

Freight Cost Per Unit

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

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Freight Cost Per Unit

Log every freight invoice and see freight cost per unit, per weight and as a share of product value by lane, carrier and week.

For: Logistics and transport managers, buyers, cost estimators and plant controllers who pay for or quote freight.

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Quick start

1. On Setup, type your company name, currency, weight unit and freight budget (as a share of product value), then replace the example lanes, carriers and modes.
2. On Shipment Log, add one row per freight invoice: date, lane, carrier, units, weight, product value, and the base, fuel and accessorional charges.
3. Read the Check column: anything other than OK names the problem in words.
4. Open the Dashboard. Set the From and To dates to look at one month or quarter; compare lanes and carriers in the tables below the charts.

What is in the workbook

Start Here	Read this first: what the workbook does and how to use it.
Setup	Company, currency, weight unit, your freight budget and the lane, carrier and mode lists.
Shipment Log	One row per freight invoice: what moved, on which lane and carrier, and every charge on the invoice.
Dashboard	Freight spend, cost per unit and share of product value against your budget, for the 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.

What each number means

Quantity	How it is calculated	Units
Total freight	Base charge + fuel surcharge + accessorials, per invoice row.	currency
Fuel and extras	Fuel surcharge + accessorials: the part of the invoice on top of the base rate.	currency
Freight per unit	Total freight / units shipped (blank when units are 0). Excel: $\text{=}[@[\text{Total freight}]]/[@[\text{Units shipped}]]$	currency/unit

Quantity	How it is calculated	Units
Extras per unit	Fuel and extras / units shipped.	currency/unit
Freight per weight	Total freight / gross weight, in the weight unit chosen on Setup (no conversion is applied).	currency/kg or lb
Freight per pallet	Total freight / pallets; blank for parcels (0 pallets).	currency/pallet
Freight share of value	Total freight / product value of the goods shipped.	%
Vs budget	On target when the share is at or below the budget on Setup; Near target up to 5% above it (budget x 1.05); Above target beyond that.	-
Dashboard roll-ups	SUMIFS over the log rows whose View date is filled in (inside the From and To dates), e.g. freight per unit = SUMIFS(total freight) / SUMIFS(units); share of value = SUMIFS(total freight) / SUMIFS(product value).	-
Fuel and extras share	Sum of fuel and extras / sum of total freight: how much of the spend sits on top of the base rates.	%
Share of spend (carrier)	The carrier's total freight / total freight of all carriers in view.	%
Lane x carrier	Freight per unit for each lane and carrier pair: SUMIFS(total freight) / SUMIFS(units) for that lane and carrier. Blank when the carrier moved nothing on the lane.	currency/unit
Weeks	Monday of each week, counted back from the latest ship date in view; the 12 most recent weeks show.	date

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 Carrick Fittings, 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.

Freight Cost Per Unit

Freight spend, cost per unit and share of product value against your budget, for the dates you choose.

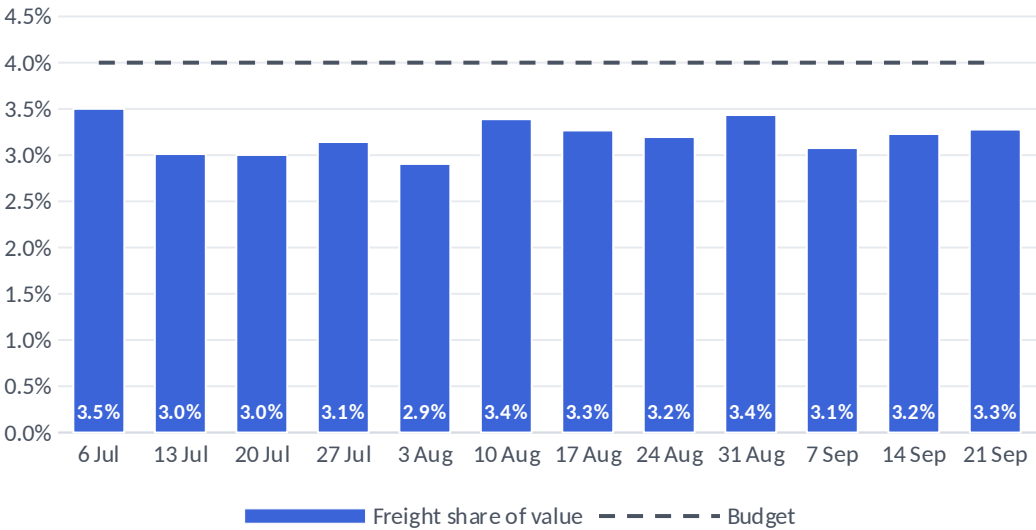
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From To

Showing 96 shipments for Carrick Fittings (example). Leave the dates blank to include everything; dates are inclusive.

FREIGHT SPEND (GBP)	FREIGHT PER UNIT (GBP)	FREIGHT SHARE OF PRODUCT VALUE	FUEL AND EXTRAS, SHARE OF SPEND
29,578	0.1518	3.20%	19.0%
Base + fuel + accessorials in view	Total freight / units shipped	Budget 4.00% On target	Surcharges and accessorials

Freight share of product value, by week



Freight per unit by lane: base vs fuel and extras

