

Delivery capability: A supplier's ability to deliver agreed quantities on time

Delivery capability describes a supplier's ability to deliver the agreed products or services in the required quantity and quality on the agreed date. It is one of the central evaluation criteria in supplier selection and operational supplier management. For technical buyers in the B2B sector, delivery capability decisively determines security of supply, inventory costs and their own ability to meet deadlines towards end customers.

Key facts

- Delivery capability covers quantity, delivery date and quality aspects of supply and is therefore more than mere delivery reliability.
- It is typically measured using key figures such as delivery reliability, OTIF (On Time In Full) and parts per million (PPM).
- Sustainably high delivery capability requires capacity reserves, process capability in the supplier's own plant and stably managed upstream suppliers.
- Weak points often only become visible at volume peaks – which is why stress tests and capacity enquiries form part of supplier evaluation.
- Digital solutions for supply chain visibility increase transparency but do not replace the structural assessment of delivery capability.
- Contractually, delivery capability can be secured through off-take quantities, capacity commitments and escalation levels – legal details should always be reviewed on a case-by-case basis.

Definition: delivery capability

Delivery capability is the demonstrable ability of a provider to make available the quantities required by the customer in a defined quality and on the agreed date. It is therefore a key figure in supplier management and a central result of supplier evaluation.

Distinction from delivery reliability

Delivery reliability measures retrospectively whether individual orders were delivered as ordered – for example as an OTIF rate. Delivery capability is the broader, upstream concept: it asks about the structural capacity of a system, i.e. machine capacity, personnel, material access and logistics. A supplier can have historically delivered reliably and still become unable to deliver if a major order exceeds its capacity. Buyers should therefore combine both perspectives: actual data on delivery reliability and prospective capacity analyses.

Levels of delivery capability

Delivery capability can be viewed on three levels. First, the production level: process capability, plant availability and depth of manufacture. Second, the procurement level: the reliability of upstream suppliers, single-source risks and material availability. Third, the logistics level: warehouse capacity,

shipping structures and competent export handling in international business, for example with Incoterms such as CIF or dangerous goods regulations under ADR. Anyone assessing delivery capability must take all three levels into account, otherwise blind spots arise.

Methods and approach for assessing delivery capability

The assessment of delivery capability takes place in practice in several stages: from the initial enquiry through qualification to ongoing operations. It is important that buyers do not simply accept statements from the sales team but verify the actual capabilities.

Capacity enquiry and audit

As part of supplier selection, capacity enquiries, shop floor walkthroughs and system audits are standard. Buyers ask about machine utilisation, shift models, order backlog and planned investments. An audit additionally examines planning processes, materials management and contingency concepts. It is also sensible to ask specifically about existing capacity reserves: in practice, reserve ratios of around 10 to 20 per cent are considered a healthy sign; providers running at 100 per cent utilisation carry a high risk of missed deadlines.

Stress test with realistic scenarios

Static capacity statements alone are rarely sufficient. Stress tests are better: the buyer presents a realistic volume scenario – for example the planned annual quantity plus a peak month – and asks the supplier to explain how it will handle it. For prototype procurement or new product launches, it is additionally examined whether the provider can manage volume leaps from sample production to series production. A structured sourcing pipeline helps to carry out such checks in a documented and comparable manner across several candidates.

Continuously monitoring delivery capability

Even after the award, delivery capability remains an ongoing topic. Regular supplier evaluations, capacity reconciliation for framework agreements and joint volume planning – ideally based on forecasts – keep the facts up to date. For critical components with single-source management, contingency plans and alternative sources of supply in the sourcing strategy are part of the precautionary measures.

Key KPIs for measuring delivery capability

Delivery capability can be operationalised. The following key figures have established themselves as the practical standard; their concrete target values depend on the industry and product and must always be assessed in context.

Delivery reliability and OTIF

Delivery reliability measures the proportion of punctual deliveries; OTIF combines timeliness and complete quantity. Typical target values in series production are frequently above 95 to 98 per cent. A clean definition is important: does the confirmed date count or the original date? Does the order line count or the parts quantity? Without uniform assessment criteria, comparisons between suppliers are of little value. Detail deviations should be clarified through a structured exception management process.

Quality and process key figures

Delivery capability does not end at the factory gate: parts that have to be delivered later or reworked for

complaint are de facto not capable of delivery. The parts per million (PPM) key figure represents the defect rate per one million delivered parts; process capability (Cp/Cpk values) shows whether manufacturing processes are permanently stable. Both figures typically feed into the supplier rating. In addition, incoming inspection and quality assurance provide data that has a retroactive effect on the assessment.

Inventory and response key figures

In addition, replenishment lead time, forecast accuracy and the inventory coverage on the supplier side are relevant. Anyone working with min-max control should check whether the supplier can genuinely support this replenishment logic. The response time to urgent requirements and the performance of complaint management also say a great deal about actual delivery capability.

Risks and controls relating to delivery capability

Delivery failures rarely arise out of nowhere. Weaknesses usually announce themselves early – they are simply not monitored systematically. Risk management and clear contractual agreements are the antidotes.

Typical risk patterns

Common causes of declining delivery capability are overbooking of a supplier's own machine park, unstable upstream supply chains, labour shortages, quality problems requiring rework and a lack of material buffers. Particularly critical: when a supplier serves several customers with comparable volumes, internal prioritisation decides who is supplied first in a bottleneck. Buyers should therefore ask what share their volume represents of the total load and which customer relationship fits with that.

Contractual safeguarding

Contractually, capacity commitments, staggered off-take quantities and obligations to act in the event of disruptions can be agreed – for example mandatory early warning of expected delays. Escalation levels up to the formation of a joint emergency team of buyer and supplier provide structure in a crisis. Whether penalties or service-level agreements are additionally sensible and legally tenable depends on the individual case and should be reviewed legally in advance. The provisions relating to preference calculation and statements of origin also form part of the reliability of the supply chain for international sourcing.

Digital transparency and early-warning indicators

Supply chain visibility platforms provide data on order status, inventories and delays in real time and help to identify bottlenecks earlier. In addition, simple early-warning indicators are often sufficient: longer response times, rising price deviations in the price deviation workflow, more frequent partial deliveries and changed invoicing behaviour. Such signals belong in regular supplier meetings, before early warnings turn into delivery failures.

Current developments: delivery capability in disruptive markets

The requirements for delivery capability have tightened in recent years. Supply chain disruptions, raw material shortages and geopolitical risks have elevated the topic from an operational detail to a management issue.

Resilience instead of pure efficiency

Many industrial companies have revised their sourcing strategy: more dual sourcing, regional sources of supply and larger strategic buffers in place of pure just-in-time optimisation. For the assessment of delivery capability, this means that the resilience of the provider is also examined – for example alternative material sources on its side and tested outage concepts. Functioning obsolescence management for long-life products also forms part of this, so that spare parts are not missing when components are phased out.

Regulatory influences

Delivery capability is increasingly influenced by regulation. Customs and documentation obligations, for example for imports of affected goods under CBAM (the carbon border adjustment mechanism), can slow customs and delivery processes if data is not available at an early stage. Export controls likewise affect export handling. Buyers should factor these considerations into scheduling and into the assessment of international providers; the specific obligations depend on the goods, origin and trade route and must be reviewed on a case-by-case basis.

Digitalisation of capacity communication

Increasingly, manufacturers and suppliers exchange capacity data and forecasts digitally – from simple supplier portals to integrated planning systems. This shortens time-to-market for new product launches and makes bottlenecks more visible. The key point remains: digital visibility is a tool, not a substitute for substance. Even the most transparent dashboard cannot show capacity that does not physically exist.

Typical metrics

Delivery reliability (On Time): > 95 %

Typical guideline value in series production; agree the definition of the reference date.

OTIF (On Time In Full): > 95 %

Combines adherence to dates and complete quantities; stricter than pure delivery reliability.

PPM defect rate: < 500 PPM

Varies considerably by industry; automotive frequently requires significantly lower values.

Supplier capacity reserve: 10–20 %

Utilisation close to 100 % is a warning sign of future bottlenecks.

Response time to urgent requirements: < 48 hours

Time until a binding statement on feasibility and delivery date for short-notice additional demand.

Practical example

A medium-sized mechanical engineering company sourced central sheet steel components from a single supplier that had historically been reliable. When the manufacturer increased its volume by around 40 per cent due to a major order, the OTIF rate fell significantly within a single quarter; the supplier had simultaneously won another major customer and had not expanded its capacity. The buyer responded with a structured package of measures and stabilised supply within two months.

- Joint capacity analysis and a binding handover of quantity forecasts to the supplier on a rolling basis.
- Establishment of a second qualified source of supply for the critical items, supported by targeted competitive tendering procedures.

- Introduction of a weekly bottleneck meeting with defined escalation levels instead of ad-hoc reactions in the event of disruptions.
- Inclusion of OTIF and PPM figures with agreed assessment criteria in the regular supplier rating.

Conclusion

Delivery capability is far more than a supplier key figure. It reflects whether a provider has the capacity, processes and upstream supply chain to deliver reliably even under load. Buyers are well advised to assess it in a structured manner: during selection through audits and stress tests, in operations through KPIs such as OTIF and PPM, and for risks through early-warning indicators and contingency plans. Anyone who systematically evaluates delivery capability and safeguards it both contractually and operationally noticeably reduces supply risks and strengthens their own ability to meet deadlines towards customers. In an environment of disrupted supply chains, this is a genuine competitive advantage.

Frequently asked questions

What does delivery capability mean in procurement?

Delivery capability refers to a supplier's ability to deliver agreed quantities in the defined quality and on the correct date. It encompasses production capacity, material availability, logistics and process stability. In procurement, it is a central criterion in supplier evaluation and security of supply.

How do you measure delivery capability?

In practice, key figures such as delivery reliability, OTIF (On Time In Full), PPM defect rates and response times to urgent requirements are used. In addition, audit results, process capability figures and capacity enquiries feed into the assessment. It is important to have a uniform definition of the measurement metrics so that suppliers are comparable.

What is the difference between delivery capability and delivery reliability?

Delivery reliability measures retrospectively whether agreed dates and quantities were met. Delivery capability is the broader concept and asks about the structural capacity of a supplier, including reserves and the upstream supply chain. A reliable supplier can still become unable to deliver if its system reaches capacity limits.

How do I assess the delivery capability of a new supplier?

A proven approach is a combination of capacity enquiries, plant audits and stress tests with realistic volume scenarios. Machine utilisation, shift models, order backlog, upstream suppliers and contingency concepts are examined. It is also helpful to ask about existing capacity reserves and the planned share of your own volume in total utilisation.

How can I secure delivery capability contractually?

Typical instruments include capacity commitments, staggered off-take quantities, mandatory early-warning obligations in the event of disruptions and defined escalation levels, up to and including joint crisis teams. Service-level agreements with measurable targets are also common. Whether penalties are legally permissible and sensible depends on the individual case and should be reviewed in advance.

What risks jeopardise delivery capability?

Common causes are overbooking of a supplier's own capacity, unstable upstream suppliers, labour shortages, quality problems and a lack of material buffers. New customers with competing large volumes or regulatory hurdles in international sourcing can also impair delivery capability. Systematic supplier evaluation and early-warning indicators help to identify risks at an early stage.