

The background of the slide is a photograph of a blue sky with light, wispy clouds above a calm blue body of water. The text is centered in white.

# CONTFAM COURSE

## PART 1

### Container basics

# Benefits of containerization

- Creates a unit load for rapid cargo handling
- Protects cargo packages
- Reduces risks to cargo
- Encourages door to door transport
- Provides economical cost effective transport

# A container has to be

- Strong enough to be repacked many times
- Change transport modes without unpacking and recapping
- Allows easy handling
- Easily packed and unpacked

Freight container = Dry box



# Container dimensions

## 20ft General Purpose



### 20'x8'x8'6" ISO Type Dry Cargo Steel Container

Dimension		mm	ft
	Width	2438	8
	Height	2591	8
<b>Internal</b>	Length	5900	19.4
	Width	2350	7.8
	Height	2393	7.1
<b>Inside cubic capacity</b>		cu.m	cu.ft
		33.2	1172
<b>Opening</b>		mm	ft
	Width	2338	7.8
	Height	2280	7.6

## 40ft General Purpose

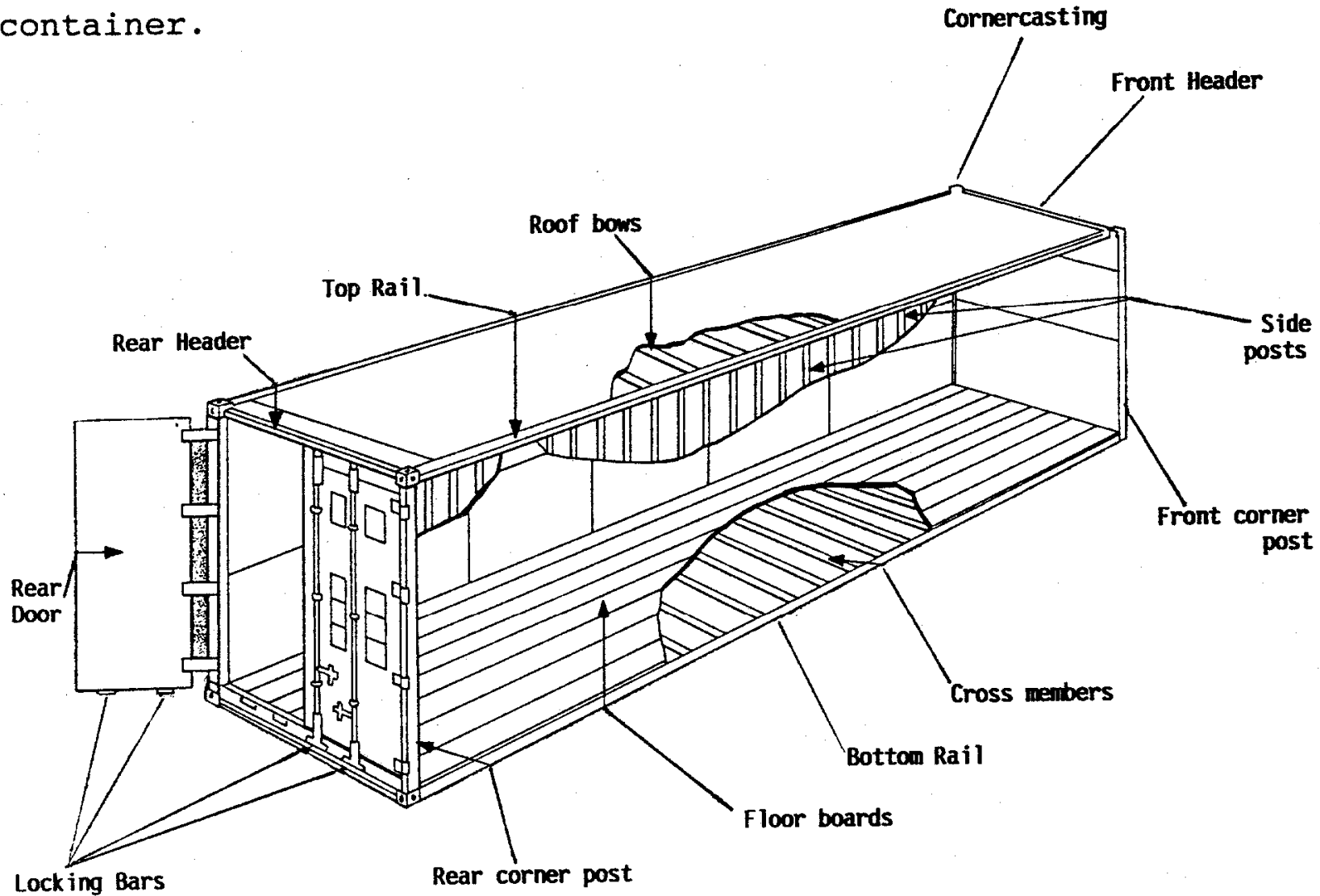


### 40'x8'x8'6" ISO Type Dry Cargo Steel Container

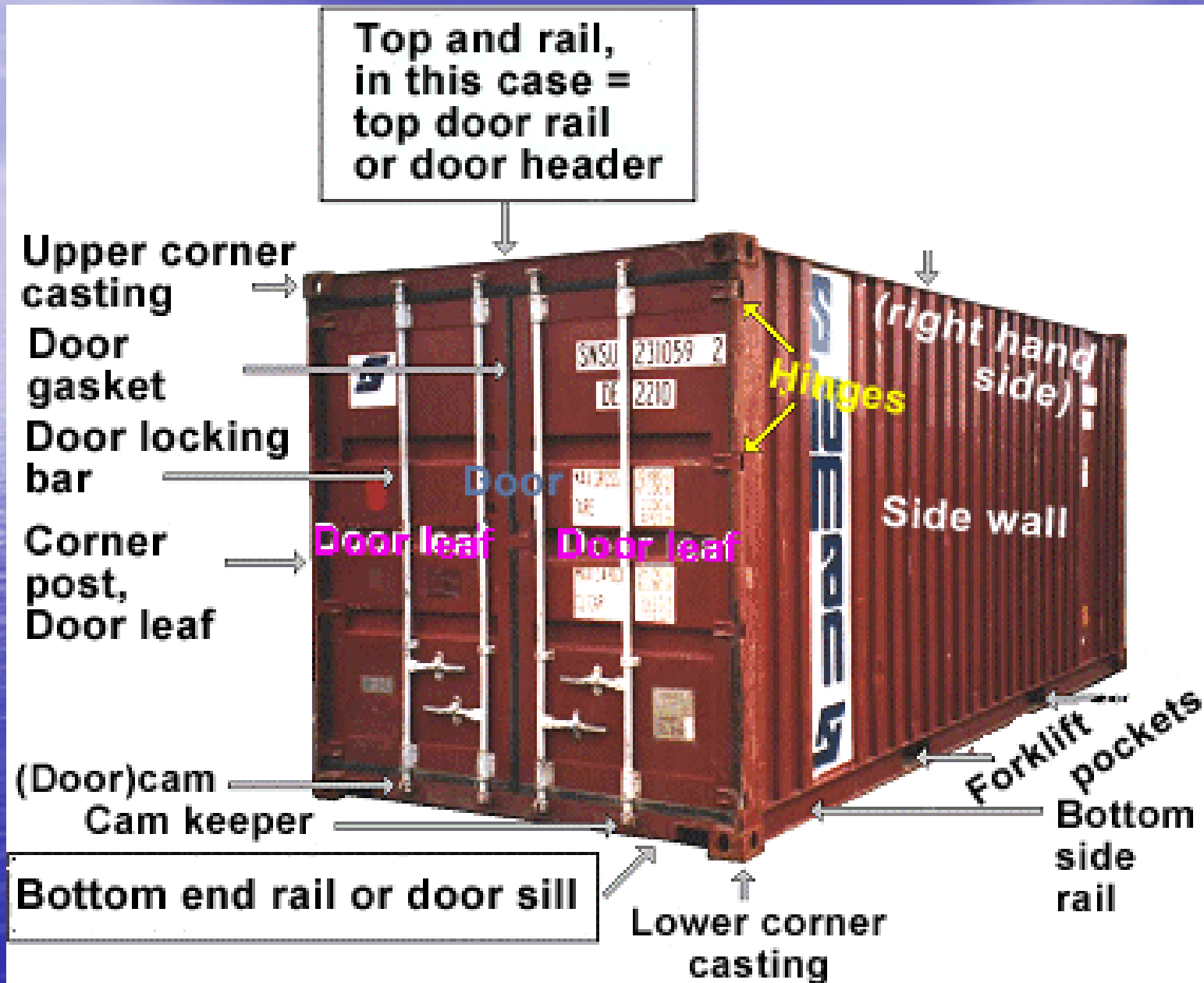
Dimension		mm	ft
<b>External</b>	Length	12192	40
	Width	2438	8
	Height	2591	9
<b>Internal</b>	Length	12036	39.5
	Width	2350	7.8
	Height	2393	7.1
<b>Inside cubic capacity</b>		cu.m	cu.ft
		67.7	2390
<b>Opening</b>		mm	ft
	Width	2338	7.8
	Height	2280	7.6

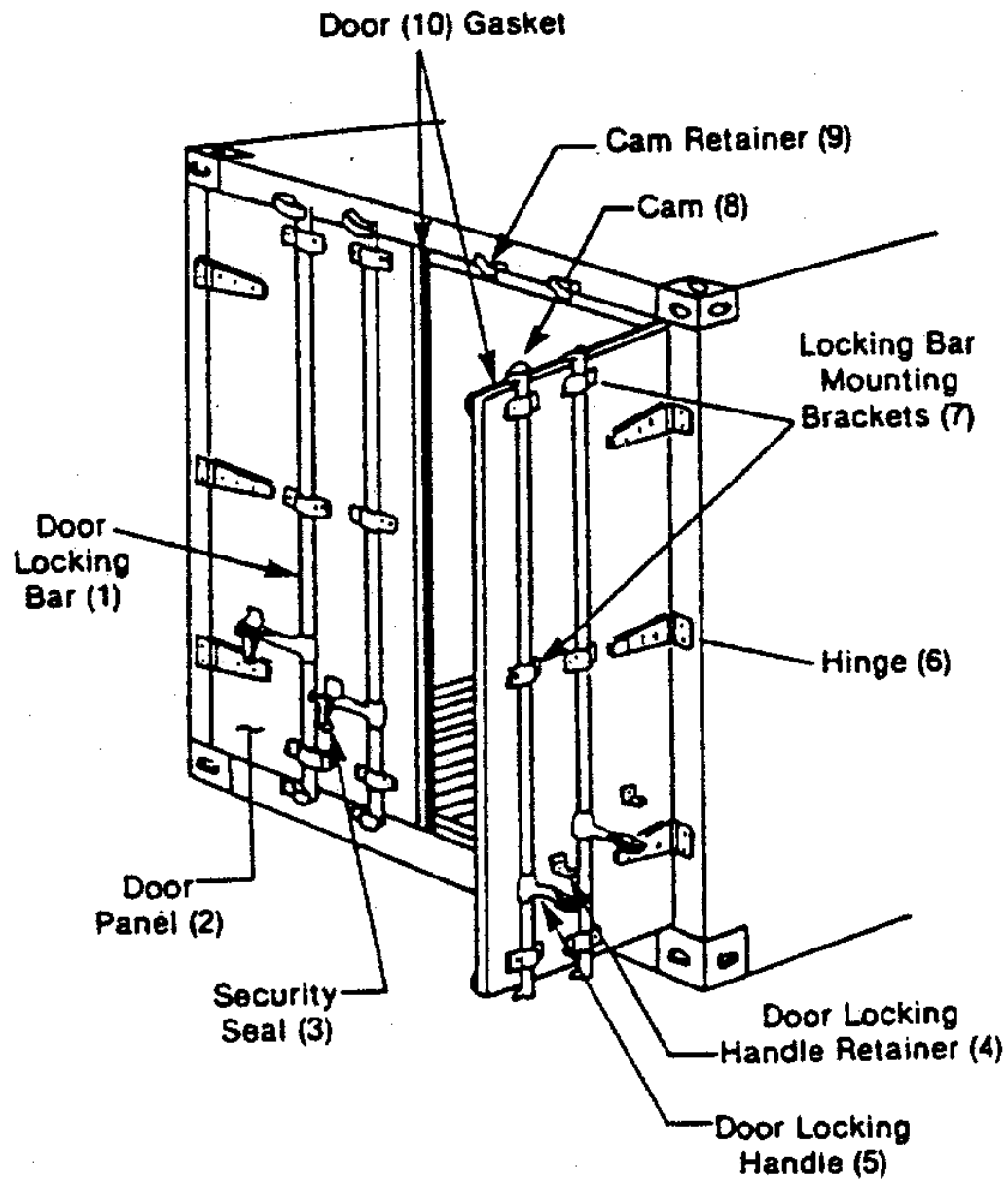
# Container Construction

container.



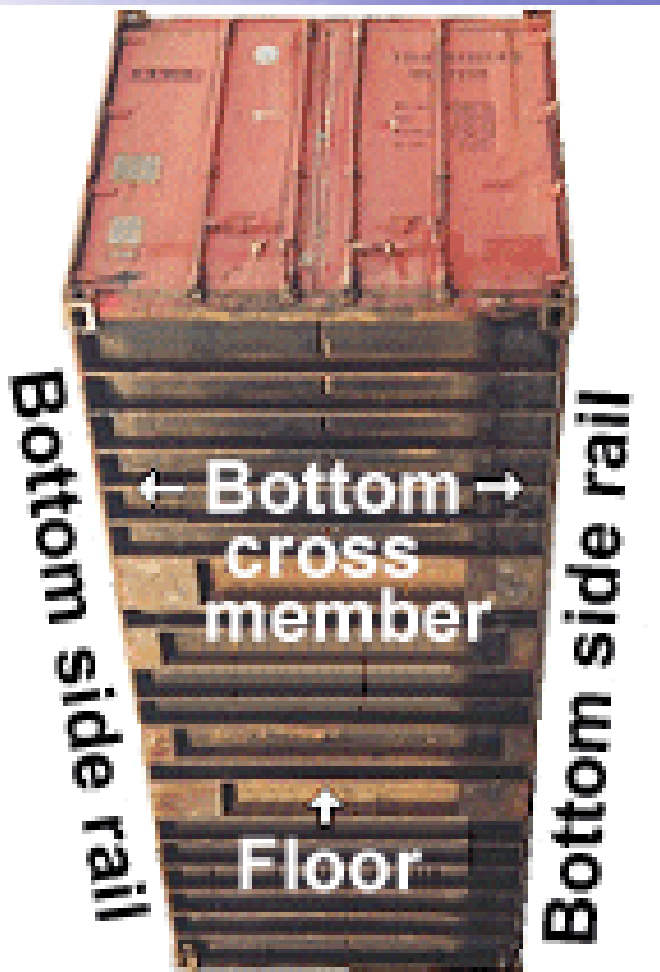
# Parts of a Container





**Details of door section.**

# Parts of a Container

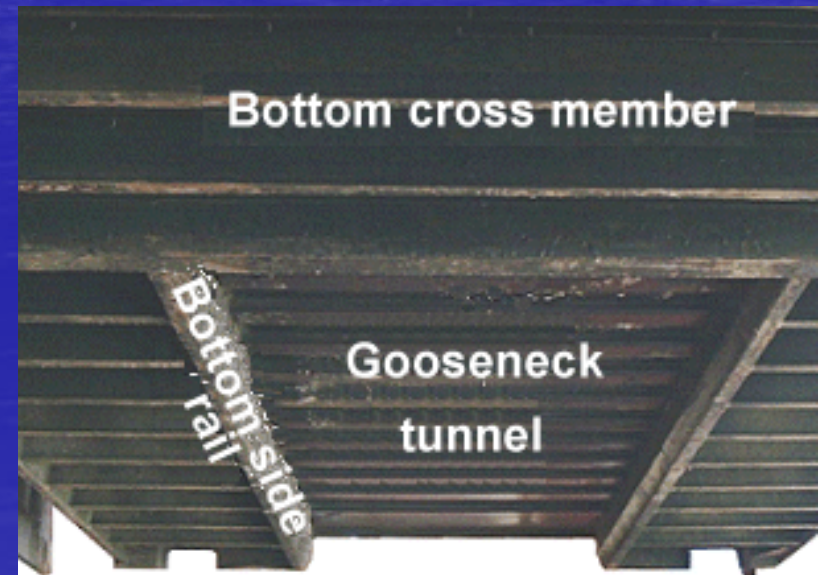


Frame



Corner Post

Bottom View



# Container Markings

MAX. GROSS	30,480	KGS
	67,200	LBS
TARE WT.	3,740	KGS
	8,245	LBS

Weight  
& cubic  
capacity

MAX. GROSS	30,480 KGS.
	67,200 LBS.
TARE	3,720 KGS.
	8,200 LBS.
NET	26,760 KGS.
	59,000 LBS.
CU. CAP.	67.8 CUM.
	2,394 CUFT.

**CAUTION**  
**9'6"**  
**HIGH**

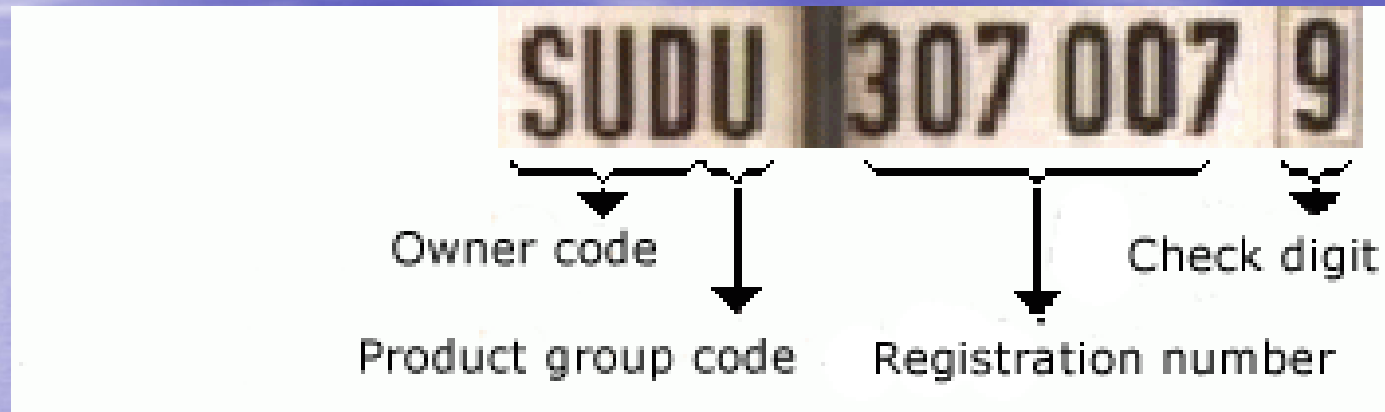
**2.6 m**  
**8' 6"**

Height Markings



Yellow and black stripes  
constitute part of the height  
marking

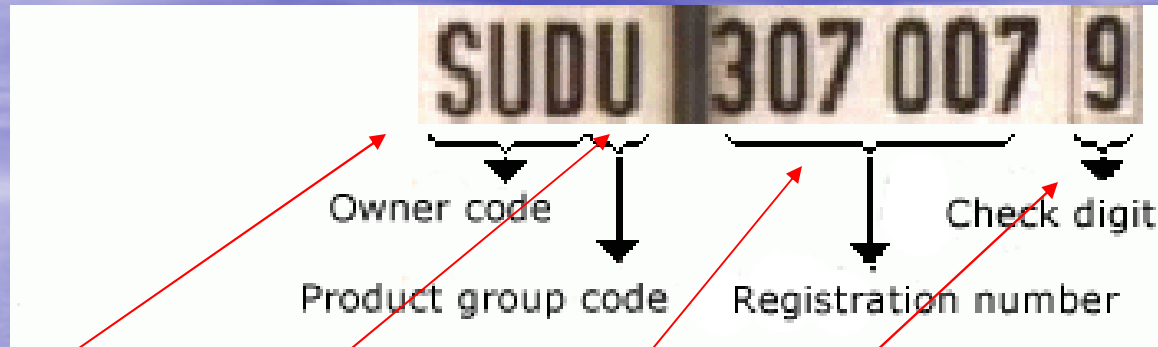
# Container Identification



The container identification system specified in DIN EN ISO 6346 consists of :

1. owner code, consisting of three capital letters
2. product group code, consisting of U, J or Z
3. six-digit registration number
4. check digit

# Container Identification



- The **owner code** must be unique and registered with the *International Container Bureau*
- The **product group code** consists of one of the following three capital letters:
  - U-for all freight containers
  - J-for detachable freight container-related equipment
  - Z-for trailers and chassis
- The **registration or serial number** consists of six digits. If the container number consists of fewer than six digits, it is preceded by enough zeros to make a six-digit number sequence.
- The **check digit** is always a single-digit number. It is usually in a box, to make it stand out from the registration number.

# A word about the check digit

**HLXU 469192 0**

- The check digit is used to validate whether the owner code, product group code and registration number have been accurately transmitted.
- No freight information system (FIS), transport information system (TIS) or similar data processing system will accept a container number, if the result of the automatic checking procedure does not show agreement with the check digit.
- The procedure is deliberately designed to ensure that a number of transmission errors cannot cancel one another out, resulting in the acceptance of incorrect data.



# Container Types

# 20 feet Dry Box



# 40 feet Dry Box



# 20 feet Open Top



# 40 feet Open Top



# 20 feet Flatrack Fixed Ends



# 20 feet Flatrack One Open End



# 40 feet Flatrack Fixed



# 40 feet Flatrack Folding



# 40 feet Flatrack one open end



40 feet  
FR  
Open  
ends



# Stack of old 40 feet FR Folded



# 45 feet Dry Box



Empty Depot  
20 feet  
9 high  
stacking



# 20 feet Reefer



# 40 feet Reefer



# Tank Container

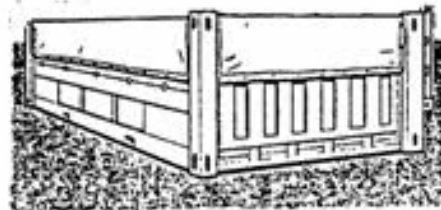


# Half Height = Bin Container

Flat rack container



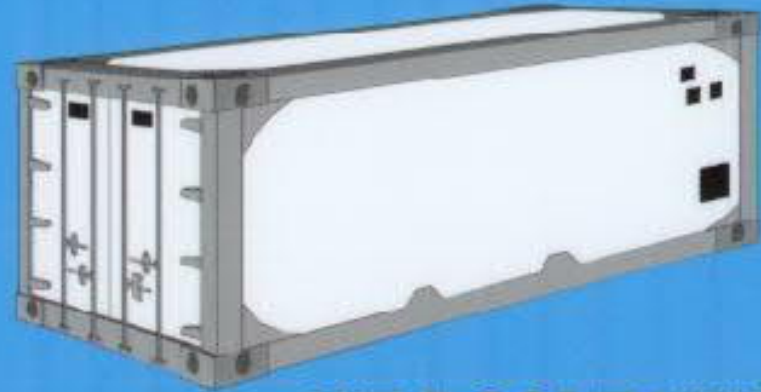
Half height BIN container



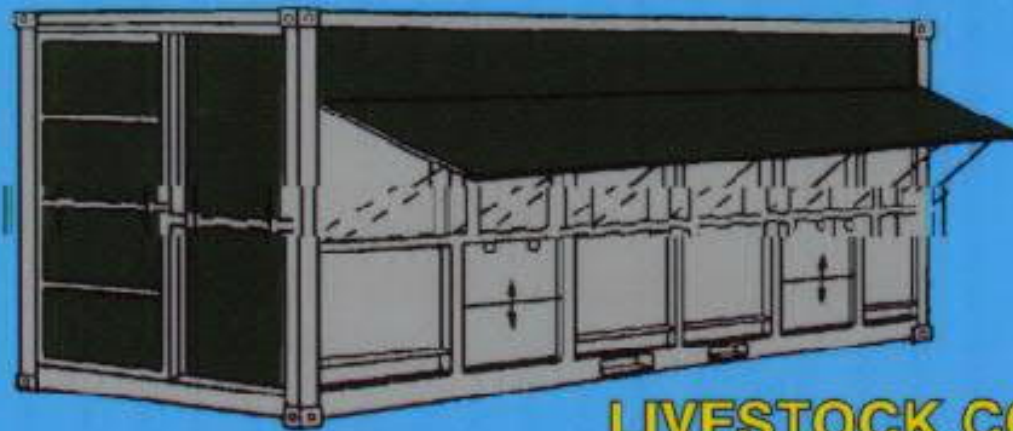
# Specials



**CAR CONTAINER**



**HIDE CONTAINER**



**LIVESTOCK CONTAINER**

# Container Handling Equipment

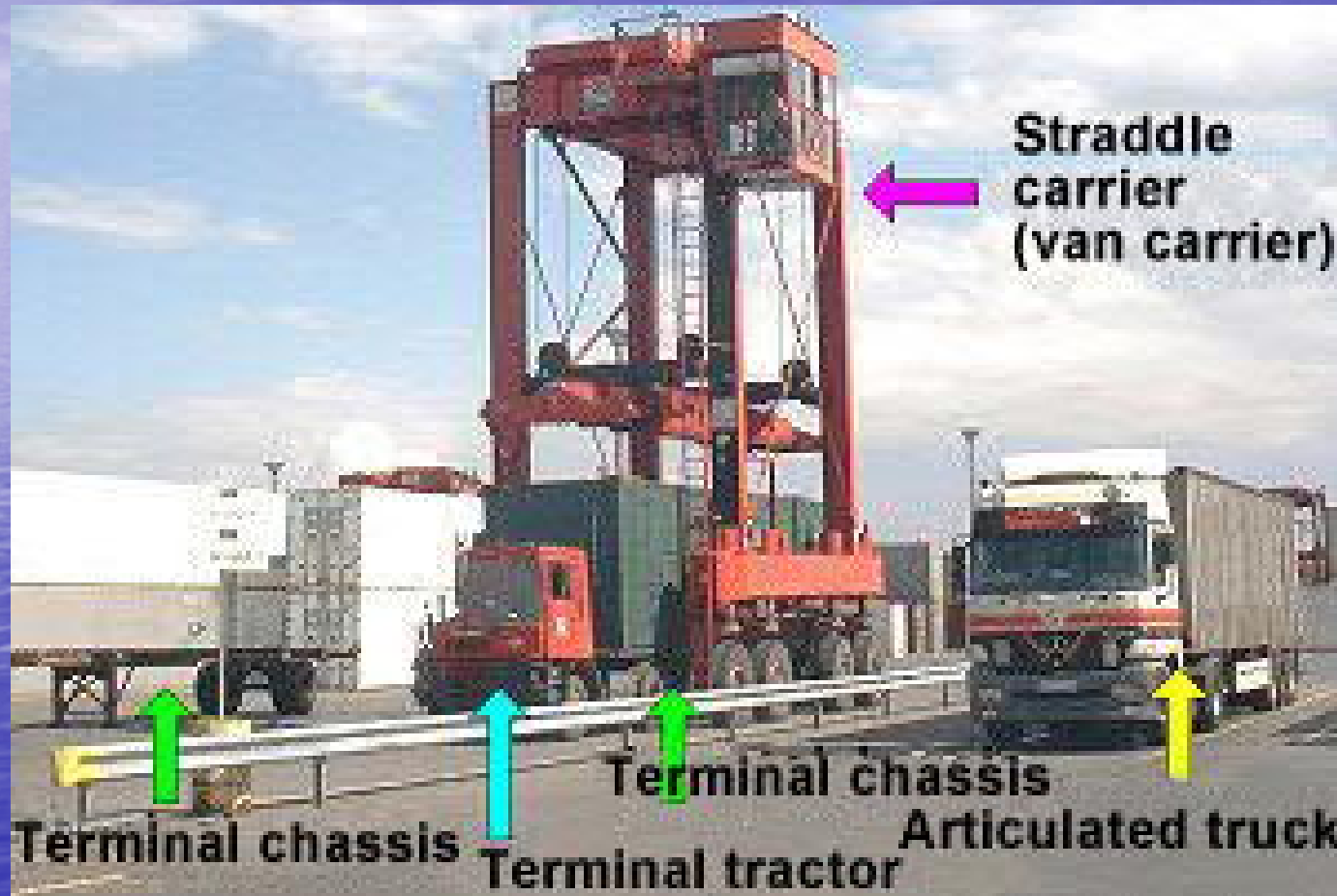
Gantry Crane



# Spreader on a Gantry Crane



# Shore container handling equipment



# Shore container handling equipment

STACKERS /  
STRADDLERS



RUBBER TIRED GANTRY (RTG) CRANE



STRADDLE  
CARRIERS



End of Part I of CONTFAM course

Thank You  
For  
Your Attention

Now please proceed to Part II of the  
CONTFAM course