
	Unit price	1.01	0.91	0.87	0.85	0.84
TI-2207-11	Mounting bracket, 6082-T6	50	100	250	500	1,000
	Unit price	23.29	19.89	17.85	17.17	16.83
TI-2207-14	Drive shaft, 303 stainless	50	100	250	500	1,000
	Unit price	15.78	13.79	12.59	12.19	11.99
TI-2207-19	Spacer bush, brass	100	250	500	1,000	2,500
	Unit price	3.41	2.69	2.45	2.33	2.25

Samples 6 weeks after tooling order; production 3 weeks after sample approval, then to schedule

Tooling and one-off charges (billed separately)

2-cavity mould, housing TI-4410-01	USD	28,500
2-cavity mould, cover TI-4410-02	USD	21,000
4-cavity mould, battery door TI-4410-05	USD	14,800
8-cavity mould, light pipe TI-4410-08	USD	19,600
Milling fixture and programming, TI-2207-11	USD	650

Terms

Payment	Net 30 days from invoice; tooling 50% with order, 50% on sample approval
Delivery	Ex works, packed in returnable totes
Validity	Valid for 30 days from the quote date.

Unit prices are per part in the currency shown, for the quantity called off and made in one lot, and exclude sales taxes, duties and freight. Tooling is billed separately and becomes the customer's property on payment. Replace this example text with your own terms of sale.

Acceptance

Accepted for and on behalf of

Name and position

Signature and date

Purchase order number