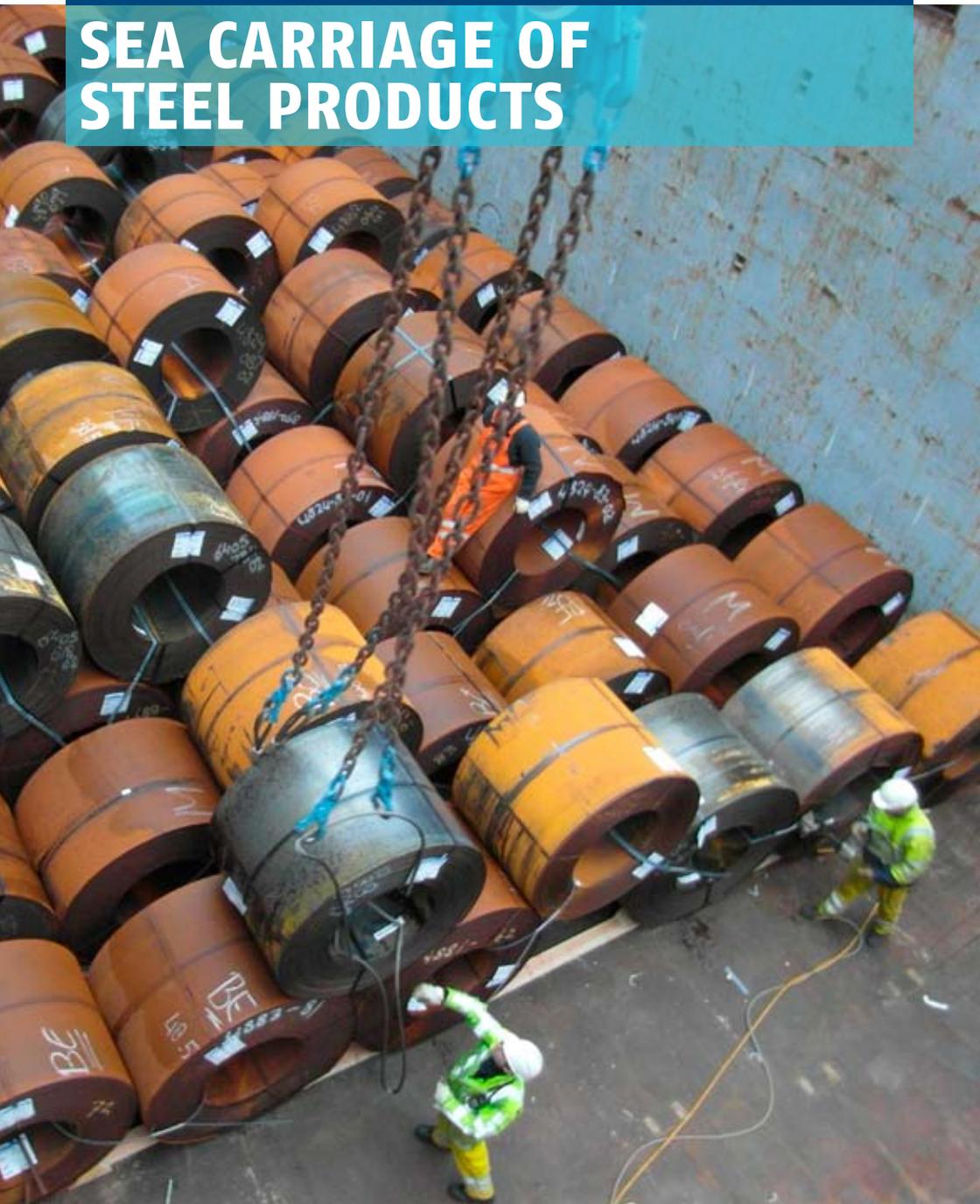


NNPC PUBLICATION

SEA CARRIAGE OF STEEL PRODUCTS



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FOREWORD

In the past years there was and is a large overcapacity in steel production. It is expected and predicted that the yearly surplus of 300 million m.ton steel per year will increase further. This resulted in a decrease of steel prices of at least 10%, a decrease of the profit margins of traders and producers and an eagerness to create claims – almost on every shipment claims are lodged.

Any deviation from the requested quality of the steel is claimed at the traders/ producers. Any deviation from the description of the steel on the Bill of Lading will be claimed at the carrier. It is clear that besides the actual transport damages there are a considerable number of 'paper' claims.

How can we protect ourselves against these claims?

The sea carriage of steel products such as coils, wire rods, billets, construction steel and many other products is full of risks.

Most steel products (hereafter referred to as steel) are susceptible to moist, rust and mechanical damages. All types of steel have in common that contact with seawater can cause heavy damages.

Seawater with major component Chlorides causes pitting to the surface of the steel. Pitting is a type of extreme local corrosion which is hard to detect. It results in a local reduction of the thickness of the material, because of which the steel can no longer be used for its original purpose.

We see – with regularity – that receivers use the presence of chlorides on the steel, indicated by a Silver Nitrate test, to lodge high claims against the carriers. By means of this publication we want to explain how claims can be avoided and how the NNPC protects her members' interests in these cases.

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INTRODUCTION

The transport of steel over sea can be divided in the following sections that are all equally important in order to avoid damages:

- Fixing and drawing up the contracts
- The preparation of holds, hatches and hatch covers
- The loading
- The sea carriage
- The discharging

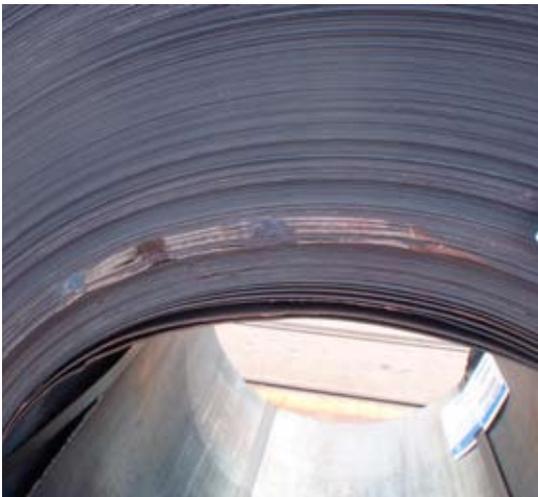


01 — FIXING AND DRAWING UP THE CONTRACTS

When discussing the contracts parties will have to agree under which conditions the cargo will be loaded and discharged, which party is responsible for the stevedores in both ports, who is responsible for the stowage- and securing materials. A loadlist will have to be presented mentioning particulars about the type and packing of the cargo and the port(s) of loading/dischARGE. With regard to the increasing dimensions of the coils the maximum weights of the individual coils will have to be mentioned in order to calculate the

maximum deck load. Furthermore it is important to agree if cargo is allowed to be loaded/discharged during rain, and if a surveyor will be present on behalf of cargo interests and/or if cargo interests will carry out a hose test, ultrasonic test and/or another inspection prior to or upon completion of the loading operations. Once all this has been recorded in a fixture it will have to be checked carefully if the agreements are properly inserted in the final charterparty.

Finally it is of great importance if and what remarks are allowed to be inserted in the Bills of Lading (Bs/L) and which parties should be mentioned on the Bs/L. (remarks are always to be noted prior to/during the loading operations!)



02 — PREPARATION OF THE HOLD, HATCHES AND HATCH COVERS

As mentioned above the presence of salt/salt crystals and seawater on steel are the major elements for lodging claims. These contaminants can be present in the holds prior to loading and/or can contaminate the cargo during the voyage (e.g. condensation) and/or can enter the holds during the voyage through, for example, hatch-covers, ventilation openings and/or bilges.

How to prevent the presence of salt in the hold prior to loading?

■ Prior to loading the holds have to be cleaned thoroughly and have to be free from previous cargoes, especially if these contained salt. In any case the holds have to be well rinsed/washed with fresh water after cleaning. This should include, amongst others, the bottoms of hatch covers, openings for lashing eyes and container lashings, bilges and manhole cover areas. Thereafter all free water has to be removed and holds have to be dried. The holds have to be completely dry prior to loading.

■ Prior loading the bilges have to be tested on proper working (non return valves!) and have to be dried thereafter. In the engine room the valves to the bilges have to be in closed condition.

■ If possible, a hose-test has to be carried out prior loading and the results have to be mentioned in the logbook. It is of utmost importance that the rubber packing is in good condition, with sound corner- and end pieces and no openings. All previous cargoes must have been removed from gutters, there should not be any damages to gutters, covers and compression bars and the drains have to be free from rust, previous cargoes and closing properly.

■ Steel itself has a high density of approx. 8,000 kg/cbm and is therefore stowed in the bottom of the holds of vessels. This will result in high tensions in the vessel and high stability that results in a stiff vessel (short rolling period, high accelerations in ship, cargo and lashings). In bad weather conditions this will result in heavy labouring of vessels for which reasons the covers have to be in the best condition.

03 THE LOADING OF OPERATIONS

What to do before and during the loading operations?

■ After arrival, when opening the hatch covers upon request, make sure that there is no salt water leaking from the hatches and that the covers are free from salt water.

■ A surveyor or inspector, acting on behalf of cargo interests, must have obtained ship owners' approval for boarding in advance. Carefully note down the particulars of this surveyor/inspector – ask for a business card – and note down the purpose of his visit.

■ If and when a surveyor is appointed by ship owners, always ask when and where this surveyors will inspect the cargo and ask for his remarks. Carefully peruse these remarks and compare the remarks with the remarks made by the vessel's crew during loading.

■ When a stowage plan is made up, the stowage of different types of steel should be taken into account, if possible. Unpacked hot-rolled coils are allowed to be stored outside, are allowed to be loaded during rain and are often wet. These coils should preferably not be stowed in the same

hold with packed cold-rolled steel coils that should be free from moist.

■ During the loading operation it is important not to open to many hatch covers in order to close them as soon as possible in case of rain or emergencies.

■ Upon completion of loading the list of remarks should be attached to the B/L and on the B/L a reference must be made to this rider.

When no surveyor or inspector is appointed, the master and his crew have to inspect the cargo and make remarks. On steel cargoes remarks are always possible, such as general remarks referring to the condition of the packing, dents and cracks, dirt, bird droppings, moist, rust, dirt, and damages caused by handling prior loading. Furthermore specific remarks are required if the condition of a coil and/or other cargo clearly differs from the condition of the other coils/cargo.

We can forward riders with remarks that can be used to note the actual condition of the steel and to insert these remarks in the Bs/L.



If steel looks dry during loading but has obviously been wet before then a remark “wet before loading” must be made. Without this remark traces of wet damage discovered in the port of discharge will lead to a claim against the vessel. The same goes for light rusting.

It is also important to record the circumstances of the berth in the port of loading. The following may be important:

- What is the origin of the cargo and how is it brought alongside the vessel; open trucks, dirty trucks, open train wagons;
- How is the cargo loaded. Shore crane, mobile crane, number of units per hoist, means to hoist the cargo such as braided wires or slings;
- Where is the loading berth located. Close to sea, close to a breakwater, next to ‘dirty’ industry; if there are activities in the port affecting the cargo a proper remark should be made;

- What were the temperatures, day and night, if possible the relative humidity;
- What is the condition of the cargo after a period of rain? Make sure that the covers are dry after a period of rain in order to avoid water getting into the holds upon opening;
- Take pictures of all matters that might be relevant for the condition of the cargo.

In many loading ports plastic sheets are placed over the cargo in order to protect the cargo from droplets of water coming from above. After loading the hatches have to be closed and prepared for sea properly.

The use of Ramnek tape provides extra security in respect of watertightness. When applying Ramnek tape make sure it is not applied too tight, as it would then crack during the moving of the vessel in bad weather conditions.

04 THE SEA VOYAGE

It is important during the voyage that sea water does not enter the holds and that condensation is avoided.

What can be done to avoid both?

It may be possible that sea water enters the holds through the hatches during adverse weather conditions and labouring vessel. The vessel's hull has a certain flexibility whilst the coamings, hatchways and hatch covers are rigid. When the vessel is moving heavily, the flexible hull in a way pulls at the hatch covers due to which there is no -or less- pressure between rubber packing and compression bar locally. Because of this seawater could pass the rubbers, however this should be drained via the gutters. Should the

quantity of water increases, combined with heavy rolling and pitching of the vessel, the gutters could and seawater could enter the holds. This should be avoided at all times. Course and speed should be adjusted to ease the vessel, all depending on the position of the vessel, the local circumstances and the duration of the bad weather period.

With regard to the above it is important to monitor the condition of the cargo inside the holds, to verify if seawater enters the hold, the check the water level in the bilges and to check if there is cargo or ships' sweat.

If there are, despite the above, problems with regard to (sea) water in the holds, the owners should be contacted immediately and be informed fully about the situation. Damages can be prevented and/or mitigated if a surveyor, appointed by the owners and/or the P&I club, is present prior to and during the discharge operations.



05 THE DISCHARGE OF OPERATIONS

Upon arrival in the port of discharge and when opening the hatches the hatches should be free from salt water. We advise to flush the covers with fresh water and dry the covers prior to opening as far as possible. Every positive silver nitrate test increases the risk of being held liable for a (steel) cargo damage.

If and when deviating circumstances are noticed upon opening of the covers, the owners should be informed immediately. The owners can advise and take measures, if need be jointly with the P & I Club.

Furthermore it is of utmost importance that no information is handed over to cargo interests and that no access is granted to a counter surveyor without the presence of an own surveyor.

During the discharge operation it is also important not to open too many hatch covers in order to close them as soon as possible in case of rain or emergencies.

If surveyors/inspectors and/or other persons board they have to report and identify themselves clearly. If they act on behalf of cargo interests they have to report to the Owners first before

any information is given and/or before they are allowed to attend on board, enter the holds and/or take pictures.

Upon completion of discharge sign only the usual documents and no documents that are related to a possible damage.

If a master is still forced to sign documents relating to the condition of the cargo the following remark should always be added: "signed without prejudice, for receipt only".

CONCLUSION

It is always, but particularly when carrying steel, of utmost importance that particulars are noted during the total transport, including loading and discharging, that proper remarks are made on the bs/l and that utmost care is taken in respect of seaworthiness. If there are any doubts always contact the owners and/or the P & I Club for advice or assistance.



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