First Article Inspection Cost

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

First Article Inspection Cost

Cost every first article inspection package from its measurement and reporting labour, program cost and outside tests, against the charge quoted for it.

For: Quality managers, inspection leads and estimators quoting and recovering FAI charges.

Version 1.0.0 · updated 11 November 2026

Quick start

1. On Setup, type your company and currency, and list your inspection resources with their loaded hourly rate.
2. On FAIs, give each package a row: part, reason, resource, articles, characteristics, hours per article, reporting hours, program cost, outside tests and the quoted charge.
3. Fix anything the Check column names.
4. Open the Dashboard: cost against quote, and where each package's cost comes from.

What is in the workbook

Start Here	Read this first: what the workbook does and how to use it.
Setup	Company, currency, the near band, and the inspection resources with their loaded hourly rate.
FAIs	One row per first article inspection package: labour, program and outside tests in; cost against quote out.
Dashboard	The cost of every first article inspection package against its quoted charge, and where the cost comes from.
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
Labour hours	Articles x hours per article + reporting hours.	h
Labour cost	Labour hours x the resource's rate per hour.	currency
Program and tests	Program cost + outside tests.	currency
Total cost	Labour cost + program and tests.	currency
Per article and per characteristic	Total cost / articles; total cost / characteristics.	currency

Quantity	How it is calculated	Units
Minutes per characteristic	Hours per article x 60 / characteristics: measurement labour only.	min
Over quote and status	Total cost - quoted charge when positive; On target at or under the quote, Near target up to the near band over, Above target further over.	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 Ravenscar Precision, 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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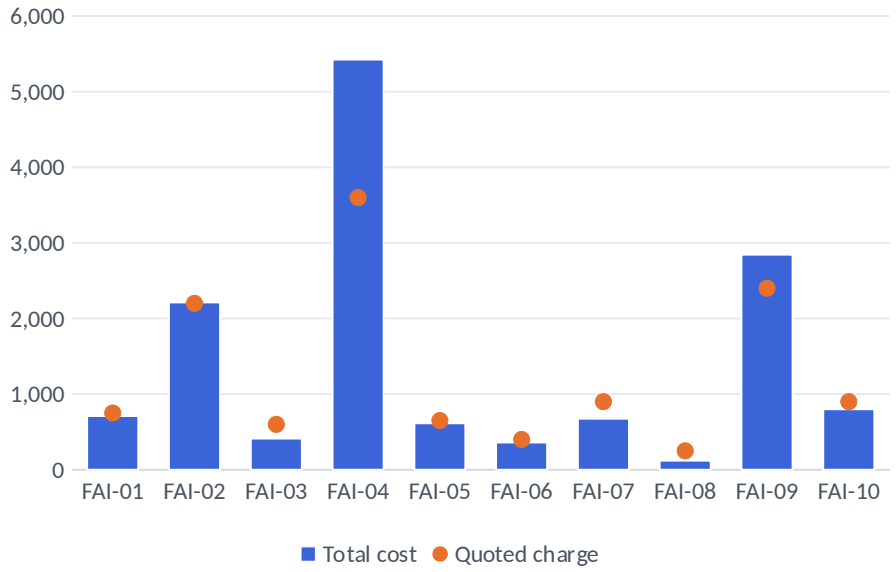
The cost of every first article inspection package against its quoted charge, and where the cost comes from.

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Ravenscar Precision (example): 10 FAI packages, 19 articles, 631 characteristics. Amounts in USD.

FAI PACKAGES	TOTAL FAI COST	OVER QUOTE	COST OVER QUOTE
10	**14,173**	**3**	**2,281**
Rows on FAIs	Labour + program and tests	Packages costing more than quoted	Sum over the quoted charges

Cost against quoted charge



Where each package's cost comes from

