OVER HEAD CONDUCTORS

HANDLING & STORAGE

OF

CONDUCTOR REELS
LOADED CONTAINER:

There are two methods of unloading from the container, the usage of each method depends on the position of the drum/reel inside the container, which is based on the dimensions of the drum/reel itself.

These methods are illustrated in the sketch below, and they are:

1. Unloading by the direct usage of the forklift.
2. Unloading by rolling.
1 – Steel Drum Unloading by Forklift

In this method, the drum/reels are lifted out of the container by a forklift where drum/reel side will be facing outward as illustrated in the photo below. The drum/reels are secured in the container using suitable a size and capacity of lashing belts which are hooked to the container hooks. The drum/reels are also secured by wedge shaped chocks to prevent any sidewise movement in the container.

**Step 1:** The lash belts to be loosened and the wooden chocks to be removed.

![Image of drum in container](image-url)

**Step 2:** The belt should be securely placed to clear the forklift truck passage. Suitable size forklift trucks (Container Type Forklift) are required which can drive within the container carrying the desired load where the forklift has to enter the container using a ramp. The forks should be well placed under the two sides of the flange. As shown below.
Step 3: Start gradually lifting the drum/reel to a certain elevation which will allow you to carry the drum/reel out of the container.
Step 4: During the entire process, ensure that both of the forks are covering the total width of the drum/reel.

2 - Unloading by Rolling

In this method, the drum/reels are rolled out of the container where the flanges of the drum/reels face the wall of the container.

The picture to the side illustrates the packing method of the drum/reel inside the container. The drum/reels are secured in the container using suitable size and capacity of lashing belts which are hooked to the container and to prevent rolling of the drum/reels, wedge shaped wooden chocks are used on each side of the Drum/reel under each flange.
Step 1: Place a steel plate on top of a platform in order to reach to the same level of the container floor. Then the rolling process of the drum/reel out of containers may begin.

Step 2: Start removing the lashing belts and the wooden chocks. BE AWARE, there might be one belt in the middle of the drum/reel which is holding both drums/reels together.
Step 3: Equipment with bumper mechanism that acts as a stop as shown in the pictures is used to roll the drum/reel out of the container. This only makes contact with the flanges to prevent contact with the mast while rolling out of the container. This is secured by heavy duty chains that are run through the eye of the drum/reels. When drum/reel is being rolled out, ensure that the rolling is on the redwood plank placed on the floor of the container.

Step 5: After rolling the drum/reel out of the container, place it in a safe manner on top of the platform. To stop the drum/reel from rolling, place wooden chocks under both side of the flange as demonstrated below.
Step 6: Start removing the chocks in sequence with the forklift movement, and after covering the full width of the drum/reel, you may lift the drum/reel in a safe manner. **DO NOT LIFT THE DRUM/REEL FROM THE SIDES OF THE WOODEN CHOCKS – THE FORKS SHOULD BE WELL PLACED UNDER BOTH SIDES OF THE FLANGE.**

**LOADED TRAILER:**
To unload the drum/reel from a trailer, the direct usage of Forklift vehicles is only required, and the following steps should be implemented and followed:
**Step 1:** Carefully, start removal the wooden chocks.

**Step 2:** Start with loosen and removing the steel chain which is holding the drum/reel to the trailer, insure the removal of the entire chain from the deck of the trailer before beginning the next step.
**Step 3:** Start gradually lifting the drum/reel from the deck of the trailer and carry the drum/reel away from the trailer. During the entire process, ensure that both of the forks are covering the total width of the drum/reel.

![Image of drum being lifted](image)

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**3 – Wooden Drum Unloading by Forklift**

In this method, the drum/reels are lifted out of the container by a forklift where drum/reel side will be facing outward as illustrated in the photo below. The drum/reels are secured in the container using suitable a size and capacity of lashing belts which are hooked to the container hooks. The drum/reels are also secured by wedge shaped chocks to prevent any sidewise movement in the container.

**Step 1:** The air bag to be removed, the lash belts to be loosened and the wooden chocks to be removed.

![Image of drum in container](image)
Step 2: The belt should be securely placed to clear the forklift truck passage. Suitable size forklift trucks (Container Type Forklift) are required which can drive within the container carrying the desired load where the forklift has to enter the container using a ramp. The forks should be well placed under the two sides of the flange. As shown below.

Step 3: Start gradually lifting the drum/reel to a certain elevation which will allow you to carry the drum/reel out of the container.
**Step 4:** During the entire process, ensure that both of the forks are covering the total width of the drum/reel.

![Image of drum/reel being loaded](image)

**4 - Unloading by Rolling**

In this method, the drum/reels are rolled out of the container where the flanges of the drum/reels face the wall of the container.

The picture to the side illustrates the packing method of the drum/reel inside the container. The drum/reels are secured in the container using suitable size and capacity of lashing belts which are hooked to the container and to prevent rolling of the drum/reels, wedge shaped wooden chocks are used on each side of the Drum/reel under each flange.

![Image of drum/reel being unloaded](image)
Step 1: Place a steel plate on top of a platform in order to reach to the same level of the container floor. Then the rolling process of the drum/reel out of containers may begin.

Step 2: Start removing the lashing belts and the wooden chocks. BE AWARE, there might be one belt in the middle of the drum/reel which is holding both drums/reels together.
Step 3: Equipment with bumper mechanism that acts as a stop as shown in the pictures is used to roll the drum/reel out of the container. This only makes contact with the flanges to prevent contact with the mast while rolling out of the container. This is secured by heavy duty chains that are run through the eye of the drum/reels.

Step 5: After rolling the drum/reel out of the container, place it in a safe manner on top of the platform. To stop the drum/reel from rolling, place wooden chocks under both side of the flange as demonstrated below.
Step 6: Start removing the chocks in sequence with the forklift movement, and after covering the full width of the drum/reel, you may lift the drum/reel in a safe manner. **DO NOT LIFT THE DRUM/REEL FROM THE SIDES OF THE WOODEN CHOCKS – THE FORKS SHOULD BE WELL PLACED UNDER BOTH SIDES OF THE FLANGE.**

Handling & Storing of Steel & Wooden Reels

It is important to properly store and handle conductor reel to ensure the safe storage of the conductor. Below is a list of general guidelines to follow when moving and storing conductor reels:

**How to handle Steel & Wooden reels**

- Unloading equipment should not come in direct contact with the conductor.
- Forklifts must lift the reel by contacting both flanges.
How to Place the Reel on the Ground?

- Place reels on hard surface so that the flanges will not sink and allow reel weight to rest on cable.
- In order to prevent any damages for the conductor if surface is not level or dry, safely place the reel on top of two 6x6 or 8x8 hard woods and please ensure the compression of the soil can handle the weight of the reel as demonstrated below.
Reel Storage Guide

The site chosen for storage of cable reels must be level and dry and protected from any water source. It should have a firm, preferably concreted surface. This will avoid sinking of the drums and difficulty in subsequent shifting. Visual periodic inspection for site environmental parameters and reel condition

All reels should be stored parallel rows flange to flange in such a manner as to leave sufficient space between them for air circulation. Storage of cable reels under shed is not essential unless the storage is for a very long period. As shown in the photos below.

HARD WOOD
6x6 or 8x8
Note: Do not remove original packing unless stringing operation will commence. If packing is removed, please ensure that conductor reel will be protected properly with respect to the existing site climate if stringing operation will be delayed.