

Decision matrix report

All records

DECISIONS IN FILE
1
15 scores recorded

OPTIONS COMPARED
3
in "Choose a new CNC machine"

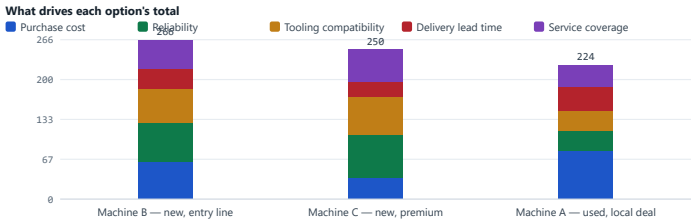
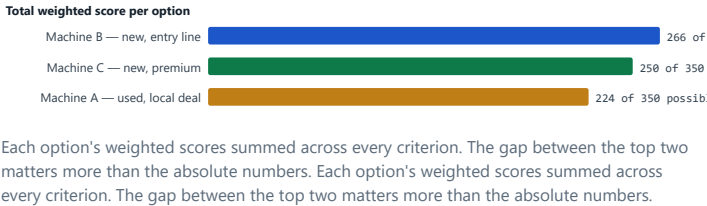
CRITERIA USED
5
a workable number

LEADING OPTION
Machine B — new, entry
266 of 350 possible

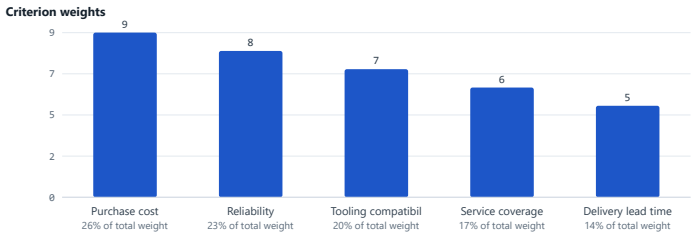
SCORE SPREAD
16
4.6% of maximum — a close call, challenge the scores

LOW-CONFIDENCE SCORES
3
verify these before deciding

15 of 15 record(s) included. All records. Amounts in USD.



Two options can reach similar totals by completely different routes — one on cost, another on reliability. This chart is where that shows. Two options can reach similar totals by completely different routes — one on cost, another on reliability. This chart is where that shows.



The weight profile for the largest decision. One dominant weight means the matrix mostly restates that single priority — which may be right, but should be deliberate. The weight profile for the largest decision. One dominant weight means the matrix mostly restates that single priority — which may be right, but should be deliberate.



Choosing the winner does not make its weaknesses disappear. The lowest bars here are what needs mitigation after the decision is made. Choosing the winner does not make its weaknesses disappear. The lowest bars here are what needs mitigation after the decision is made.

The matrix

CRITERION (WEIGHT)	MACHINE A — USED, LOCAL	MACHINE B — NEW, ENTRY L	MACHINE C — NEW, PREMIUM
Purchase cost (w9)	9 × 9 = 81	7 × 9 = 63	4 × 9 = 36
Reliability (w8)	4 × 8 = 32	8 × 8 = 64	9 × 8 = 72
Tooling compatibility (w7)	5 × 7 = 35	8 × 7 = 56	9 × 7 = 63
Delivery lead time (w5)	8 × 5 = 40	7 × 5 = 35	5 × 5 = 25
Service coverage (w6)	6 × 6 = 36	8 × 6 = 48	9 × 6 = 54
Total (of 350 possible)	224	266	250

Sensitivity check

CRITERION REMOVED	WEIGHT	LEADER WITHOUT IT	TOTAL	RUNNER-UP	VERDICT
Purchase cost	w9	Machine C — new, premium	214	Machine B — new, entry line (203)	Winner flips to Machine C — new, premium
Reliability	w8	Machine B — new, entry line	202	Machine A — used, local dealer (192)	Result holds
Tooling compatibility	w7	Machine B — new, entry line	210	Machine A — used, local dealer (189)	Result holds
Delivery lead time	w5	Machine B — new, entry line	231	Machine C — new, premium (225)	Result holds
Service coverage	w6	Machine B — new, entry line	218	Machine C — new, premium (196)	Result holds

Score register

DECISION	OPTION	CRITERION	WEIGHT	SCORE	BY	DATE	CONF.	WEIGHTED
Choose a new CNC machine	Machine A — used, local dealer	Purchase cost	9	9	Finance manager	2026-07-31	High	81
Choose a new CNC machine	Machine B — new, entry line	Purchase cost	9	7	Finance manager	2026-07-31	High	63
Choose a new CNC machine	Machine C — new, premium	Purchase cost	9	4	Finance manager	2026-07-31	High	36
Choose a new CNC machine	Machine A — used, local dealer	Reliability	8	4	Production engineer	2026-07-31	Low	32
Choose a new CNC machine	Machine B — new, entry line	Reliability	8	8	Production engineer	2026-07-31	Medium	64
Choose a new CNC machine	Machine C — new, premium	Reliability	8	9	Production engineer	2026-07-31	Medium	72
Choose a new CNC machine	Machine A — used, local dealer	Tooling compatibility	7	5	Production engineer	2026-08-01	Medium	35
Choose a new CNC machine	Machine B — new, entry line	Tooling compatibility	7	8	Production engineer	2026-08-01	High	56
Choose a new CNC machine	Machine C — new, premium	Tooling compatibility	7	9	Production engineer	2026-08-01	High	63
Choose a new CNC machine	Machine A — used, local dealer	Delivery lead time	5	8	Operations manager	2026-08-01	High	40
Choose a new CNC machine	Machine B — new, entry line	Delivery lead time	5	7	Operations manager	2026-08-01	Low	35
Choose a new CNC machine	Machine C — new, premium	Delivery lead time	5	5	Operations manager	2026-08-01	Low	25
Choose a new CNC machine	Machine A — used, local dealer	Service coverage	6	6	Operations manager	2026-08-01	Medium	36
Choose a new CNC machine	Machine B — new, entry line	Service coverage	6	8	Operations manager	2026-08-01	Medium	48
Choose a new CNC machine	Machine C — new, premium	Service coverage	6	9	Operations manager	2026-08-01	Medium	54

Notes

Sample decision — replace the options, criteria, weights and scores with your own before relying on it or circulating it.

A decision matrix structures judgement; it does not replace it. The totals are only as good as the criteria chosen, the weights agreed and the honesty of the scores — and two options with identical totals are not identical options. If the sensitivity check shows the winner changing when one criterion is removed, that is a prompt for more discussion, not proof of anything. Nothing here is professional advice on the decision itself.