Paper & Raw Materials Container Planning Guide

2026 edition - A booking worksheet for China-origin cargo and international destinations. Build the plan from the actual cargo and route.

20GP or 40HQ is an equipment choice, not a guaranteed tonnage. Net cargo capacity depends on the assigned container, packing, carrier acceptance and both inland routes.

01 Use the tightest applicable constraint

Preliminary net-cargo mass ceiling
= min(actual container gross limit - actual tare - packing / securing / attachments, carrier-accepted cargo limit, origin road / axle limit, destination road / axle limit).

Compare all limits on the same net-cargo basis. A road limit stated as gross vehicle weight needs the truck, chassis, container and non-cargo masses deducted. A mass result is still subject to floor loading, axle distribution, packing geometry and securing approval [1].

Input	How to obtain it
Assigned equipment	Container number, CSC plate / markings, actual tare, internal dimensions and door opening. Carrier brochures are examples; equipment varies [2].
Cargo + packing mass	Weigh or document individual units, pallets, wraps, dunnage and securing material. Separate net cargo from gross packed cargo.
Carrier acceptance	Written cargo description, packed mass, equipment acceptance and booking-specific restrictions.
Road / terminal route	Forwarder and destination haulier confirm truck / axle limits, terminal handling and receiving-site restrictions for the actual route.

02 Compare 20GP and 40HQ on usable capacity

For each proposed container, calculate the permitted number of cargo units from both mass and an approved packing layout. Then compare freight, inland charges, handling, receiving equipment and the landed cost per usable unit. Extra volume does not automatically allow extra weight.

Design the cargo unit before the booking

Use measured packed dimensions and weight. Material format changes the load plan more than the product name.

03 Prepare the right packing information

Cargo format	Information needed for the load plan
Paper parent reels	Packed outer diameter and reel width; core ID; net / gross mass per reel; permitted orientation; lifting method; crush / edge protection; blocking and securing design.
Paperboard sheets	Sheet size, sheets per pallet, packed pallet L x W x H, pallet tare, gross mass, maximum stacking, corner protection and handling clearances.
Tissue / fibres	Bale or roll dimensions and mass, compression / stacking restrictions, wrapping and protection from moisture or contamination.
Polymer pellets / flakes	Bag or bulk-bag dimensions and mass, pallet arrangement, stack stability, lining / contamination controls and any cargo-specific transport requirements.

04 Validate layout, handling and protection

- ☐ **Check a scaled loading layout.**
  Confirm the door opening, handling clearances, floor contact loads and weight distribution. Do not rely only on total container volume. Reels need an orientation and restraint plan accepted by the appointed packer.
- ☐ **Check the empty container and packing condition.**
  Record condition, cleanliness, dryness, visible defects and cargo compatibility before loading. Agree moisture protection, dunnage and securing for the route and cargo; retain dated photos.
- ☐ **Check the receiving operation.**
  Confirm forklift capacity, reel clamps or other lifting equipment, unloading method, doorway / floor limitations and delivery appointment at the buyer site.

Packing worksheet: unit net mass ____ kg | packed gross mass ____ kg
packed dimensions ____ x ____ x ____ mm | approved units / container ____
total packed mass ____ kg | layout revision ____ | packer approval ____

Confirm the destination and release documents

Name the destination country, receiving port, terminal and final delivery address. Recheck the booking and transport requirements per shipment.

05 Destination and quotation handoff

Buyer input	Confirmation needed before booking
Destination and buyer	Named country, port / terminal and final receiving site; importer and customs-broker contact; required cargo and import documents.
Route and handling	Origin and destination hauling / handling; receiving equipment and unloading method; route, terminal and site restrictions confirmed by the appointed parties.
Quote comparison	Same specification, packed quantity and named shipping term; list freight validity, included charges, exclusions and the responsible party for each stage.

06 Keep VGM separate from the planning estimate

Under SOLAS, the shipper must provide the verified gross mass (VGM) sufficiently before vessel loading. It includes the container and its contents. IMO recognizes weighing the packed container, or summing cargo and all packing / securing masses plus container tare using a method approved by the competent authority where packing is completed [3].

Confirm the accepted method, responsible signer, weighing record, submission channel and VGM cut-off with the carrier / terminal. A preliminary spreadsheet estimate is not a VGM declaration. Availability of VGM is a loading condition; it does not itself guarantee shipment [3].

Release record: container / seal ____ | actual tare ____ kg | VGM ____ kg
method / record ____ | signer ____ | submitted at ____ | cut-off ____
packing list revision ____ | carrier / terminal acceptance ____

Sources and scope

Original planning guide. The packer, carrier, forwarder and hauliers must confirm the actual load and route. No fixed loading tonnage or freight rate is offered. References checked 1 October 2026.

[1] IMO/ILO/UNECE CTU Code, published copy - packing, weight and securing:
Hapag-Lloyd: CTU Code for cargo packing and stuffing (PDF).

[2] Hapag-Lloyd equipment guidance - specifications vary by actual equipment:
hapag-lloyd.com - 40 ft Standard / General Container Information.

[3] IMO - Verification of the gross mass of a packed container:
imo.org/en/ourwork/safety/pages/verification-of-the-gross-mass.aspx.