Replacing the central machining centre

A decision analysis for a UK precision manufacturer with about 40 staff. Position at 8 November 2026.

The business is fictional. Its operating figures are my assumptions and are marked as such. Interest rates, tax rules and price points are public and carry their date.

Recommendation

Replace the machine and finance it on hire purchase. Over seven years the expected net present value (E) after tax is £663k. Repairing and continuing gives £605k. Replacement therefore adds £58k in expectation.

This holds while the business sells more than about 910 machine hours a year, if the volume is the same every year. Below about 890 hours I would subcontract the parts, and in the narrow band between the two repairing is best. The Base case assumes 3,000 hours.

The answer does not depend on full expensing. With writing-down allowances only, replacement still adds £48k and the volume above which it pays rises to about 1,190 hours (see Table 7).

Hire purchase beats paying from own funds only while its rate stays below 10.75%. I use 9.25%.

Under these assumptions I would not wait for the order book. Waiting a year costs £19k in expectation. Knowing the order volume first would be worth £2k.

Terms

NPV. Net present value: cash flows after tax over seven years, discounted at 8%.

(E). Expected or modelled value. A figure marked (E) is a model result and not an observation.

Null case. Repair the old machine and keep it running. It is replaced only if it fails beyond repair.

Hire purchase. 10% deposit, five annual instalments, ownership on the last payment. For tax the buyer is the owner from the start (CAA 2001, s67).

Full expensing. 100% of the cost is deducted in the year the machine is brought into use. Plant bought for leasing is excluded.

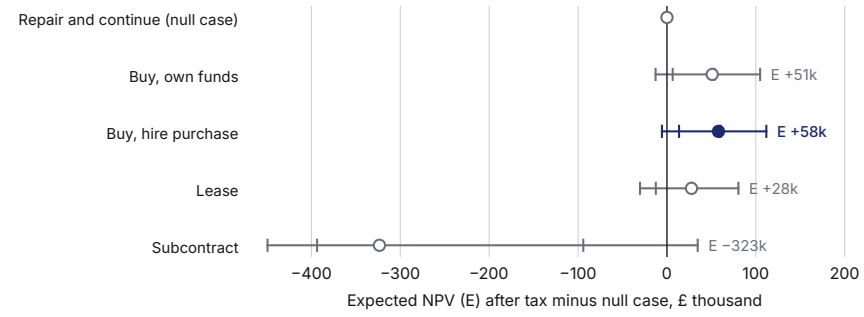
Volume states. Sold hours a year: Collapse 700, Low 1,400, Base 3,000, High 3,500.

Table 1. Hire purchase has the highest expected value of the five options.

Option	Net payment at start, £k	Expected NPV (E), £k	Against null case (E), £k	Range over the four volume states (E), £k
0 Repair and continue (null case)	0	605	–	–
1 Buy from own funds	249	656	+51	−13 to +105
2 Buy on hire purchase	11	663	+58	−6 to +112
3 Lease	−15	633	+28	−30 to +80
4 Subcontract the parts	−15	282	−323	−449 to +35

Net payment at start is the deposit or the price paid on day one, less the £15k scrap value of the old machine. A negative value is a net receipt. NPV after tax over seven years at 8%, expected value over four order-volume states. Source: own model, assumptions in Table 12. Position at 8 November 2026.

Figure 1. Replacing on hire purchase beats repairing in three of four volume states.



Expected NPV (E) after tax of each option minus the null case. Ticks mark the Collapse, Low, Base and High states. Circle is the expected value. Source: own model, assumptions in Table 12. Position at 8 November 2026.

1 Longlist, screening and shortlist

I followed the Green Book options framework in reduced form (HM Treasury 2022, paragraphs 5.17 to 5.35). It asks for a longlist, tests against critical success factors and a shortlist of about five options. The shortlist must contain the business-as-usual case. Five tests screen the longlist. They are my own.

Table 2. Five tests screen the longlist.

Test	Requirement
C1 Capacity	Serves at least 3,000 sold hours a year, with planned downtime only for service.
C2 Speed	In production within 9 months.
C3 Cash	Payment at start leaves cash above the £120k minimum without drawing the facility.
C4 Warranty	At least 24 months on the machine, or no machine to warrant.
C5 Space	Fits the existing floor space, which has one machining bay.

Source: own screening criteria (assumptions), method after HM Treasury, The Green Book (2022), chapter 5. Position at 8 November 2026.

Table 3. Eight options were considered and three fall out.

No.	Option	Fails	Outcome
L1	Repair and continue	–	Carried forward as null case. The Green Book requires it (paragraph 5.18).
L2	Overhaul the old machine (new control, spindle)	C4	Out. No warranty on frame and guideways.
L3	Buy new from own funds	–	Shortlist.
L4	Buy new on hire purchase	–	Shortlist.
L5	Lease new	–	Shortlist.
L6	Subcontract all parts	–	Shortlist. Passes C1 through the supplier.
L7	Buy a used machine, five to eight years old	C4	Out. I assume dealer warranty below 24 months. A 24-month offer would put it back.
L8	Add a second machine, keep the old one	C5	Out. I assume floor space for one bay only.

Source: own screening against Table 2. Assumptions are listed in Table 12. Position at 8 November 2026.

Hire purchase and lease differ in how the machine is financed. I keep them apart because the tax treatment differs. The buyer claims full expensing, which the lessee cannot do. Each shortlisted option is valued on one scale, net present value after tax over seven years at 8%.

Table 4. How each shortlisted option is modelled.

Option	Modelled as
0 Repair and continue	Repairs as needed. In any year the machine can fail beyond economic repair. It is then replaced on hire purchase at a 10% rush premium after a long outage.
1 Buy from own funds	£264k paid at the start, including a 10% optimism uplift. Full expensing in the first year.
2 Buy on hire purchase	10% deposit, five annual instalments of £61k at 9.25%. Full expensing in the first year.
3 Lease	Seven annual rentals of £49k at 10.75% implicit. Rentals deducted as paid. No allowance for the lessee.
4 Subcontract the parts	No machine. The business keeps 45% of its contribution, less a 20% optimism uplift on the subcontract cost.

Source: own model. Public tax rules in Table 6. Position at 8 November 2026.

2 Value and cash of each option

Every option is valued after tax. The model computes Corporation Tax on the whole company profit each year, with the small profits rate, marginal relief and the main rate. Losses carry forward. In the Collapse state the first-year deduction exceeds profit for the purchase options, and the model carries the unused part forward.

Table 5. Subcontracting is best in the Collapse state and hire purchase in every other state.

Option	Collapse (£) 700 h p 0.05	Low (£) 1,400 h p 0.20	Base (£) 3,000 h p 0.55	High (£) 3,500 h p 0.20	Expected (£)
0 Repair and continue (null case)	48	248	709	816	605
1 Buy from own funds	35	254	763	921	656
2 Buy on hire purchase	42	261	770	928	663
3 Lease	17	235	738	896	633
4 Subcontract the parts	82	153	316	367	282

NPV after tax in £k over seven years at 8%, with optimism uplifts (Table 8). Probabilities are assumptions. Source: own model. Position at 8 November 2026.

Table 6. Public inputs and how they enter the model.

Input	Value	Date	Use in the model
Bank Rate	4.00%	5 Nov 2026	Sets the revolving facility at 8.5%, Bank Rate plus 4.5 points (assumption).
Hire purchase APR, plant and machinery, prime	7% to 12%	Jun 2026	Broker index, read when Bank Rate was 3.75%. Bank Rate then rose 0.25 points on 5 November. I add them and use 9.25%, and test 7.25% to 12.25%.
Corporation Tax	19% under £50k, 25% over £250k, marginal relief 3/200	Year from 1 Apr 2026	Applied to total company profit each year.
Full expensing	100% in the year the machine is brought into use	8 Nov 2026	New and unused main-rate plant, companies only. Options 1 and 2. Plant bought for leasing is excluded.
Writing-down allowance, main pool	14%	From 1 Apr 2026	Used in the variant without full expensing, Table 7 below.

Sources: Bank of England (Monetary Policy Summary, Nov 2026; Bank Rate history); Spark Finance (UK Asset Finance Rate Index, Jun 2026); GOV.UK and HMRC (Corporation Tax rates; capital allowances); Capital Allowances Act 2001; HMRC Capital Allowances Manual. Position at 8 November 2026, each source with its own date in the list of sources.

Tax relief on hire purchase

I read the originals for the tax treatment of hire purchase. The buyer is treated as the owner from the day the machine is brought into use (Capital Allowances Act 2001, s67). All capital expenditure still to be paid under the contract is treated as incurred on that day (s67 and the HMRC Capital Allowances Manual, CA23310 and CA11800). Full expensing needs a company, new and unused plant, expenditure from 1 April 2023 and no general exclusion (CA23174AB). The exclusion that touches financing is plant provided for leasing (CA23113). Hire purchase is not leasing.

No manual page says in one sentence that full expensing applies to the hire purchase buyer. It follows from the four statements above. The contract must be a hire purchase under which title passes on the last payment. A lease-purchase with a market-price option would not make the buyer the owner for tax (CA23310).

I therefore also ran the case without full expensing. The machine then earns the main-rate writing-down allowance of 14% a year on the reducing balance, in a pool of its own, with a balancing adjustment in the year of sale. Hire purchase still leads with £648k against £600k for repair. The ranking of the five options does not change. What changes is the volume that replacement needs (Table 7). An annual investment allowance of £1m, if other spending has not used it, would restore the full first-year deduction. I do not model it.

Table 7. Without full expensing hire purchase still leads, but the volume it needs rises.

Option	Expected NPV (E), full expensing, £k	Expected NPV (E), allowances only, £k	Difference (E), £k
0 Repair and continue (null case)	605	600	−5
1 Buy from own funds	656	641	−15
2 Buy on hire purchase	663	648	−15
3 Lease	633	633	0
4 Subcontract the parts	282	282	0
Hire purchase against null case (E), £k	58	48	−10
Hours above which hire purchase beats repair (E)	911	1,186	275
Hours below which subcontracting beats hire purchase (E)	890	940	50

NPV after tax in £k over seven years, expected over the four volume states. Hours are found by bisection, volume equal in every year. Source: own model, tax rules in Table 6. Position at 8 November 2026.

The cash purchase leaves £171k at the start, which is £51k above the minimum. Hire purchase leaves £409k. In the stress run the peak draw on the facility is £35k for the lease, £18k for hire purchase and £13k for repair. A control row checks every year that cash equals the ledger of all sources and uses. The largest difference is below one hundredth of a penny (Table 13).

Figure 2. Only the cash purchase uses its cash headroom at the start. No option breaches the facility under stress.



Cash less revolver (E), expected over failure years of the old machine. Minimum cash £120k, facility £250k. Left panel uses 60% distribution of profit after tax. Right panel fixes distributions at £150k. Source: own model, assumptions in Table 12. Position at 8 November 2026.

3 Optimism bias on cost and downtime

The Green Book asks for explicit uplifts on costs and durations at the start of an appraisal (paragraphs 6.78 to 6.80). Where an organisation has no record of its own, supplementary guidance gives starting values. For equipment they run from 10% to 200% on capital cost and from 10% to 54% on duration. For outsourcing the operating cost range is 0% to 41%.

Table 8. Uplifts applied, and why.

Item	Option	Uplift	Basis
Installed machine price	Options 1, 2, 3	+10%	Lower bound for equipment. A fixed-price dealer quote mitigates the risk.
Installation and ramp-up weeks	Options 1, 2, 3	+10%	Lower bound for duration.
Repair cost per event	Option 0	+50%	My judgement. The 200% upper bound is for equipment development, not for repairing a known machine.
Downtime per failure	Option 0	+54%	Upper bound for duration. Nothing mitigates the delay of a repair on an old machine.
Subcontract cost	Option 4	+20%	Middle of the 0% to 41% range. Price is fixed by contract, rework and logistics are not.

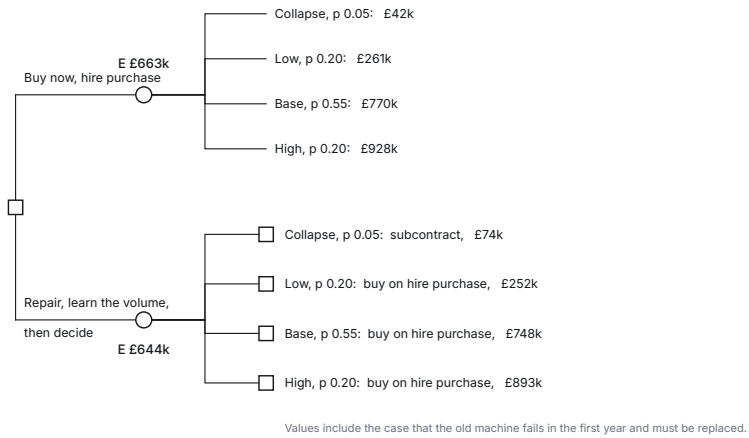
Source: HM Treasury, The Green Book (2022), paragraphs 6.78 to 6.80; HM Treasury, Supplementary Green Book guidance on optimism bias, Table 1. Choices of bound are mine. Position at 8 November 2026.

Without uplifts hire purchase beats repair by £36k. With them it beats repair by £58k. The uplifts cut the null case by £40k and hire purchase by £18k. A quote fixes the price of a new machine, and nothing fixes the cost of a repair. I regard £36k as the cautious figure. It is still positive and the ranking of the five options does not change.

4 Decision tree with rollback

The event that matters most is the order volume. It depends on a few large customers and I model four states. The first decision is to buy now on hire purchase or to repair for a year and decide when the volume is known. I rolled the tree back from the right. At a decision square I take the better branch. At a circle I weight the branches by their probabilities.

Figure 3. Buying now (£663k) beats repairing and deciding later (£644k).



Expected NPV (E) after tax in £k over seven years. Probabilities are assumptions. Source: own model, assumptions in Table 12. Position at 8 November 2026.

Waiting costs £19k because the old machine runs one more year, it can fail in that year, and the productivity gain starts later. Waiting pays only in the Collapse state, where subcontracting gives £74k against £42k for buying. That state has a probability of 0.05.

5 Sensitivity and switching values

I moved each driver across a range and recorded the advantage of hire purchase over the null case. The two strongest drivers are sold hours and the productivity gain of the new machine. Figure 4 varies them together.

Table 9. Sold hours and productivity gain move the result most.

Driver	Range tested	Advantage at low end (E), £k	Advantage at high end (E), £k
Sold hours, all states	x0.75 to x1.25	+32	+127
Productivity gain of the new machine	0% to 10%	+31	+85
Machine price	£180k to £320k	+80	+27
Annual probability of repairable failure	15% to 45%	+21	+65
Repair cost per event	£15k to £45k	+38	+78

Advantage of option 2 over option 0, expected NPV after tax in £k. Ranked by the width of the swing. The full list of eleven drivers is in the results file. Source: own model. Position at 8 November 2026.

Figure 4. Replacing on hire purchase loses to repairing only at very low volume combined with a low productivity gain.



Advantage (E) of option 2 over option 0 in £k. Outlined cell is the base case. Source: own model, assumptions in Table 12. Position at 8 November 2026.

Table 10. Switching values for the preferred option.

Driver	Base case	Switching value (E)	Reading
Sold hours a year, same in every year	3,000 (Base state)	911	Below this level repairing or subcontracting beats replacing (Table 11).
All four volume states scaled together	x1.00	x0.34	Same test on the whole distribution.
Installed price before uplift	£240k	£390k	Above this price repairing beats replacing.
Productivity gain of the new machine	5.0%	−5.6%	Replacing wins even with no gain at all.
Contribution per sold hour	£78	£24	Below this repairing beats replacing.
Annual probability of a repairable failure	40%	1.1%	Replacing wins unless the old machine almost never needs repair.
Hire purchase rate, against repairing	9.25%	30.6%	Above this rate repairing beats replacing. Far outside the broker band.
Hire purchase rate, against own funds	9.25%	10.75%	Above this rate own funds beat hire purchase. The top of the broker band lies above it.
Share of contribution kept when subcontracting	45%	85%	Above this share subcontracting beats replacing.
Hurdle rate, hire purchase against own funds	8%	6.88%	Below this rate own funds beat hire purchase.

Value at which option 2 and the named alternative have equal expected NPV, found by bisection with all other inputs at base values. Source: own model. Position at 8 November 2026.

For the probability of terminal failure, the repair cost and the discount rate I found no switching value inside the ranges tested. Hire purchase beats own funds by £7k and the lease by £30k. The financing choice is therefore worth far less than the choice to replace.

Direct switching hours between every pair of options

The first row of Table 10 compares hire purchase with repair only. Table 11 compares every pair. Each row holds the volume that is the same in every year and finds the hours at which the two options have equal expected NPV. I scanned 200 to 3,600 hours and refined each crossing by bisection.

Table 11. Hire purchase needs about 910 hours to beat repair and about 890 hours to beat subcontracting.

Pair	Equal at (E), full expensing, h	Equal at (E), allowances only, h	Below, above (full expensing)
Repair and own funds	1,169	1,469	Below: repair. Above: own funds.
Repair and hire purchase	911	1,186	Below: repair. Above: hire purchase.
Repair and lease	1,893	1,733	Below: repair. Above: lease.
Repair and subcontract	887	904	Below: subcontract. Above: repair.
Own funds and hire purchase	none	none	Hire purchase ahead throughout.
Own funds and lease	none	none	Own funds ahead throughout.
Own funds and subcontract	924	976	Below: subcontract. Above: own funds.
Hire purchase and lease	none	none	Hire purchase ahead throughout.
Hire purchase and subcontract	890	940	Below: subcontract. Above: hire purchase.
Lease and subcontract	1,010	1,010	Below: subcontract. Above: lease.

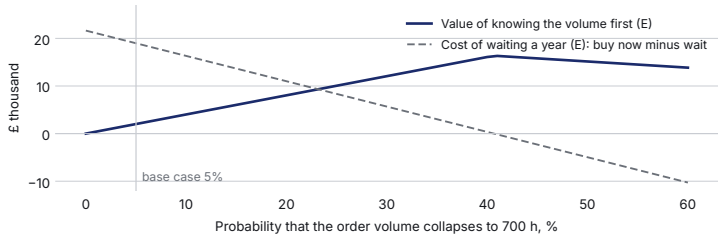
Expected NPV (E) with the order volume equal in every year, tax rules as in Table 6. Where no crossing exists in the range scanned, the option named is ahead throughout. Source: own model. Position at 8 November 2026.

In order of volume the best option is subcontracting up to 887 hours, repairing up to 911 hours, and hire purchase above. The band in which repairing is best is 24 hours wide. Without full expensing it moves to 904 to 1,186 hours.

6 Value of information

The question is what it is worth to clarify the order book before deciding. With perfect knowledge the business would pick the best option in each state. That gives an expected value of £665k. The best plan without it, which is to buy now, gives £663k. The difference is £2k. This is the most the business should pay for a perfect forecast of the volume.

Figure 5. Knowing the volume first becomes worth more than waiting costs only if a collapse has more than 41% probability.



Value of perfect information about the order volume (E), and cost of waiting a year (E), as the probability of the Collapse state changes. Other states keep their relative weights. Source: own model, assumptions in Table 12. Position at 8 November 2026.

The value peaks at £16k when the collapse probability is 41%. Waiting beats buying now from 41% upwards. The base case sits

at 5%, so waiting loses.

A cheaper signal is a three-year framework agreement with the anchor customer. I assume it is signed with probability 0.02 in the Collapse state, 0.15 in Low, 0.80 in Base and 0.95 in High. If it is not signed, the chance of a collapse rises from 0.05 to 0.14. Hire purchase stays the best option after either answer, so the signal changes no decision and has no value in decision terms. I would still ask for it, because a signed agreement also raises confidence in the Base volume.

7 Recommendation with conditions

Under a sustained volume above about 910 machine hours a year, replace the machine on hire purchase. Below about 890 hours, subcontract the parts, and in between repair. The expected gain over repairing is £58k, or £36k without optimism uplifts and £48k without full expensing. In that last case the volume above which replacement pays is about 1,190 hours.

Replacement stays ahead while the installed price is below £390k. It does not depend on the assumed productivity gain. Hire purchase is the better way to pay while its rate is below 10.75%. Above that rate own funds win, provided the business can keep its £120k minimum cash. Own funds leave £171k at the start. The lease costs £30k more in value.

The model does not decide. It orders the options under stated assumptions. Three facts would replace assumptions at low cost. A fixed-price quote for the installed machine, a cycle-time test on the business's own parts, and an engineer's survey of the old machine. The first two address the strongest drivers in Table 9. The hire purchase offer, with its rate and the confirmation that title passes on the last payment, settles the financing and the tax question.

8 Limits

The model is sized to the decision and is not a forecast. It has six limits.

- The order-volume state holds for all seven years. A collapse in year four is not modelled.
- Periods are annual and prices are flat. There is no inflation and no growth.
- Hire purchase and lease prices are indicative. A real offer will differ. The hire purchase rate is the June broker reading plus the November rise. I found no later reading.
- Failure probabilities describe an end-of-life machine and are assumptions. An engineer's survey would replace them.
- Customer approvals could rule subcontracting out. The model only keeps a share of the contribution.
- Tax relief is valued at the rates of a company with other profits. The variant without full expensing treats the machine as the only asset in its pool.

Sources

1. Bank of England. Monetary Policy Summary and minutes of the Monetary Policy Committee meeting on 4 November 2026. Published 5 November 2026.
2. Bank of England. Official Bank Rate history. Read 8 November 2026. 3.75% from 18 December 2025 to 4 November 2026.
3. HM Revenue and Customs, GOV.UK. Corporation Tax rates and allowances. Budget 2026: overview of tax legislation and rates, Annex A. Read 8 November 2026.
4. GOV.UK. Claim capital allowances: Full expensing and 50% first-year allowance; Annual investment allowance. Read 8 November 2026.
5. GOV.UK. Work out your writing down allowances: Rates and pools. Main pool 14% from 1 April 2026 for Corporation Tax. Read 8 November 2026.
6. Capital Allowances Act 2001, section 67: Plant or machinery treated as owned by person entitled to benefit of contract, etc. The National Archives, revised text, up to date to 7 November 2026.
7. HM Revenue and Customs. Capital Allowances Manual: CA23113 (FYA, general exclusions), CA23174AB (full expensing, qualifying expenditure), CA23174AC (general exclusions), CA23174AD (balancing charge after full expensing), CA23310 (hire purchase, notional ownership), CA11800 (when capital expenditure is incurred). Read 8 November 2026.
8. HM Revenue and Customs. HS252 Capital allowances and balancing charges 2026. Updated 6 April 2026.
9. HM Treasury. The Green Book: Central Government Guidance on Appraisal and Evaluation. 2022. Paragraphs 5.17 to 5.35, 6.78 to 6.83, 6.92 to 6.101.
10. HM Treasury. Supplementary Green Book guidance: optimism bias. Table 1, recommended adjustment ranges (after Mott MacDonald, 2002).
11. Spark Finance. UK Asset Finance Rate Index 2026. Last updated June 2026. Plant and machinery, prime, 7% to 12% APR.
12. MTD. Bringing 5-axis to every UK machine shop. 19 November 2025. 5-axis entry model at £220,000, compact model at £110,000 to £125,000.
13. Phillips, L. D. Decision Analysis for the Practitioner. Decision Analysis (INFORMS), 2025. Decision tree and value of better information, printed pages 13 to 14.
14. West of England Combined Authority and Bath and North East Somerset Council. Somer Valley Links Outline Business Case. 2024. Switching values, page 98 of the PDF.

Assumptions

Table 12. Every assumption in the model, with its basis.

Assumption	Value	Basis
Profit before tax from all other work	£130k	Judgement. Company profit before tax is this amount plus the machining line.
Opening cash, minimum cash	£420k, £120k	Minimum is about two weeks of payroll and supplier payments.
Distributions	60% of profit after tax	Discretionary. The stress run fixes £150k a year.
Revolving facility	£250k at 8.5%	Bank Rate plus the margin in Table 6.
Sold hours a year by state	700 / 1,400 / 3,000 / 3,500	Collapse, Low, Base, High. Collapse is the loss of the anchor customer and more.
State probabilities	0.05 / 0.20 / 0.55 / 0.20	Judgement. The value-of-information curve varies the first.
Contribution per sold hour	£78	Sales less materials, tooling and direct labour, before machine costs.
Share kept when subcontracting	45%	Subcontractor takes the machining margin.
Capacity, new and old machine	3,600 h, 3,100 h	Two shifts, 48 weeks. The old machine is slower. Overflow is subcontracted.
Installed price of new machine	£240k, range £180k to £320k	Price points of £220k (5-axis entry model) and £110k to £125k (compact model), both Nov 2025. Includes tooling and fixtures.
Horizon, market value	seven years, falls 15% a year	Sold at the end. Proceeds taxed in full as a balancing charge (CA23174AD), or as a balancing adjustment in the variant.
Scrap value of old machine, maintenance new and old	£15k; £6k, £14k a year	Judgement.
Productivity gain of the new machine, ramp-up	5%; 4 weeks of lost output	Judgement, tested from 0% to 10%. Ramp-up covers installation, proving and first-article approval.
Repairable failure	40% a year, £30k, 6 weeks	Premise of an end-of-life machine.
Failure beyond repair	15% a year, 20 weeks, +10%	Forced replacement on hire purchase.
Hire purchase	9.25%, 10% deposit, 5 years	Table 6. Inside the broker range once the November rise is added.

Assumption	Value	Basis
Lease	10.75% implicit, seven years	A lessor cannot use full expensing, so I assume 1.5 points over hire purchase. Lessor residual 80% of market value.
Discount rate	8% after tax	Bank Rate plus a business risk premium. A public-sector social rate does not fit a private company.
Timing	Year-end flows, purchases at start of year	Simplification.

Source: own assumptions unless a public source is named in Table 6. Optimism uplifts in Table 8. Position at 8 November 2026.

Model checks

Every check below is computed in the model run that produced this document. All 15 pass. A failed check stops the build.

Table 13. Control rows of the model, with the value each one reached.

No.	Check	Value	Limit	Result
K1	Cash balance less ledger of all sources and uses, largest absolute difference, £, five options times four volume states times every failure year, base and stress	0.0000	within 0.01	pass
K2	Shortfall beyond the revolving facility, largest value, £, same runs	0	equal to 0	pass
K3	Peak draw on the revolving facility in the stress run, £, against the facility limit	65,254	at most 250,000	pass
K4	Lowest closing cash on any path, £, against the minimum cash	120,000	at least 120,000	pass
K5	Probabilities of the four volume states, sum less one	0.0000	within 0.0001	pass
K6	Failure-year weights of the old machine, sum less one, largest over four survival histories	0.0000	within 0.0001	pass
K7	Hire purchase: instalments less interest less the amount financed, £	0.0000	within 0.01	pass
K8	Lease: present value of rentals and lessor residual less the price, £	0.0000	within 0.01	pass
K9	Tax relief over the machine's life, both regimes: allowances less balancing charge less (price less sale proceeds), £	0.0000	within 0.01	pass
K10	Corporation Tax at the two rate boundaries against the plain rates, sum of differences, £	0.0000	within 0.01	pass
K11	Expected NPV against the probability-weighted state values, largest difference over five options, £	0.0000	within 0.01	pass
K12	Buy-now branch of the decision tree less expected NPV of option 2, £	0.0000	within 0.01	pass
K13	Value of perfect information, £, must not be negative	2,011	at least 0	pass
K14	Value of the framework-agreement signal, £, must not be negative (rounding tolerance one penny)	0.00	at least −0.01	pass
K15	Switching hours, option 2 against option 0: NPV difference at the reported hours, £	0.00	within 1.00	pass

Values in pounds unless stated. Source: own model, the check rows are written to the results file. Position at 8 November 2026.