

Supplier approval: qualifying suppliers for series supply

Supplier approval is the formal process by which a company qualifies and approves a supplier for the supply of defined materials, components or services. It links strategic sourcing and operational procurement with quality assurance and is a prerequisite for series orders. A structured supplier approval significantly reduces delivery and quality risks before they arise in the value chain.

Key facts

- Supplier approval typically includes review steps such as quality capability, capacity, financial stability and compliance.
- It is a milestone in the source-to-contract process and defines which parts and lot sizes a supplier may supply.
- In practice, the process is often divided into sample approval, first article inspection and series approval.
- Key criteria include, among others, On-Time In Full (OTIF), scrap rates and responsiveness to complaints.
- Approval is usually time-limited or tied to conditions and is reviewed through regular supplier evaluations.
- Without documented approval, procurement organisations bear organisational and partly legal liability for quality problems.

Definition: supplier approval

Supplier approval is the formal outcome of a review and qualification process after which a supplier is enabled for defined articles, material groups or services. It is not a one-off act but a state that is tied to conditions and monitored.

Distinction from other approvals

Supplier approval must be distinguished from part approval (first article inspection, sample approval) and material approval in goods receipt. A supplier may be generally approved while individual parts do not yet have series approval. Conversely, an approved part can only be procured from approved suppliers. In practice and in the standards environment, the terms supplier qualification, Supplier Qualification or Approved Vendor List (AVL) are also used.

Legal and contractual classification

Approval itself does not usually create an entitlement to order placement; it merely opens up procurement within the framework of existing framework agreements. Contract clauses such as product liability clauses, confidentiality agreements and audit rights are often negotiated before or during approval. How far audit and documentation obligations extend depends on the industry and risk and should be legally reviewed on a case-by-case basis.

Methods and approach of supplier approval

The process typically follows a multi-stage scheme: potential suppliers are identified, evaluated, audited and finally conditionally or fully approved. The scope of the review is based on risk class, depth of value creation and the criticality of the material.

Preliminary review and supplier shortlist

The starting point is systematic market monitoring and market segmentation in procurement, from which candidates can be derived. From the long list, a supplier shortlist is created using criteria such as certifications, references, capacity and geographic location. Financial indicators and initial compliance checks are incorporated at this stage already, in order to identify adverse developments early. For standard parts, document-based qualification is often sufficient; for critical components, an on-site audit.

Audit, sample phase and safe launch

Quality capability is at the core: after a process audit and sample delivery, first article inspection follows (for example according to PPAP logic). Before ramping up to series volume, suppliers often prove themselves in a safe launch phase with increased inspection requirements, reduced lot formation and intensive support. Only after stable performance is full series approval granted. Lot sizes in this phase are deliberately kept small to limit risks.

Integration into procurement processes

After approval, the supplier is recorded in master data, Material Requirements Planning (MRP) and the material group hierarchy. Only approved suppliers appear in purchase requisitions and awards, which controls the process automatically. Framework agreements, volume tiers and packaging sizes as well as questions about Minimum Order Quantity (MOQ) are typically clarified in negotiation rounds parallel to qualification.

Key KPIs for controlling supplier approval

KPIs make it possible to assess whether the approval process works quickly, consistently and effectively. They support both operational steering and reporting to management.

Performance metrics of approved suppliers

Key metrics are On-Time In Full (OTIF), delivery reliability, scrap and complaint rates as well as response times to objections. These values feed into the supplier rating and determine whether approval is maintained, upgraded or downgraded. A schedule deviation analysis helps to separate structural delivery weaknesses from isolated cases.

Process metrics of the approval itself

On the process side, lead times from enquiry to approval, audit density per risk class and the proportion of conditionally approved suppliers are meaningful indicators. The costs per qualification and the rate of aborted qualifications also provide insight into efficiency and selection quality. These values feed the savings pipeline, as new suppliers often also unlock savings potential.

Risks and controls in supplier approval

Without discipline in the approval process, typical damage occurs: quality problems in series production,

supply failures, compliance violations and uncontrolled purchasing outside approved sources (maverick buying). Controls must therefore work preventively and continuously.

Typical risk areas

Common risks are insufficient capacity reserves, financial instability, lacking material compliance (e.g. regarding raw material and limit value requirements) and dependencies in the supply chain, for example due to the Supply Chain Due Diligence Act. Price risks such as savings leakage through subsequent surcharges also arise more frequently with insufficiently qualified suppliers. A risk matrix ranks materials and suppliers by probability of failure and damage amount, thereby determining the scope of the review.

Continuous monitoring and requalification

Approval must be reviewed continuously: through regular supplier evaluations, re-audits upon expiry or triggered by events, deadline monitoring for certificates and change notifications for processes or part numbers. A clear escalation logic is important: in the event of performance deterioration, the usual sequence is warning stage, intensified inspections, conditional approval and finally blocking. Blockings must be enforced technically in the system, for example through order blocks in the ERP.

Current developments: digitalisation, sustainability and resilience

The approval process is changing due to digitalisation, tightened sustainability requirements and the debate on supply chain security. Companies are automating reviews and integrating sustainability criteria into qualification.

Digital approval processes

Supplier portals, standardised self-disclosures and automated certificate monitoring shorten lead times and reduce error rates. Data from quality management and goods receipt is increasingly fed back into the supplier rating automatically. This reduces manual effort and makes approval decisions traceable and audit-proof.

Compliance, sustainability and supply chain law

Sustainability and due diligence requirements, including in the context of the Supply Chain Due Diligence Act, extend the review catalogue to human rights, environmental standards and risks in upstream stages of the supply chain. Material compliance requirements (e.g. banned substances in components) are also often queried already during approval. Which due diligence obligations apply in individual cases depends on legal form, size and field of activity and should be professionally reviewed.

Resilience and dual sourcing

Experiences with supply shortages have strengthened the importance of second sources. Many companies deliberately qualify several suppliers per critical part, whereby the second source may only be approved for defined shares. This increases effort in qualification but reduces the risk of failure and strengthens the negotiating position.

Typical metrics

On-Time In Full (OTIF): typically > 95%

delivery reliability as a core criterion for maintaining approval

Scrap rate: usually < 500 ppm

strictness varies depending on industry and part criticality

Approval process lead time: often 8–20 weeks

from enquiry to series approval, depending on risk class

Proportion of conditionally approved suppliers: typically < 10%

high proportions indicate process weaknesses

Practical example

A medium-sized mechanical engineering company has so far sourced a critical cast part from a single supplier. Following repeated schedule deviations, a second source is to be established. Procurement initiates market segmentation in procurement, derives five candidates from market monitoring and creates a supplier shortlist of three companies.

- On-site audits at two candidates, reviewing process capability, capacity reserves and compliance evidence
- Sample phase with first article inspection and safe launch across several small lots with reduced inspection privileges
- Approval initially for 20 percent of the volume, parallel inclusion in MRP master data and material group hierarchy
- Inclusion in supplier rating with OTIF and complaint metrics, plus requalification subject to inspection after twelve months

Conclusion

Supplier approval is the central control gate between sourcing and operational procurement. It determines from whom a company procures goods and services and ties quality, capacity and compliance to documented criteria. Those who build the process in stages and on a risk-based basis avoid costly series problems and maverick buying. Continuous monitoring through KPIs and requalification is essential, as approval is not a permanent state. In interaction with supplier rating, risk matrix and digital tools, supplier approval thus becomes an effective instrument for supply security and cost efficiency.

Frequently asked questions

What is supplier approval?

Supplier approval is the formal process by which a company qualifies a supplier for defined materials or services and authorises them for supply. It typically involves reviewing quality, capacity, financial stability and compliance. Once approved, the supplier can be considered in ordering and planning processes.

What criteria are relevant for supplier approval?

Typical criteria include quality capability (certifications, process audits, first article inspection), delivery reliability, capacity, financial stability as well as compliance and sustainability requirements. Depending on the risk class of the material, additional review steps apply. The criteria are usually documented in an approval catalogue.

How does the supplier approval process work?

In practice, the process is divided into preliminary review and supplier shortlist, audit and sample phase, as well as first article inspection and series approval. Before the series ramp-up, a safe launch phase with intensified controls often follows. After approval, the supplier is integrated into ERP and planning systems.

What is the difference between supplier approval and first article inspection?

First article inspection concerns the approval of a specific part, while supplier approval concerns the authorisation of the supplier as a source. The two steps complement each other: a part can only run in series if both the supplier and the part are approved. Only together do they form the prerequisite for regular procurement.

How long does a supplier approval remain valid?

Approvals are often time-limited, for example for one to three years, or tied to conditions. On expiry or in the event of performance deterioration, requalification takes place through re-audits or updated evidence. Certificates and qualification evidence should be monitored continuously.

What happens if supplier approval is breached?

Purchases outside approved sources are considered maverick buying and undermine quality and compliance controls. In practice, companies respond with order blocks in the system, escalation processes and training for the specialist departments. In the event of quality problems, organisational consequences and liability issues, up to and including product liability clauses, may become relevant.