

# International Container Design Regulations and ISO Standards

## Size, strength, and durability requirements

The basis of these regulations is to guarantee that the container can withstand extreme environments endured during transport as well as possess the structural integrity needed to be lifted by cranes or other heavy equipment (IEEE GlobalSpec, 2017).

## Container safety certificate (CSC)

## Types

- Flat racks
- Open-top containers
- Dry freight or cube containers
- Reefer or refrigeration containers
- Tank containers

## Flat racks

It is believed that flat rack containers fit our purpose best. They are ISO containers that are used to transport heavy machinery. We can use it as the base and add sidewalls for dust protection purposes instead of structural purposes. All of the loads are supported by the metal frame.



Figure 1, flat rack containers

## Containers provided by SEARATES

20' STANDARD

40' STANDARD

40' HIGH-CUBE

20' OPEN TOP

40' OPEN TOP

**20' FLATRACK**

**40' FLATRACK**

20' FLATRACK COLLAPSIBLE

40' FLATRACK COLLAPSIBLE

20' PLATFORM

40' PLATFORM

20' REFRIGERATED

40' REFRIGERATED

20' BULK

20' TANK

## Specification of SEARATES 20' FLATRACK



- INSIDE LENGTH: 5.698 m
- INSIDE WIDTH: 2.230 m
- INSIDE HEIGHT: 2.255 m
- TARE WEIGHT: 2500 Kgs
- MAX CARGO WEIGHT: 21500 Kgs

## Specification of SEARATES 40' FLATRACK

- INSIDE LENGTH: 11.832 m
- INSIDE WIDTH: 2.228 m
- INSIDE HEIGHT: 1.981 m
- TARE WEIGHT: 4200 Kgs
- MAX CARGO WEIGHT: 40800 Kgs

## Specification of SEARATES 40' STANDARD

- INSIDE LENGTH: 12.029 m
- INSIDE WIDTH: 2.350 m
- INSIDE HEIGHT: 2.392 m
- DOOR WIDTH: 2.340 m
- DOOR HEIGHT: 2.292 m
- CAPACITY: 67 m<sup>3</sup>
- TARE WEIGHT: 3780 Kgs
- MAX CARGO WEIGHT: 26700 Kgs

## Specification of SEARATES 40' HIGH-CUBE

- INSIDE LENGTH: 12.024 m
- INSIDE WIDTH: 2.350 m
- INSIDE HEIGHT: 2.697 m
- DOOR WIDTH: 2.340 m
- DOOR HEIGHT: 2.597 m
- CAPACITY: 76 m<sup>3</sup>
- TARE WEIGHT: 4020 Kgs
- MAX CARGO WEIGHT: 26460 Kgs

## References:

IEEE GlobalSpec (2017). *ISO Containers Information*. [online] Global Spec. Available at: [https://www.globalspec.com/learnmore/material\\_handling\\_packaging\\_equipment/material\\_handling\\_equipment/iso\\_containers](https://www.globalspec.com/learnmore/material_handling_packaging_equipment/material_handling_equipment/iso_containers) [Accessed 18 Sep. 2019].