



Welcome to Mitsuba Pallet

Introduction

Welcome to our latest product catalog!

We present to you our newly patented product, the Mitsuba Pallet. Our product is designed to increase work efficiency and decrease the amount of industrial waste in the world. Explore our patented product and discover how we can help you and your company achieve SDGs.

Our Video





Mitsuba Pallet

Mitsuba pallet is the world's first pallet design that is ideal for transporting round items such as drum cans, rolls, and tires. The Mitsuba pallet was designed with the primary goal of reducing unused space that occurs with traditional pallets and improving loading efficiency.

In 2025, we hope to finally introduce the three-leaf pallet to the world and make it the first choice of pallets for transporting open drums.

Current Issues

Sizing

Loading
Time

Low
Safety

Currently, there are many issues with the current transportation of open drums. Some of these issues are small enough that they can be ignored, while others are large enough that they result in unnecessary waste of money.

Loading Time



The transportation of open drum cans requires careful handling and safety measures to prevent accidents. Currently, individual loading is the most common method for transporting open drums.

Typically, it requires two people to operate the lift and move the drums into position inside the truck. This method maximizes loading capacity, but it is very time- and labor-intensive.

LOADING OF CANS
ONTO PALLETS



TRANSPORTING
PALLETS



LOADING OF CANS
INTO THE TRUCK



Loading Process Time

FOR EXAMPLE:

- Truck uses a 20-foot container
- Loads 30 drums
- Please refer to the table below for a rough estimate of the time required for manual loading

Transporting Method \ Process	No. of cans inside a 20ft container	Securing pallets	Loading in Trucks		Total time
			Loading of cans / pallets	Securing cans	
Individual Loading	38	-	2 Hrs 30 Min	10 Min	2 Hrs 40 Min

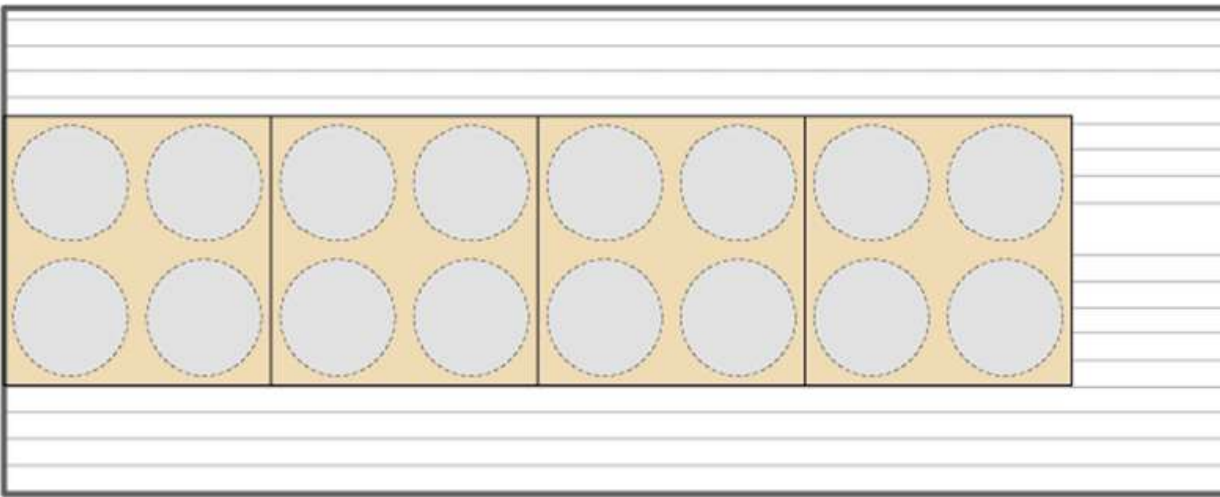
Open Drum

Close Drum

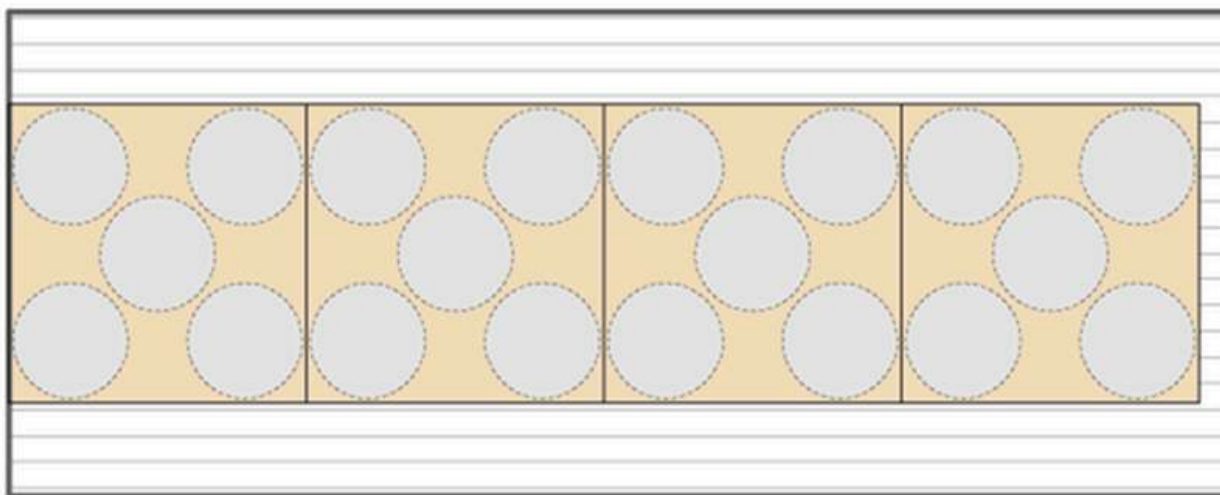
Size

Some companies have adopted palletizing to speed up the loading process. However, unlike closed drums, it is generally not possible to load 4 open drums side-by-side horizontally due to the increased width caused by the ring locks. The maximum loading is 3 cans per row.

Palletizing

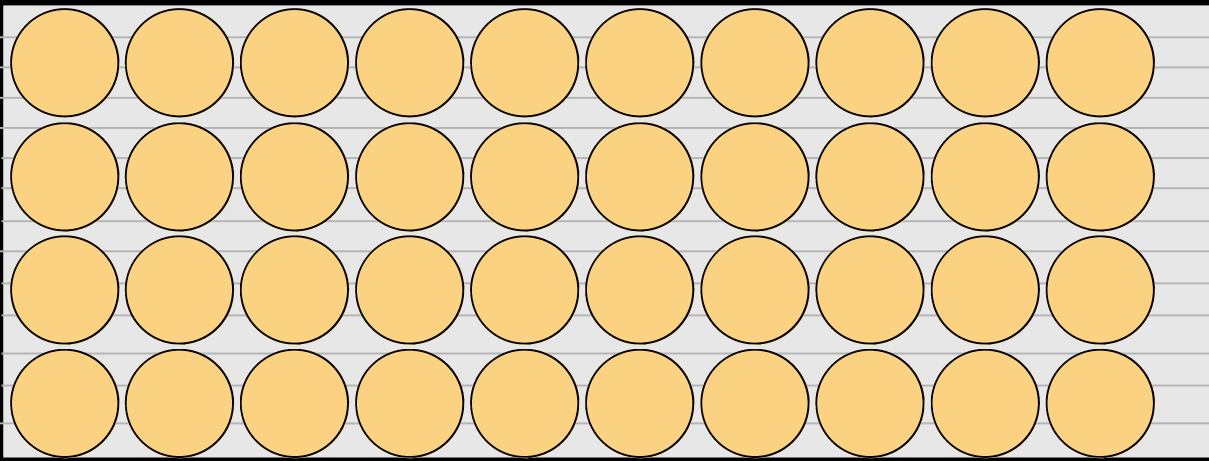


Depending on the pallet size, drums can be arranged at 4 or 5 per pallet.

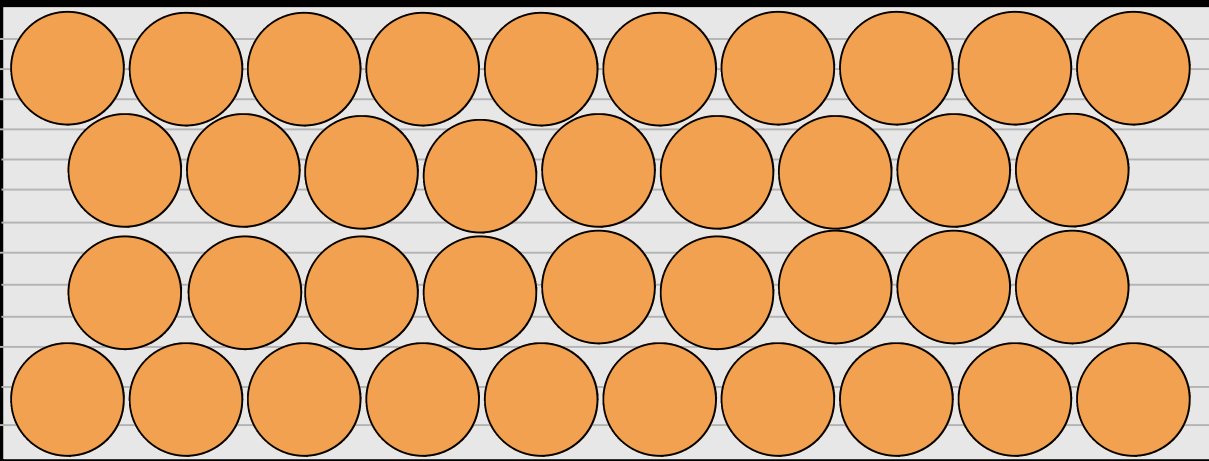


Due to the width of the drum cans, only 1 row of pallet can be put horizontally, limiting it to 4 pallets per 20ft container.

Manual Loading



40 closed drums can be loaded into a 20 feet container



When arranged carefully, 38 drums can be loaded into a 20 feet container. However, due to the extra inches, the layout cannot be the same as for closed drums.

Storage

Palletizing

- Pallets are heavy and bulky
- Requires a lot of storage space
- Needs to be discarded once damaged
- Expensive to maintain (Purchase new ones)

Rental Pallet

- Limited size and quantity
- Total cost is high: rental based on period of use, return shipping, damage compensation

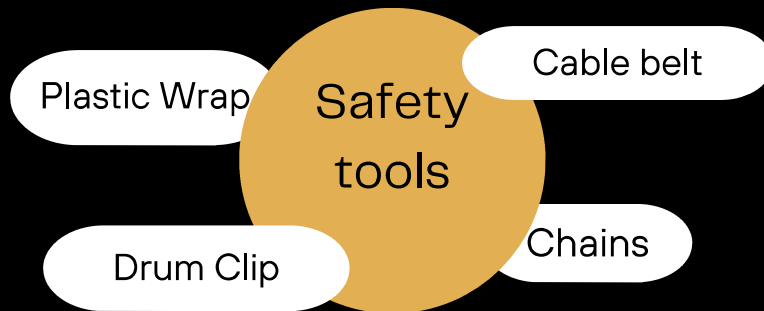
Disposable Pallet

- Expensive due to continuous purchase
- Increases industrial waste
- Disposal fee required



Low Safety

One of the main challenges in transporting drums is safety, as drums tend to move, get bumped and dented during transport.



The problem with all the above tools is that they lack safety: most do not prevent the drums from moving on the pallet when the pallet is tilted, nor do they prevent the drums from hitting each other during transport. It is also an additional cost as they need to be purchased separately.





Benefits of Mitsuba Pallet

The Mitsuba pallet is specially designed to address all the challenges that come with transporting open drums. From loading efficiency to storage efficiency, the Mitsuba pallet aims to contribute to solving and reducing overall transportation costs and become a worthwhile investment for your company.

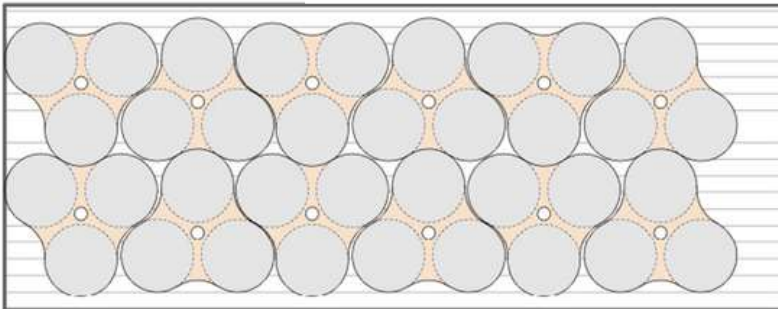
Our Video



Design



- Design to follow the curve of the cans
- Each drum can have a dedicated platform
- Curve shape allows them to fit together like puzzles
- Can be safely stacked using the stacking pallet



- Ensures maximum loading capacity
- 12 sets of pallets can fit into a 20ft container
- 72 drum cans can be transported when using the stacking set

Mitsuba Pallet Loading Time

By combining the benefits of palletizing and manual loading, you can maximize your loading capacity and reduce loading times.

For example:

- Trucks use 20ft containers
- 12 Mitsuba pallet can be loaded

The approximate time required to load drums using manual loading, palletizing, and Mitsuba pallet is shown in the table below.



Transporting Method \ Process	No. of cans inside a 20ft container	Securing pallets	Loading in Trucks		Total time
			Loading of cans / pallets	Securing cans	
Individual Loading	38	-	2 Hrs 30 Min	10 Min	2 Hrs 40 Min
Palletizing	16	40 Min	15 Min	-	55 Min
Mitsuba Pallet	36	10 Min	20 Min	-	30 Min