

Demurrage: cost control in container and storage delays

Demurrage refers to charges incurred when containers or means of transport exceed agreed standing times and therefore remain tied up longer than permitted with the shipowner, at the terminal or with the consignee. For industrial buyers, Demurrage costs are a relevant component of logistics costs that can rise quickly in the event of supply chain disruptions. Those who know the contractual terms, free times and responsibilities can avoid these costs or negotiate them strategically.

Key facts

- Demurrage is a delay charge for exceeding standing times of containers, wagons or lorries within or after the agreed free time.
- It must be distinguished from Detention (use of the container at the consignee) and Storage (warehousing charges at the terminal).
- Typically graduated rates: the daily rate increases with each day of delay.
- Common causes are customs delays, documentation errors, capacity bottlenecks at the unloading point or a lack of advance planning.
- In procurement, Demurrage risks can be reduced through clear responsibilities in the Incoterm, framework supply agreements and contingency processes.
- Demurrage costs belong systematically in the logistics cost view and therefore also in spend analytics.

Definition: Demurrage

Demurrage is a compensation charge demanded when a means of transport or container exceeds the agreed time for loading or unloading or the free time at the terminal. It compensates for the fact that the carrier must forgo its equipment or capacity. In sea freight, Demurrage is the most commonly used term.

Distinction from Detention and Storage

In practice, three types of charges are frequently confused. Demurrage usually relates to the time a container stands at the terminal beyond the permitted free time. Detention applies when the consignee uses the container for too long after taking delivery, at the plant or warehouse, before returning it empty. Storage is the terminal's warehousing charge for goods or containers; it can be incurred in parallel with Demurrage.

Legal classification

The basis for Demurrage claims arises from carriage contracts, liner terms and tariffs of transport companies as well as from Incoterms in the supply chain. Who bears the transport cost sandwich, i.e. the costs of the delay, results from the agreed place of delivery and the transfer of risk. Detailed questions, such as limitation periods or liability caps, must always be examined contractually on a

case-by-case basis.

Methods and approach for avoiding Demurrage

Demurrage rarely arises intentionally, but rather through planning, communication or documentation errors. A structured approach across the entire procurement logistics is therefore more effective than downstream negotiations about charges.

Regulating responsibilities in the contract

The framework supply agreement and delivery conditions should conclusively regulate who is responsible for slot booking, customs clearance, readiness at the unloading point and return of the containers. Typical stumbling blocks are unclear responsibilities when Incoterms change or missing definitions of free time. Rights and obligations in the event of disruptions, such as an agreed procurement emergency team for critical shipments, also belong in the contracts.

Lead time and transport planning

Relevant levers are reliable lead times, early container bookings, clear dock slots and a functioning inbound delivery scheduling. For imports from third countries, customs clearance including the customs broker should be planned in, as customs backlogs are a main trigger for Demurrage. Supplier sanctions screening and document checks before shipment prevent shipments from being stuck at the destination port.

Communication and escalation

In the event of foreseeable delays, a clear escalation logic helps: at the latest two to three working days before the end of free time, extensions, relocations or prioritisations should have been negotiated. A defined contact person on both the buyer's and the freight forwarder's side shortens response times. Dunning processes for outstanding extension confirmations and a documented contingency plan complete the approach.

Key KPIs for controlling Demurrage costs

Without measurement, Demurrage costs remain invisible because they are often incurred decentrally across various freight forwarders and terminals. KPIs create transparency and a basis for negotiation.

KPIs at a glance

Key metrics are Demurrage costs per container or per tonne, the proportion of shipments with free-time overruns and the average overrun duration. In addition, an analysis by root cause, terminal, freight forwarder and destination is worthwhile. Ideally, this data flows into spend analytics and the logistics cost view.

Target values and early indicators

In practice, a Demurrage share of below one per cent of freight costs is considered a good level; higher values indicate structural problems in planning or responsibilities. Early indicators such as the rates of on-time container returns or the number of short-notice extension requests reveal problems before invoices arrive. A three-way match between the bill of lading, event log and invoice secures data quality.

Risks and controls relating to Demurrage

In addition to immediate costs, there are reputational and quality risks: shipments waiting at the terminal may violate temperature limits, miss customs releases or block downstream production starts. Controls minimise these consequences.

Typical risks

Common risks are capacity bottlenecks at the unloading point, incomplete customs or dangerous goods documents, missing material release before shipment as well as confused responsibilities among several intermediaries. Voltage or packaging requirements, for example in the sustainable packaging product group, can also lead to rejections at the terminal if specifications are unclear.

Controls and compliance

Effective controls are checklists for shipping documents, a clean three-way match of the freight cost invoice and a documented invoice clearing of Demurrage line items. For disputed charges, evidence of the actual sequence of events helps. In critical cases, a stop shipment can be initiated to avoid further follow-on costs; contractual rights must be examined carefully in this regard.

Liability and product liability clause

If deadlines are missed due to Demurrage or goods are damaged, the question arises as to who is liable for consequential damage. Product liability clauses and recourse claims in the supplier contract as well as the liability limitations of the carriers determine which costs remain with the buyer. Generic statements are not sufficient here; the specific contractual situation should always be examined on a case-by-case basis.

Current developments: Demurrage in modern procurement

Scarce ship and port capacity, digitalisation and sustainability requirements are changing how Demurrage arises and is managed. Buyers must adapt their processes accordingly.

Digital transparency

Tracking systems and automated event logs make it possible to identify Demurrage risks earlier. In combination with spend analytics, patterns by route, terminal or freight forwarder can be identified. This data source also flows into source-to-contract (S2C) processes by incorporating Demurrage experience into new freight tenders and the competitive bidding process.

Nearshoring and supply chain adaptation

Nearshoring reduces long sea freight routes and thus potential Demurrage exposure, but shifts the risk into other forms such as lorry waiting times at the plant gate. Anyone reorganising the depth of value creation should also assess the number of transport border crossings and customs steps, as each step is a potential Demurrage trigger.

Sustainability and supplier strategy

The sustainable packaging product group and material substitution (ESG) change load profiles and container utilisation, which can influence return times. In the supplier segmentation matrix, Demurrage-prone suppliers and routes should be classified as critical partners so that potential risks are considered in material compliance and open innovation approaches. With open book costing in

freight contracts, Demurrage rates can be shown transparently and negotiated in a targeted manner.

Practical negotiation approaches for Demurrage

Demurrage is negotiable, provided buyers bring data and alternative options. Negotiations are more effective when they are based on the actual root causes.

Free time and tiers

Key negotiation levers are the duration of free time, the tiering logic of daily rates and flat-rate arrangements for regular services. In practice, an extension of free time or a cap per container is often agreed. It is important to anchor the arrangement in the framework supply agreement and the delivery conditions.

Interfaces with risk management

Demurrage is part of supply chain risk management: scenarios such as dockworker strikes, customs reforms or terminal overloads should be reflected in contingency plans and relocation strategies. In addition, buyers check which transport insurances or carrier liabilities cover Demurrage-related consequential damage. Insurance cover and contractual liability must be assessed separately here.

Typical metrics

Demurrage costs per container: €0 (target)

Higher values indicate structural planning or responsibility issues.

Proportion of shipments with free-time overruns: < 5%

In well-organised supply chains, often in the low single digits in practice.

On-time container return: > 98%

Early indicator of detention risks at the consignee.

Demurrage share of freight costs: < 1%

A common benchmark; significantly higher values suggest a root-cause analysis.

Practical example

A medium-sized machinery manufacturer regularly imported castings by sea freight. Due to defective customs documents and short-notice production changes at the receiving plant, Demurrage and Detention costs rose sharply. The procurement department analysed the incidents by root cause and terminal, added clear delivery conditions and established an escalation logic.

- Responsibilities for customs, unloading point and container return conclusively regulated in the framework supply agreement.
- Pre-check of all shipping and customs documents including supplier sanctions screening introduced before shipment.
- Three-way match and invoice clearing set up for freight and Demurrage line items to identify incorrectly invoiced charges.
- Contingency plan with alternative terminals and a defined procurement emergency team created for critical shipments.

Conclusion

Demurrage is far more than an administrative ancillary cost item: it is an early warning indicator of weaknesses in planning, responsibilities and interfaces in procurement logistics. Those who conclusively regulate free times, responsibilities and escalation paths reduce costs and disruptions at the same time. Consistent KPIs, clean documentation and a firm integration into supply chain risk management are essential. As details on liability and contract design depend heavily on the individual case, relevant contractual clauses should always be examined individually.

Frequently asked questions

What does Demurrage mean in logistics?

Demurrage is a charge for exceeding the agreed standing or free time of a container or means of transport, for example at the terminal. It compensates the carrier for the unavailability of its transport equipment. The amount depends on the tariff and the duration of the overrun and typically increases on a daily basis.

What is the difference between Demurrage and Detention?

Demurrage usually relates to containers standing at the terminal beyond the permitted free time. Detention applies when the consignee uses the container for too long after taking delivery before returning it empty. Storage is the separate warehousing charge of the terminal and may be incurred in addition.

Who bears Demurrage costs in procurement?

This depends on the agreed Incoterm and delivery conditions: in principle, the costs are borne by the party within whose area of responsibility the delay arises. In the event of disruptions on the supplier side, contractual recourse claims may exist. If in doubt, the specific contractual and Incoterm situation should be examined on a case-by-case basis.

How can Demurrage costs be avoided?

Key factors are clear responsibilities in the contract, reliable advance planning, complete customs and shipping documents and sufficient capacity at the unloading point. Early communication about foreseeable delays and a defined contingency plan help to avoid charges. Continuous analysis of root causes closes structural gaps.

How high are typical Demurrage rates?

Rates vary considerably by shipping line, route and terminal and are typically calculated on a graduated per-day basis, with daily rates increasing with each additional day of overrun. A blanket figure is therefore not credible. The decisive factors are the published tariffs of the shipping lines and terminal operators as well as contractual agreements.

Does Demurrage belong to freight costs or logistics costs?

Demurrage is usually allocated to logistics costs, although formally it is not pure freight. For tenders and spend analytics, a separate line item is worthwhile, as it makes root-cause drivers visible. In this way, Demurrage can be addressed in a targeted manner in negotiations and process improvements.