

COST ANALYSIS FOR BULK BAGS VS. BULK CONTAINER



This worksheet can be used to calculate the packaging and logistics costs involved when shipping a bulk bag and a bulk container.

Fill in data for information in E in F

PACKAGE DESCRIPTION	BULK BAGS ON PALLETS	REPRESENTATIVE AIR BAG LINER WITH AIR BAG CORNERS
NET WEIGHT PER CONTAINER (KG)	20,000	24,000
NET WEIGHT PER CONTAINER (lbs.)	44,092	52,910
Annual volume (kg)	10,000,000	10,000,000
Annual Volume (lbs.)	22,046,000	22,046,000
PACKAGING MATERIALS		
	Number	
BULK BAGS (20) Adjust if less than 1,000 kg. per bag	20	\$160.00
HEAT TREATED WOOD PALLET (20)	20	\$200.00
BRACING		\$10.00
LINER		\$105.00
STEEL BARS (5) @ \$ 12 each		\$60.00
PACKAGING LABOR		

		Lbs.	
Weight in Bulk bag (KG)	1,000	2,205	Adjust if lower weight/bag
Number of KG shipped per year	#####	22,046,000	250 Days X 2 Containers/Day X 20,000 kg. per container
Materials Cost per KG	1.65	0.75	Adjust to customer estimates
Bulk bag cost (each)		\$8	
Heat Treated Pallet Cost (each)		\$10	
Bracing Cost (per container)		\$10	
Loading Labor Rate/ hr		\$15	
Unloading Labor/hr w/benefits		\$25	Adjust as necessary
Ocean Freight (per container)		\$3,000	
Inland Freight (per container)		\$500	
Delivery Charges Customs Clearance etc, (per container)		\$100	

BAG FILLING (3 HOURS)	\$45.00	
WAREHOUSING (1 HOUR)	\$15.00	
LOADING (1 HOUR)	\$15.00	
LINER INSTALLATION (.5 HR)		\$7.50
LINER FILLING (1 HOUR)		\$15

LOGISTICS COST		
OCEAN FREIGHT (Asia to US PORT)	\$3,000.00	\$3,000.00
Ocean Freight Savings - For 40 ft. to 20 ft. Container		-\$350.00
Inland Freight	\$500.00	\$500.00
Customs etc.	\$100.00	\$100.00
Materials Loss or contamination during unloading @.0033	\$108.90	
Unloading Labor - 1 hour savings	\$25.00	

Remove -\$ 350 if no move to 20 ft. container; get freight quotes for other savings amounts

Adjust as necessary

TOTAL COST PER CONTAINER	\$4,178.90	3,437.50
CONTAINERS PER YEAR	500	417
ANNUAL COST	\$2,089,450.00	\$1,432,291.67

SAVINGS	\$657,158
Savings per Kg.	\$ 0.066
Savings per lb.	\$ 0.030
Cost for Container Unloading	\$155,000

System	
Years to Payback Unloading System Cost at Annual Volume	0.24
Annual Volume for One Year Payback - Kg.	2,358,640
Annual Volume for One Year Payback - lbs.	5,199,858