

1917 - Subpart D - Specialized Terminals



1917 - Subpart D

- 1917.70 – General
- 1917.71 - Terminals handling intermodal containers or roll-on roll-off operations
- 1917.73 - Terminal facilities handling menhaden and similar species of fish



Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(a)

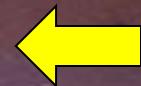
- **Intermodal container marked with:**

- Weight of empty container in pounds
- Maximum cargo weight container can carry in pounds
- Sum of container and cargo weight in pounds



MAX.GROSS

30,480 KGS
67,200 LBS



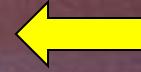
TARE

3,860 KGS
8,510 LBS



PAYLOAD

26,620 KGS
58,690 LBS



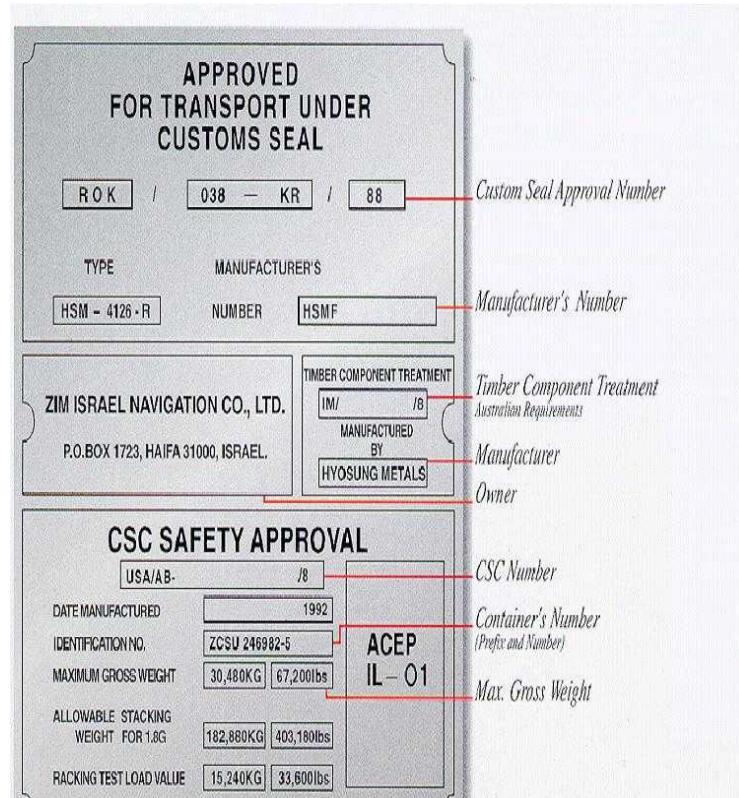
CUB. CAP.

76.2 CUM
2,690 CUFT

Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71

- Note: The Convention for Safe Containers 1972 (CSC) documents construction, inspection standards and required markings



Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(b)

- Persons in charge of movement and lifting of containers
 - Know if containers are empty or loaded





TANCRED
TANSCREED

BOMAG

Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(b)(1)

- Methods of container identification:
 - Cargo plans
 - Manifests
 - Markings on container



Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(b)(2)

- Loaded containers:
 - Gross weight plainly marked and visible, **or**
 - Paperwork on hand showing container serial number and actual gross weight



Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(b)(3)

- Outbound (export) containers weighed before hoisting
 - Can be done at terminal or elsewhere once loading is completed





SCALE

2
SCALE

Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(b)(5)

- Open type vehicle carrying containers excepted from paragraphs (b)(3) and (b)(4)



Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(b)(5)

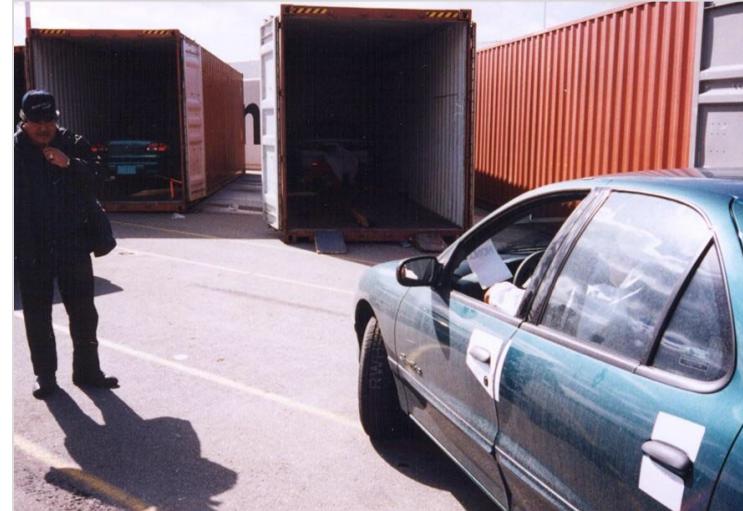
- Containers built specifically and used solely for compressed gasses are excepted from paragraphs (b)(3) and (b)(4)



Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(b)(6)(i)

- Closed dry van containers carrying vehicles exempted from paragraph (b)(4):
 - Carries only completely assembled vehicles.
 - Marked on the outside.
 - Vehicle was loaded at the marine terminal.



MAKING
PAYLOAD
CUB. CAP.

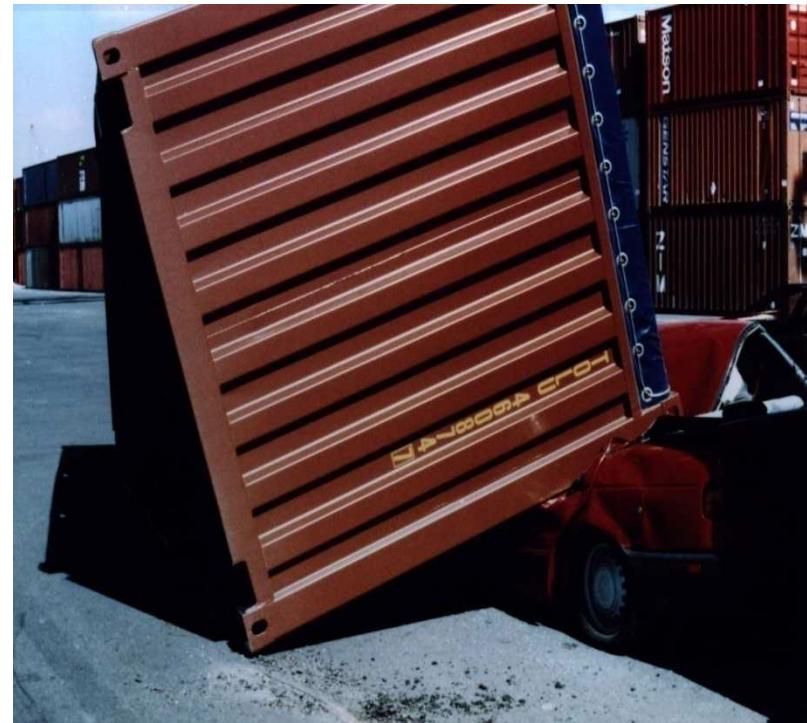
WARNING—MAY CONTAIN
EXPLOSIVE MIXTURES WITH
AIR—KEEP IGNITION SOURCES
AWAY WHEN OPENING

AUTOMOBILE

Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(c)

- Containers not hoisted if actual gross weight exceeds weight marked as required in paragraph (a)(2)



Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(c)

- Containers not hoisted if actual gross weight exceeds capacity of crane or other hoisting device



Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(d)(1)

- Marked or designated areas
 - Required for employee passage
 - Unless transportation is provided



Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(d)(2)

- Employees directed to stay clear of suspended containers







APL 103890

APL

J. AGED
P. 1920

MAX
CARGO
CUBIC
CAP.

26.780 KGS
59.040 LBS
67.8 CM³
2.394 CU.FT

MAERSK

108

XI





Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(e)

- High visibility vests required
 - Working in vicinity of container handling equipment
 - In terminal traffic lanes





Port of Oakland

NOL







Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(f)

- Containers handled using lifting fittings or other arrangements suitable for purpose set forth in paragraphs (f)(1) through (f)(4)
- Damaged containers may require special means of handling









6

63

Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(f)(1)(i)

- Less than vertical lift on containers:
 - ISO closed box container.
 - Condition of box is sound.
 - Speed of hoisting and lowering is moderated.
 - Lift angle is at 80 to 90 degrees.
 - Distance between beam and load is 8 feet, 2.4 inches.
 - Length of spreader beam is at least:
 - » 16.3 feet for a 20-feet container
 - » 36.4 feet for a 40-feet container



Matson





16.3'

8' 2.4"



36.4"



Jeep

TEHTO2

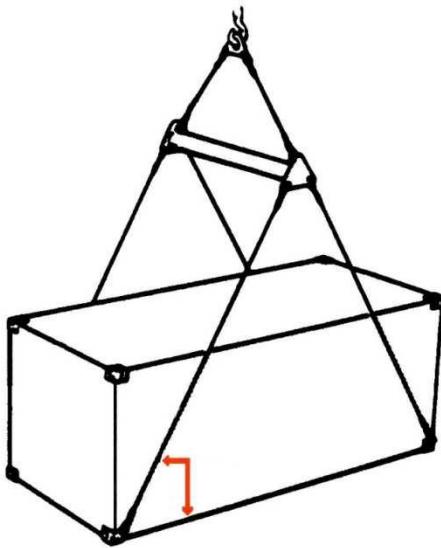


Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(f)(1)(ii)

- Hoisting from bottom fittings:
 - Hoisting connections must bear on fittings only - make no other contact with container
 - The angle of the four bridles:
 - » Not less than 30 degrees to the horizontal for a 40' container
 - » Not less than 37 degrees for a 30' container
 - » Not less than 45 degrees for a 20' container





Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(f)(1)(iii)

- Lifting containers by:
 - Forklift trucks,
 - Grappling arms from above, **or**
 - From one side;
 - » Done only if container is designed for this type of handling



Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(f)(1)(iv)

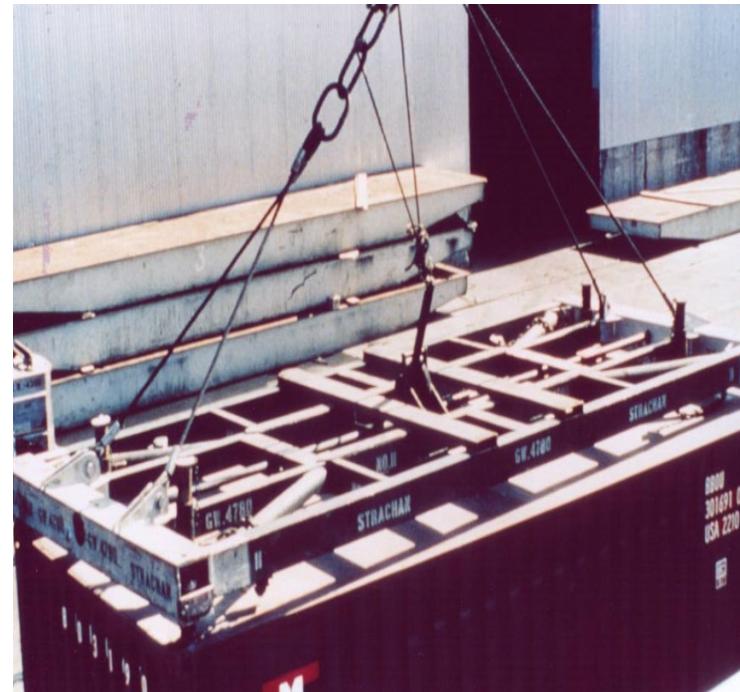
- Other means of hoisting
 - If containers and hoisting means are designed for such use



Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(f)(2)(i)

- Manual operated spreader bar w/lanyards
 - Precautions taken to prevent accidental release of load



GENSTAR

A ST Capital Co.

Genstar
Container
Corporation
San Francisco
California,
U.S.A.

OCEU 604046 0
LS 4332

MAX.GR.
TARE
NET
CU.CAP.

32890 KG
72310 LB
3650 KG
8,490 LB
28950 KG
63,820 LB
59.1 CU.M
2,087 CUFT

Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(f)(2)(ii)

- Container spreader twistlock systems
 - Designed with interlocks
 - Prevent suspended load from accidental released



Vertical Tandem Lift







Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(f)(3)

- Flat bed trucks or container chassis used to move intermodal containers equipped with:
 - Pins
 - Flanges
 - Other means to prevent container from shifting





Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(f)(4)

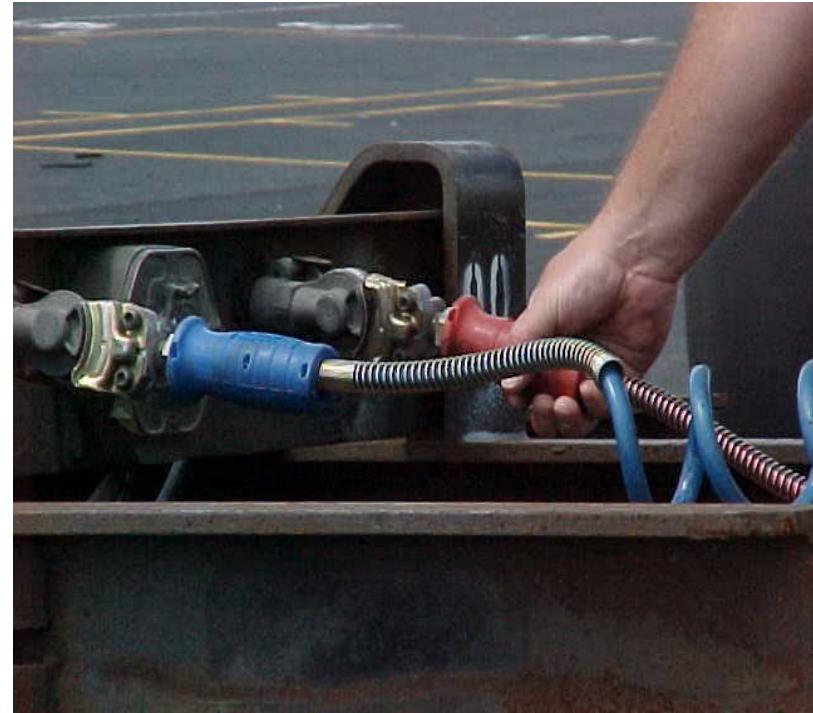
- After 7/27/1998 - flat bed, low boy trailers (mafis) and other similar equipment
 - Marked with capacities



Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(f)(5)

- Tractor have all brake lines connected
 - When pulling trailers equipped with air brakes



Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(g)(1)

- Containers inspected for defects in structural members or fittings before handling



Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(g)(2)

- Containers found to be unsafe
 - Identified, removed from service and repaired



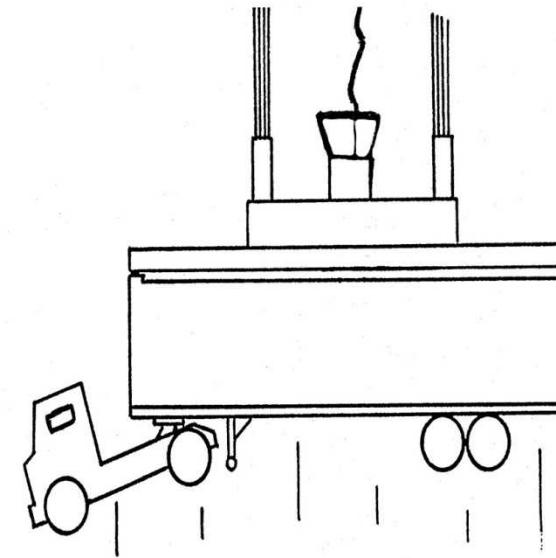


OOCL

Terminals Handling Intermodal Containers or Ro/Ro Operations

1917.71(h)

- Containers not hoisted unless all engaged chassis twist locks are released





Terminal Facilities Handling Menhaden and Similar Species of Fish

1917.73

- Menhaden are small fish processed into fertilizer and other products
- Menhaden give off hydrogen sulfide, a toxic gas



Terminal Facilities Handling Menhaden and Similar Species of Fish

1917.73(a)(1)

- Bailwater tanks opened or ventilated
 - Drained each day and left open to air







Terminal Facilities Handling Menhaden and Similar Species of Fish

1917.73(a)(2)-(3)

- Before employees enter tank
 - Tested for hydrogen sulfide and oxygen deficiency
 - Hydrogen sulfide exceeds 20 ppm
 - Less than 19.5% oxygen
- Tests conducted by designated person





**CAUTION H₂S MAY BE
PRESENT
DO NOT ENTER THIS AREA
WITHOUT APPROVED H₂S
DETECTION EQUIPMENT**



Terminal Facilities Handling Menhaden and Similar Species of Fish

1917.73(c)

- At least 4 units of respiratory protective equipment available for emergency
- Employees entering tank in emergency
 - Wear a lifeline and safety harness
- At least two employees, similarly equipped
 - Stationed outside of tank for observation and rescue



Terminal Facilities Handling Menhaden and Similar Species of Fish

1917.73(d)-(e)

- Management personnel trained and knowledgeable
 - Hazards of hydrogen sulfide and oxygen deficiency
- Supervisors trained in appropriate PPE and rescue procedures
- Supervise discharging of bailwater from vessels



Thank You For Attending!

Final Questions?

1-800-NC-LABOR
(1-800-625-2267)
www.nclabor.com



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