



Calculation of W/M for Ocean Freight

Ocean freight rates for LCL (Less than Container Load) cargo is applied either to the per-1000.KG unit (W) or the total cubic meters (M) of the shipment in question.

To calculate the weight unit (W):

1. Determine the total weight of the shipment in pounds (LBS)
2. Convert total LBS into kilograms (KGS) by a divisor of 2.2046
3. Further divide the total KGS by 1000 for the "W" factor used in the calculation of freight charges

To calculate the volume unit (M):

1. Take measurements of each carton being shipped in inches
2. Multiply L x W x H of each piece to get cubic inches
3. Divide by 1728 to get cubic feet (CFT)
4. Add up all the CFT
5. Divide the total CFT by 35.3147 to get cubic meters (CBM), which is the "M" factor used in the calculation of freight charges

Apply the ocean freight rate to whichever number is greater to determine total ocean freight cost.

Sample Shipment

10 Cartons Total

(A) 5 Cartons are 17" x 22" x 30", weighing 150.LBS each

(B) 5 Cartons are 27" x 36" x 47", weighing 300.LBS each

Cube (A) = 5 (17 x 22 x 30) = 56100 cubic inches div. by 1728 = 33 CFT

Cube (B) = 5 (27 x 36 x 47) = 228420 cubic inches div. by 1728 = 132 CFT

Total CFT = 165 CFT div. by 35.3147 = 4.672 CBM

Weight = 750.LBS (A) + 1500.LBS (B) = 2250.LBS div. by 2.2046 = 1021.KGS

For this shipment the W = 1.021 versus M = 4.672

The shipping charges for these 10 cartons would be assessed on the 4.672 cubic meters, as it is greater.