

OCEAN CONTAINERS ISO 668:2015 Series 1 freight containers

FEET	20' container	40' container	40' high-cube container	45' high-cube container
	metric	metric	metric	metric
internal volume	33.1 m ³	67.5 m ³	75.3 m ³	86.1 m ³
empty weight	2,200 kg	3,800 kg	3,900 kg	4,800 kg
net load	28.2 Metric Tons	26.6 Metric Tons	26.58 Metric Tons	25.6 Metric Tons

Classification, dimensions and ratings

Maximum line load of **4.5 metric tons** per linear meter for a 20' container.

Maximum line load of **3.0 metric tons** per linear meter for a 40' container.

Line load is calculated as follows:

A cargo weighing 15 tons extends over a length of 6 meters. This gives a line load of $15/6 = 2.5$ t/m. This cargo could therefore be transported in either a 20' or a 40' container.

A cargo weighing 16 tons extends over a length of 4 meters. This gives a line load of $16/4 = 4.0$ t/m. This cargo could only be transported in a 20' container. In a 40' container the maximum line load would be exceeded and transport would therefore be disallowed.

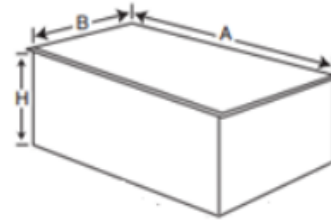
Cargo Density and dimensional weight are calculated as follows:

$W/m^2 = \text{Weight} / \text{Area}$ (cargo density) $m^3/m^2 = \text{Volume} / \text{Area}$ (dimensional weight)

Dimensional Weight Calculation

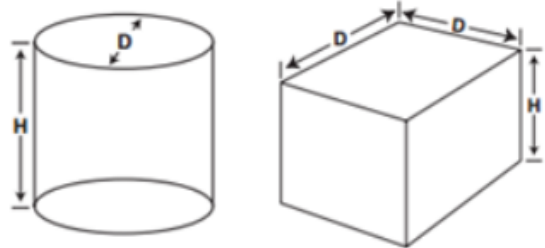
MEASURING OVERLAPPING EDGES

Measure to the nearest inch (centimeter)
 Use the greatest measurement in each direction
 Measure A x B x H



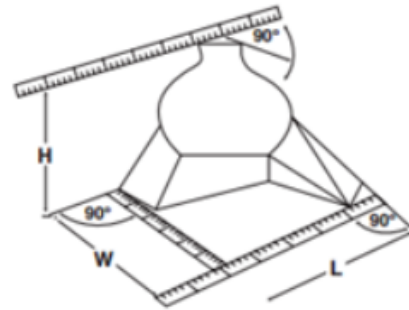
MEASURING CYLINDERS

Calculate the volume using the diameter as the length and the width.
 For example: Measure D x D x H
 The box has the same dimensional weight as the cylinder.



MEASURING IRREGULAR SHAPES

Place the package in a corner in the position it will be loaded. Measure by holding a straight edge at the right angles to the wall.
 Measure L x W x H



Weight Conversions

UNIT	CONVERT	MULTIPLY BY
Pounds	Kilos	0.4536
Kilos	Pounds	2.2046
Metric Ton	Kilos	1,000

Volume Conversions

UNIT	CONVERT	MULTIPLY BY
Cubic Meters	Cubic Feet	35,3147
Cubic Feet	Cubic Inches	1,728
Cubic Meters	Cubic Centimeters	1,000,000

Linear Conversions

UNIT	CONVERT	MULTIPLY BY
Inches	Centimeters	2.54
Centimeters	Inches	0.393701
Meters	Feet	3.281
Centimeters	Meters	100

FLORIDA DOT

COST PER TON-MILE AND TIME TO MOVE 20 METRIC TONS 1000 MILES

<i>Mode</i>	<i>\$/TM</i>	<i>\$/TM x 1000</i>	<i>\$ Cost</i>	<i>Transit Time</i>
Water	0.017	17	240	5 days
Rail	0.045	45	900	2 days
Truck	0.250	250	5,000	1 day
Air	1.395	1395	27,900	2 hours

TERMINAL HANDLING FEES REFERENCE TABLES

Rates are established for six billing areas, when terminal handling is not included in the freight rate.

Reference: Association of World Ports.

- North Atlantic - Port of Baltimore and North (North of Washington D.C.)
- South Atlantic and Gulf, Port of Norfolk and South-- all Gulf Ports. (South of Washington D.C.)
- West Coast - Pacific coast ports to include Alaska.
- Europe - Belgium, Germany, Italy, United Kingdom, Greece, Turkey, Azores, the Netherlands, Iceland, Southwest Asia , Africa, and all other European locations.
- Pacific – Pakistan, Thailand, Australia, Japan, Korea, and all other Far East locations.
- Caribbean - Panama, Central America, South America, and the Caribbean.

Port Handling Cargo Billing Rates

Billing Rates per MTON for Export Shipments

2016 increase 3% over 2015

<u>LOAD-DISCHARGE SERVICES</u>	North Atlantic	South & Gulf	West Coast	Europe	Pacific	Caribbean
Containers	\$29.14	\$25.32	\$59.96	\$52.07	\$35.08	\$30.97
BB General Cargo	\$85.30	\$57.78	\$130.00	\$104.48	\$51.47	\$39.47
BB Wood	\$90.39	\$84.60	\$83.09	\$58.05	\$22.13	\$32.40
BB Metal	\$113.02	\$110.31	\$102.31	\$55.77	\$47.96	\$31.94
BB Cargo	\$29.04	\$27.49	\$28.70	\$19.68	\$21.06	\$18.46
Containers	\$27.03	\$30.40	\$38.64	\$39.11	\$22.65	\$26.62
House Hold Goods	\$69.64	\$68.13	\$86.41	\$106.99	\$43.73	\$47.09

Reefer cargo	\$63.88	\$63.81	\$56.20	\$34.02	\$16.81	\$32.17
Heavy Vehicles>4,500 Kilos	\$49.31	\$19.97	\$42.08	\$23.40	\$35.90	\$19.84
Vehicles < 4,500 Kilos	\$40.59	\$29.41	\$50.05	\$42.21	\$32.31	\$31.50
Oversize Vehicles	\$45.59	\$57.72	\$34.32	\$61.56	\$34.22	\$14.52

Port Handling Cargo Billing Rates

Billing Rates per MTON for *Import Shipments*

2016 increase 3% over 2015

<u>LOAD-DISCHARGE SERVICES</u>	North	South &	West			
Commodity	Atlantic	Gulf	Coast	Europe	Pacific	Caribbean
Containers	\$74.85	\$67.04	\$81.17	\$67.09	\$58.43	\$70.54
BB General Cargo	\$54.50	\$62.05	\$84.78	\$62.80	\$62.21	\$37.24
BB Wood	\$70.22	\$98.63	\$79.63	\$30.63	\$35.14	\$20.83
BB Metal	\$75.07	\$49.68	\$88.13	\$42.36	\$25.11	\$30.81
BB Cargo	\$20.83	\$22.46	\$24.09	\$44.32	\$36.82	\$18.93
Containers	\$23.01	\$25.85	\$18.23	\$39.15	\$31.93	\$13.39
House Hold Goods	\$66.59	\$96.40	\$82.52	\$87.37	\$39.46	\$16.45
Reefer cargo	\$77.61	\$83.64	\$65.46	\$59.80	\$39.13	\$24.01
Heavy Vehicles >4,500 Kilos	\$45.74	\$21.74	\$20.88	\$26.76	\$36.98	\$13.49
Vehicles < 4,500 Kilos	\$72.72	\$25.80	\$34.42	\$47.54	\$37.82	\$22.31
Oversize Vehicles	\$33.45	\$21.28	\$25.82	\$40.94	\$17.17	\$12.50