



# CSIS

Container and Shipping Inspection Services

## Shipping Dangerous Good and the risks

**What are the risks for shipping Dangerous Goods in a container on a vessel?**

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## INTRODUCTION

According to the September 28<sup>th</sup>, 2023, news story published by Worldshipping.org\*, improperly declared dangerous goods (DG) are putting lives at risk. In 2022, fire related incidents increased by 17% over the previous year, and a serious ship fire occurs every 6 days. Despite clear national and international regulations (i.e. IMDG), there is a clear need for additional steps to prevent this increase to get out of hand and to prevent this from spiraling out of control.

One of the risk mitigations that a carrier can and should take is vanning inspections of those containers with DG, and making sure the materials are properly labeled, packaged, tied down, even properly declared. In addition to the carrier requesting these inspections the Carriers should have these performed as part of their normal day to day operations. These vanning inspections are or should be the first line of defense for the shipper (and carrier) to lower their risk. This document will share various approaches of vanning inspections and the risk reduction they will bring.

\* <https://www.worldshipping.org/news/improperly-declared-dangerous-goods-putting-lives-at-risk-in-the-supply-chain-liner-shipment-addresses-urgent-safety-concern>

# VANNING INSPECTIONS

A vanning inspection is best described as visual inspection of the cargo loaded in the container and comparing this to the rules and regulations of shipping. A vanning inspection is carried out by an experience inspector that will perform various steps to provide the shipper and the carrier with a certificate that the cargo listed on the shipping documents is the same as in the container, and that is packaged according to the rules and regulations. The reason these inspections are done, is to have an independent source review all the available documents and have eyes on the product and making sure what is listed is there. In addition to verifying the materials, it is essential that when these materials get loaded in the container, they will not shift during transportation. Most incidents on water are caused by motion of the vessel shifting the improper packed materials and causing leaks, container damage, or even worse react and cause fire.

During the years of performing vanning inspections, we have found a variety of risks:

- Shipping declared DG in improper packaging
- Shipping declared DG improperly tied down inside the container
- Shipping declared DG without the proper labeling
- Shipping declared DG with incorrect exterior placarding
- Shipping declared DG loaded incorrectly
- Containers are inspected by regulators in the secured zone and incorrect labeling delays the shipping

The International Maritime Organization (IMO) has set forth rules on how to ship, package, containerize and load DG, and a vanning inspection can make sure these rules and regulations are being followed by the shipper, and therefore it minimizes the risk of the carrier. In addition to the company's experience, their location is important too. If you have a company with only one or two locations, you will have to deal with a multitude of companies throughout the world.

# RISK-REWARD OF PERFORMING A VANNING INSPECTION

Risk #1



The Carrier loads container with improperly declared DG.

Risk #2



The shipper loads the DG incorrectly and therefore it can shift during transport.

Risk #3



Improper labeling of the container leads to confusion and delays in port

Reward #1



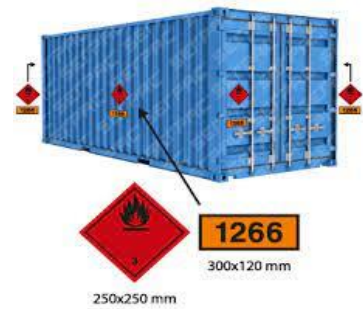
The vanning inspection detects the improperly declared material and prevent this from entering the shipping process

Reward #2



The vanning inspection found this issue and made the shipper correct this prior to the container being loaded on the vessel

Reward #3



Properly labeled containers are loaded on vessels quickly, safely and without delaying the shipment.

# VARIOUS ISSUES FOUND DURING INSPECTIONS

The below photographs show a variety of issue found during previous Vanning inspections. All these issues could have lead to numerous safety issues, major violations by the regulator or major delays in the port. Prior to these containers being loaded on the vessel all these issues were resolved with the the shipper and these shipments were safely loaded and transported without any major delays in the shipment process.

## **NON-COMPLIANCE CASES**



*Incorrect material Identification*



*Drums loaded incorrect without proper lashing and protection*



*Drums not corrected lashed to container*



*Incorrect exterior container Placarding*



*Placards overlapping*



*Drums damaged*

## **COMPLIANCE CASES**



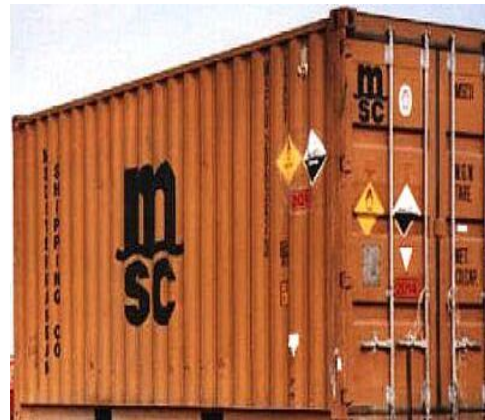
*Correct Drum type, lashing to prevent movement*



*Load correctly loaded*



*Airbags used to prevent movement during shipping*



*Correct Placarding not overlapping*



## CONCLUSION

Vanning inspections are there to protect both the shipper and the carrier. By performing these vanning inspections, we also make sure people on board of the vessel are safe. We additionally are protecting the environment, and all that at a very low cost compared to safety related incidents. Vanning inspections do have a regulatory aspect to it so making sure the right company performs them is vital.

Benefits of Vanning Inspections are clear.

- Requirements of all sections of Chapter 1.3 of the IMDG Code, CSC regulations, CTU guidelines and USCG 49 CFR 172.704 are met by appointing qualified and IMDG trained Surveyors.
- Ensure Dangerous goods are stowed and secured as per IMDG Code and CTU Code.
- Non-Compliances to IMDG and CTU Code requirements are identified at the early stage during packing of the Containers and Client/Shipper is informed for further action where appropriate.
- Clients and Shippers are informed of best practice of transport of Dangerous goods and raise awareness of IMDG and CTU Code.
- Due diligence checks of Dangerous goods packed are carried out on behalf of Liners.
- Minimize risk of Undeclared Dangerous goods, avoid risk of Misdeclaration of Dangerous goods and prevents Incidents and Accidents during Multimodal transportation and Ocean shipping.
- Avoid expenses of re-stuffing, additional costs due to non-compliance of IMDG and CTU code requirements if identified by Customs and Port authorities after Container Gate-In at port of Loading.
- Avoid expenses of Salvage containers, Fines, Delays, Port infrastructure charges, Re-placarding, additional container rent due to non-compliance of IMDG and CTU code requirements if identified by Water police, Customs and Port authorities during random inspection at the transshipment port and Port of Discharge.
- Avoid expenses due to Delays, Fines, Additional costs due to non-compliance of IMDG and CTU code requirements if identified during Concentrated Inspection Campaign (CIC) by various Port state control inspectors (PSC) on Dangerous Goods as per their MOUs.



## Key Takeaways

- Make sure you as a shippers use a vanning inspection company to make sure their DG is managed correctly, and your risk is reduced.
- The vanning inspection companies should be 100% independent from both the shipper and the carrier and have a vast global reach and experience.
- Vanning inspection companies should be an experienced global company, to be sure inspections are performed via a set of internal standards all over the world.
- Vanning inspections prevent delays in shipment in both Ports (departure and arrival) and bring the total safety risk down.

If you want to know more about Vanning inspection and the need, or requirements of these, please reach out to our global team.

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