RESOURCE DOCUMENT

Second-source readiness clinic

A practical guide for qualifying a backup machining supplier before a critical component becomes urgent.

For OEMs, machinery builders, maintenance teams, procurement teams and industrial operators that depend on repeat machined components.

WHY qualify a second source?

How will your business be impacted by a primary source supply failure? What percentage of your revenue would be impacted if that supplier was impacted by a 3-4 month supply problem?

A second source is not a spare supplier name in a spreadsheet. It is a fully qualified back-up or partial supplier, created using controlled path from part selection, drawing review and technical fit to first batch approval and repeat supply.

Start a component supply review

Use this document to decide which machined components should be reviewed first, what information is required, and whether the part is suitable for ALE to assess.

Current version: website resource draft | External use

1. When a second-source review is needed

Most second-source work starts too late. By the time a supplier has failed, the buyer is left with poor choices: incomplete drawings, no material record, unclear inspection requirements, no production slot and pressure on lead time.

Use the clinic when one or more of these conditions is present:

Signal	What it means
Single supplier exposure	One machining supplier controls a part or part family with no qualified backup.
Longer lead times	Delivery dates have started moving, or the supplier will not commit to reliable timing.
Quality drift	Parts still arrive, but rework, fit issues or inspection concerns are increasing.
Unclear drawings	Current drawings, revisions, materials or inspection points are not well controlled.
Repeat demand	The part is ordered more than once and should not be treated as a fresh enquiry each time.
Downtime exposure	A late or incorrect part would stop equipment, delay maintenance or affect production.
Supplier change risk	The existing supplier has capacity, ownership, staffing, pricing or communication concerns.

Clinic rule

Do not start by sending every drawing. Start by selecting the parts that carry the most supply risk.

2. What the clinic is built to do

The clinic is a structured review. It is not a rush quote desk, and it is not a general engineering advisory session.

Clinic output	Purpose
Candidate part list	Identify which parts should be reviewed first.
Readiness rating	Rate drawing control, material clarity, inspection clarity and repeat demand.
Risk summary	Separate urgent, high-risk and watch-list components.
First batch recommendation	Select the part or part family most suitable for a controlled first batch.
Next action	Confirm whether to proceed to drawing review, component supply review or second-source first batch.

What ALE needs from buyer

Information	Minimum requirement
Part name and function	What the part does, where it is used and what happens if it fails.
Drawing or file	Current drawing, sketch, 3D file, STEP file or CAD file, photo or marked-up existing part information.
Revision status	Current revision, last known change and whether old drawings are still being used.
Material and finish	Material grade, heat treatment, coating, plating, anodising or other finishing requirements.
Demand pattern	Annual usage, batch size, minimum spare quantity and expected timing.
Inspection requirement	Critical features, certificates, reports, FAIR, CMM or customer inspection expectations.
Current supplier status	Lead time, quality issues, communication concerns and whether supply is already at risk.

3. Clinic agenda

Use this agenda for a 30 to 45 minute session. Keep the discussion tied to actual parts, drawings and production risk.

Step	Agenda item	Decision made
1	Confirm machinery or equipment context	Part is industrial, functional and worth reviewing.
2	Identify current supply risk	Supplier risk is real enough to justify second-source planning.
3	Review drawing and revision state	Drawing is suitable, incomplete or needs clean-up before RFQ.
4	Check material, finish and inspection requirements	Technical inputs are clear enough for review or need clarification.
5	Review repeat demand and timing	Part has repeat value, backup supply value or urgent readiness value.
6	Select first candidate part or family	One suitable part or part family moves to the next stage.
7	Agree next step	Drawing review, component supply review, first batch or no fit.

Clinic outcomes

Outcome	What happens next
Strong fit	Proceed to component supply review or first batch readiness review.
Possible fit	Clarify drawing, material, inspection or batch information first.
Poor fit	Do not proceed unless part data, timing or commercial fit changes.
Not enough information	Hold the review until drawing, material and inspection records are available.

Next step

Where there is a suitable part, the next step is controlled review, not an open-ended quote request.

Start a component supply review

4. Part candidate worksheet

Use this worksheet to select the first parts for second-source review. Start with 5 to 10 parts. Do not include commodity parts unless they sit inside a larger controlled component package.

No.	Part / drawing	Equipment	Current supplier issue	Annual use	Risk level	Next action
1						
2						
3						
4						
5						
6						
7						
8						

Risk level: Low, Moderate, High, Critical. Next action: no action, drawing review, component supply review, first batch review, add to critical parts register.

Good second-source candidates

Good candidate	Poor candidate
Repeat component with clear demand	One-off part with no future requirement
Part with real downtime or production exposure	Commodity item with easy alternate supply
Drawing exists or can be checked	No drawing, no sample, no useful part information
Material and finish can be specified	Unknown material or uncontrolled reverse-engineering requirement
Inspection points can be defined	Customer cannot state what features matter

5. Second-source readiness score

Score each candidate part before asking a supplier to quote. Low scores usually mean the part needs drawing review before it is ready for second-source manufacture.

Category	0	1	2	Score
Drawing control	No current drawing	Drawing exists but revision unclear	Current drawing and revision known	
Material and finish	Unknown or assumed	Partly known	Specified and controlled	
Inspection clarity	No critical features known	Some inspection needs known	Fit-critical features defined	
Demand profile	No repeat need	Likely repeat need	Annual or periodic demand known	
Supplier risk	Low risk	Warning signs present	Single-source or active risk	
Downtime impact	Low impact	Maintenance inconvenience	Stops equipment or production	
Technical fit	Outside ALE fit	Possible fit	Strong fit for ALE capability	

Suggested interpretation: 0 to 5, hold or clean up data. 6 to 10, possible clinic candidate. 11 to 14, strong second-source review candidate.

Do not over-score weak data

A part with no current drawing, unknown material and unclear inspection requirements should not be treated as ready simply because it is urgent.

6. From clinic to first batch

A second source is only useful if the first batch proves the part properly. The clinic should end with a clear decision about what moves forward and what stays on hold.

Stage	Buyer action	ALE action	Output
1. Supply review	Submit selected part information and current risk	Review fit, drawing readiness, demand and timing	Fit rating and next step
2. Drawing and inspection review	Provide drawings, material, finish and critical feature notes	Check manufacturing and inspection requirements	Clarification list or RFQ basis
3. Controlled first batch	Approve first batch scope and inspection expectation	Machine, inspect and record the approved process	First batch for customer approval
4. Approval	Confirm fit, installation and acceptance	Capture notes for repeat manufacture	Approved production record
5. Repeat supply planning	Share reorder timing and likely usage	Move suitable parts into planning tools	Planned supply path

What should not move forward

Hold or decline when	Reason
The part has no repeat demand and no supply risk	It will consume review time without building supply control.
The drawing is uncontrolled and cannot be checked	Manufacture would be guesswork.
Material or finishing requirements are unknown	The first batch cannot be assessed properly.
Inspection expectations are not defined	Acceptance risk stays unresolved.
Timing is already impossible	A second-source pathway cannot replace proper planning.

7. Buyer checklist before the clinic

Send this list to the customer internal team before booking the review. The clinic will run cleaner if engineering, maintenance and procurement bring the same part information.

[ ] Part name, part number and drawing number are known.

[ ] Current drawing revision has been checked.

[ ] The part function and equipment location are understood.

[ ] Current supplier, lead time and known problems are recorded.

[ ] Annual or expected demand has been estimated.

[ ] Known material and finishing requirements are available.

[ ] Inspection or fit-critical features have been marked or listed.

[ ] Urgent, high-risk and planned review parts have been separated.

[ ] Internal owner is nominated for engineering, procurement and maintenance follow-up.

Links and next steps

Start a component supply review

Download the second-source supplier checklist

Check RFQ readiness

Check drawing health

Read the controlled first batch guide

Review inspection requirements

Capacity note

ALE reviews new work for technical fit, production fit, drawing control, inspection requirements, timing and repeat demand. Not every enquiry will be a fit.

Submit selected parts for review