

# Importing your goods by air

Freighting goods by air is the quickest way to move your cargo. This guide discusses some of the decisions you'll be faced with when investigating your airfreighting options.

## Airfreight services and shipping terms

The introduction of commercial aviation saw companies freighting their cargoes. However, high costs meant it was only profitable to airfreight cargoes of small dimensions and high value. As the industry grew, planes became more fuel efficient, the frequency of flights increased and the cost of airfreight fell. While it remains unprofitable to send heavy, low value cargoes by air, it has become cost-effective for lighter, high value items to be air freighted. For example, Australian producers can now export lettuces to Singapore or lobsters to China.

There are two methods of air freighting your goods – direct and deferred services. A direct flight is as the name suggests, when your freight is loaded on a scheduled flight from the airport of origin to the final destination. When you choose a deferred service, your goods are carried from the point of origin to another country where the cargo is off-loaded and then re-loaded onto a flight scheduled for its final destination. For example, Malaysian Airlines load cargo destined for Sydney in Shanghai and airfreight it to their home base in Kuala Lumpur. Here it is discharged off the first flight and loaded onto the next available flight from Kuala Lumpur to Sydney.

As with all transport options, the quickest method is the most expensive, so if your freight is not time-dependent, a deferred service may prove more profitable.

After choosing an appropriate service, ensure you are clear on the purchase terms offered by your supplier. These terms are crucial to understanding which party pays for what in the shipping process and are defined in Incoterms (International Commerce Terms) devised and published by the International Chamber of Commerce.

Below are some of the most widely used INCO terms.

COMMON INCOTERMS		
ACRONYM	MEANING	EXPLANATION
CFR	Cost & Freight	Supplier pays the cost of goods and freight.
CIF	Cost, Insurance & Freight	Supplier pays the cost of goods, insurance and freight.
DDP	Delivery Duty Paid	Supplier pays the cost of goods and all charges up to consignee's door, including duty.
DAP	Delivered at Place	Supplier pays the cost of goods and all charges up to consignee's door, excluding duty.
EXW	Ex Works (suppliers in US may use FOB ex works as a term)	Consignee pays for all charges from supplier's door to your premises.
FCA	Free Carrier Arrival	Supplier pays for delivery of the goods to a nominated forwarder at the port of origin. Then the consignee pays all export customs & handling charges at origin and freight charges to destination.
FOB	Free on Board	Supplier pays all charges at the port of origin including delivery to nominated forwarder, export customs & handling charges.

The International Chamber of Commerce first introduced Incoterms in 1926 and have since updated them six times to keep pace with the development of international trade. For more information visit their website at <https://iccwbo.org/resources-for-business/incoterms-rules/incoterms-2020/>

## What cargo dimensions can fly?

While airlines offer a mixture of passenger and dedicated cargo flights on most trade routes, passenger flights are most frequent. Airfreight carried on passenger flights is carried in the belly or lower deck of the aircraft. This confined space imposes both height and length restrictions. The maximum height available is 1.6 metres and the maximum length is 3.1 metres. Cargo items that exceed these restrictions must be transported on a dedicated cargo flight in a 'main deck' position. Since cargo flights are less frequent, you will incur higher freight costs. <http://www.qantas.com.au/freight/dyn/capacity/loading>

## Determine the cost of your shipment

The cost of air freight is always quoted as a price per kilo. However, since space is also a major consideration and some cargoes are quite bulky, airlines have devised a method of converting light, yet bulky shipments into a volumetric weight; i.e. they convert the cubic measurement into a chargeable weight. The cost of freighting your goods by air plus any applicable surcharges is based on the greater of gross weight or volumetric weight.

To convert gross weight into volumetric weight they use a conversion factor of 1 cubic metre to 167 kilos.

So to determine the chargeable weight for your shipment:

**Step 1:** Determine total gross weight of shipment including packaging, then determine the total cubic measurement, (length x width x height x total number of cartons)  
E.g. For a shipment of 60 cartons with gross weight of 5.5kg per carton and dimensions of 32 x 35 x 45cm.

**Step 2:**  $5.5\text{kg} \times 60 \text{ cartons} = 330\text{kg}$  (gross weight).

**Step 3:**  $.32\text{m} \times .35\text{m} \times .45 \text{ m} = .0504 \text{ cubic metres/carton} \times 60 \text{ cartons} = 3.024\text{CBM}$  in total  
 $3.024\text{CBM} \times 167\text{kg} / \text{cubic metre} = 505.008 \text{ volumetric kilos}$ .

As volume weight of 505kg is greater than gross weight of 330kg, the chargeable weight is 505kg.

If, for example, your shipment weighed 1600 kilos and had a volume of 8.4 CBM, you would convert volume to volumetric weight with  $8.4\text{CBM} \times 167\text{kg}/\text{CBM} = 1402.8 \text{ volumetric kilos}$ . In this case, the gross weight of 1600 kgs is greater than the volumetric weight, 1402.8kg, so you would use the former to calculate your freight costs.

## Additional charges

So that the airlines do not have to constantly modify – and re-publish – base freight rates to allow for fluctuations in fuel and relative surcharges, fuel and security surcharges are now quoted separately.

The Fuel Surcharge covers the fluctuations in airline fuel costs and will move up or down depending on costs of world oil prices. As a guide, the fuel surcharge will move by USD0.01 for every movement in oil prices by USD per barrel. If fuel rises after the freight rates are published, airlines will recoup the difference through this fuel surcharge.

The Security Surcharge off-sets the increased costs associated with the airlines' extensive investment in upgrading security since the 2001 terrorist attacks in the US. Improvements include installing advanced X-ray machines, equipment and video surveillance systems.

## What cargo can fly?

Various commodities are suitable for air freight and most are categorised as General Cargo. These are packed in uniform cartons that are easily stowed in cargo containers or on pallets. Products requiring special care can also be transported by air. For example, fresh cut flowers can be freighted on scheduled passenger flights while oversized machinery can fly on a special cargo charter flight. Even hazardous cargoes can be air freighted; however, this requires expert advice and strict adherence to specific packaging instructions.

Fashion items unsuited to the traditional flat packs can be freighted using the Garment on Hanger system. Such shipments are one of the areas of specialisation for Magellan.

## Garment on Hanger (GOH)

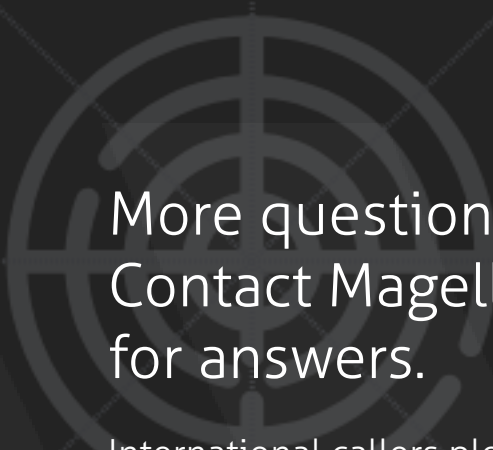
For garments sensitive to creasing and flat pack is not an option, they can be transported in a Garment on Hanger (GOH) method by air. Either by bar system or string system, our overseas offices specialise in the preparation of airfreight containers and/or specialised GOH boxes. For more information on GOH shipment method see our guide on GOH shipping.

## Ground handling process

Whilst the process for passenger baggage may seem simple, the import process for commercial cargo is much more complex as all cargo must be checked and cleared through customs.

In general, when a passenger or cargo flight arrives, cargo is transferred to the cargo terminal. From there the airline handling agent physically checks all cargo unloaded from the flight against a cargo manifest. This check-in process is to ensure all cargo that was loaded at origin arrives at destination. Because the check-in process is done in order of flight arrival this process could take up to 3-6 hours. Once the handling agent's check is finalised, the cargo is transferred to a bonded (customs controlled) warehouse where it is sorted and made available for pick up.

Once customs formalities have been completed your broker will arrange a suitable vehicle to collect the goods and deliver them to your premises. This usually happens within three hours of clearance. However, if your delivery is urgent and your budget permits, your broker can arrange an urgent dedicated delivery vehicle.



More questions?  
Contact Magellan Logistics  
for answers.

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