Supplier failure early warning checklist

A practical review tool for OEMs, maintenance teams and industrial operators that rely on repeat machined components.

Use this checklist when lead times stretch, inspection problems repeat, drawings are unclear, or one machining supplier is carrying too much supply risk.

Start a component supply review | Review second-source readiness

Document use: public website download. This is a planning tool, not a design approval, quotation or manufacturing instruction.

When to use it

Machined component supply usually fails in stages. The warning signs appear before the shortage: longer lead times, patchy communication, old drawings, missed inspection detail, supplier capacity pressure and reactive ordering. The risk is higher when the same supplier controls every repeat part in a family.

This checklist gives procurement, maintenance and engineering teams a structured way to identify early supply risk before the part becomes urgent.

Best fit

Repeat machined components used on industrial machinery.

Critical spares, shutdown parts, pump parts, shafts, bushes, housings, brackets, rollers, pulleys and adaptor components.

Parts with drawing, material, finish, inspection or revision-control requirements.

Parts where a delay, fit issue or poor inspection record can affect production, service or maintenance timing.

Not suitable for

Commodity bought-in items where the part is not machined to drawing.

Isolated one-off work with no future requirement.

Design approval decisions that require the original equipment owner or engineer of record.

Regulated pressure, safety or certified parts where compliance responsibility has not been defined.

How to rate each warning sign

Score	Status	Meaning	Action
0	Clear	No current issue.	Keep normal review cadence.
1	Watch	Minor weakness or unclear information.	Clarify records and monitor next order.
2	Active risk	Repeated weakness, rising delay or known gap.	Start supplier review and prepare second-source data.
3	Urgent risk	Immediate risk to production, shutdown, service or customer supply.	Escalate. Identify drawings, materials, inspection needs and first-batch candidate.

Add the category totals on the final page. A high score in one category may be enough to act, even if the total score is moderate.

1. Delivery and lead-time signals

Have lead times stretched, due dates shifted or the supplier has started missing basic order discipline?

Warning sign	0	1	2	3
Quoted lead times have increased over the last three orders.	[ ]	[ ]	[ ]	[ ]
Promised dates are revised after the purchase order is placed.	[ ]	[ ]	[ ]	[ ]
The supplier misses delivery dates without early notice.	[ ]	[ ]	[ ]	[ ]
Expediting becomes normal for parts that should be planned.	[ ]	[ ]	[ ]	[ ]
Shutdown or service parts are not acknowledged quickly enough.	[ ]	[ ]	[ ]	[ ]
The supplier cannot confirm material availability or external-process timing.	[ ]	[ ]	[ ]	[ ]

Category total: _____ Highest single risk score: _____ Notes: _____

2. Quality and inspection signals

Has fit, finish, inspection evidence or repeatability started to drift?

Warning sign	0	1	2	3
The same quality issue has appeared on more than one batch.	[ ]	[ ]	[ ]	[ ]
Inspection reports are missing, late or not matched to the drawing features.	[ ]	[ ]	[ ]	[ ]
Critical dimensions are not clearly reported.	[ ]	[ ]	[ ]	[ ]
Parts arrive with fit issues that should have been detected before dispatch.	[ ]	[ ]	[ ]	[ ]
Material certificates, coating certificates or heat-treatment records are hard to obtain.	[ ]	[ ]	[ ]	[ ]
The supplier treats inspection as an afterthought rather than part of the process.	[ ]	[ ]	[ ]	[ ]

Category total: _____ Highest single risk score: _____ Notes: _____

3. Drawing, material and revision-control signals

Is part data is unclear, old, split across people or held mainly by the supplier?

Warning sign	0	1	2	3
The current drawing revision is unclear or not controlled.	[ ]	[ ]	[ ]	[ ]
Material grade, finish, hardness or coating is not fully specified.	[ ]	[ ]	[ ]	[ ]
Tribal knowledge is being used instead of controlled drawings and inspection notes.	[ ]	[ ]	[ ]	[ ]
Old drawings do not match the part now being supplied.	[ ]	[ ]	[ ]	[ ]
The supplier has made undocumented process changes.	[ ]	[ ]	[ ]	[ ]
Only one supplier understands the part history, fixtures, inspection method or external operations.	[ ]	[ ]	[ ]	[ ]

Category total: _____ Highest single risk score: _____ Notes: _____

4. Communication and commercial signals

Is the supplier relationship is becoming harder to manage?

Warning sign	0	1	2	3
Responses are slower than they were six months ago.	[ ]	[ ]	[ ]	[ ]
Technical questions are not answered by the person who understands the job.	[ ]	[ ]	[ ]	[ ]
Price changes appear without explanation of material, batch or process drivers.	[ ]	[ ]	[ ]	[ ]
The supplier is reluctant to quote repeat work or small planned batches.	[ ]	[ ]	[ ]	[ ]
Order acknowledgements, delivery updates or NCR responses need repeated follow-up.	[ ]	[ ]	[ ]	[ ]
The supplier appears to be prioritising other customers or different work types.	[ ]	[ ]	[ ]	[ ]

Category total: _____ Highest single risk score: _____ Notes: _____

5. Capacity and continuity signals

Is supplier capacity, ownership, labour, equipment or process knowledge weakening?

Warning sign	0	1	2	3
The supplier has lost key machinists, programmers, estimators or quality staff.	[ ]	[ ]	[ ]	[ ]
A machine, cell, fixture or subcontract process has become a bottleneck.	[ ]	[ ]	[ ]	[ ]
The supplier cannot confirm future capacity for repeat parts.	[ ]	[ ]	[ ]	[ ]
The supplier is reducing appetite for older spares, small batches or difficult work.	[ ]	[ ]	[ ]	[ ]
The supplier depends on one person for quoting, programming, inspection or dispatch control.	[ ]	[ ]	[ ]	[ ]
Ownership, management, location or financial pressure may affect continuity of supply.	[ ]	[ ]	[ ]	[ ]

Category total: _____ Highest single risk score: _____ Notes: _____

6. Internal ordering and stock signals

Is the customer's organisation creating risk through late ordering, poor records or weak stock control?

Warning sign	0	1	2	3
Repeat parts are still ordered as emergencies.	[ ]	[ ]	[ ]	[ ]
Minimum stock, reorder point and annual demand are not defined.	[ ]	[ ]	[ ]	[ ]
Maintenance knows the part is critical but procurement sees only a one-off purchase.	[ ]	[ ]	[ ]	[ ]
Drawings, photos, inspection records and order history are not stored in one place.	[ ]	[ ]	[ ]	[ ]
Parts are reviewed only after a breakdown, shutdown risk or customer delay appears.	[ ]	[ ]	[ ]	[ ]
No one owns the part family across engineering, maintenance, procurement and stores.	[ ]	[ ]	[ ]	[ ]
Drawings are complete, up to date and well understood internally	[ ]	[ ]	[ ]	[ ]

Category total: _____ Highest single risk score: _____ Notes: _____

Action thresholds

Result	What it usually means	Recommended next step
0 to 12	Supply risk appears low, but records still need review before shutdowns or repeat orders.	Keep drawings, material notes and inspection records current.
13 to 24	Several weaknesses are present. The current supplier may still be performing, but the part data may not be ready for backup supply.	Prepare a second-source file and review drawing health.
25 to 39	Active risk. Lead time, quality, data or capacity signals are likely affecting the part family.	Start a component supply review and select first-batch candidates.
40+	High exposure. A supplier or part family may already be a production, maintenance or service risk.	Escalate. Collect drawings, photos, material notes, annual demand and inspection requirements.

Information to collect before supplier review

Area	Required notes
Part and drawing	Part number, drawing number, revision, drawing owner, CAD file if available.
Material and finish	Material grade, certification needs, heat treatment, coating, plating, anodising or other external operations.
Inspection	Critical features, tolerances, fits, surface finish, inspection reports and gauges used.
Demand	Order history, annual demand, batch size, reorder pattern, shutdown timing and current stock.
Current supplier situation	Lead time trend, open orders, quality issues, communication history and known capacity issues.
Consequence of delay	Machine, line, asset or customer impact if the part is late or wrong.

Next step

If the same part family shows supplier, drawing, inspection and stock risk, don't wait for the next urgent order. Move the best candidate part into review before production timing becomes compressed.

Start a component supply review | Download the second-source supplier checklist | Use the RFQ readiness guide

Related ALE resources

Second-source supplier checklist - Use this when one supplier controls too much repeat machined work.

RFQ readiness guide - Use this before sending drawings, materials and inspection notes for review.

Drawing health checklist - Use this when old revisions, missing tolerances or unclear material notes are slowing supply.

Controlled first batch guide - Use this before moving a new part or part family into repeat supply.

Inspection requirement guide - Use this when inspection evidence, certificates or controlled features need to be defined.

Customer critical parts register - Use this after approved work is ready to move into repeat control.