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Mr. Charles Whited
Murphy, Rogers, Sloss & Gamble
701 Poydras Street
Suite 400
New Orleans, Louisiana 70139

Re: Steel Cargo Claims / Ventilation Practices

Dear Mr. Whited:

Our firm has noted an increase in the occurrence of transit related damage to steel cargoes on account of improper ventilation practices and condensation related issues. While most Masters and Chief Officers are no doubt aware of the importance of ventilating cargoes during the voyage, it has become increasingly more common to find officers that are not aware of the specific requirements for proper ventilation of steel cargoes.

In many cases, vessel Masters and/or Chief Officers are of the opinion that steel cargoes are to be ventilated as much as possible during periods of good weather. This practice, of course, gives no consideration to the prevailing humidity conditions, dew points and temperatures. In most cases, when ventilation is carried out in this manner without proper regard for dew point and relative humidity, condensation in the form of cargo sweat and/or ship's sweat will form resulting in potentially significant cargo claims.

Condensation related claims on steel cargoes, especially those delivered to the United States, have in the past proven to be costly and time consuming to defend. Over the past 2 years, high steel prices in the United States, due in part to the demand for steel in China and an increase in the domestic demand for steel, have resulted in a good secondary market and an overall low occurrence of significant cargo claims. The present trend, however, is for steel prices and demand to drop in the United States. As steel prices drop, the potential for costly steel cargo claims increases due to lower demand and a weak secondary salvage market.

Vessel Owners should take steps to insure that their Masters and Chief Officers are aware of the proper steps to be taken in order to determine whether ventilation of a steel cargo is necessary. In order to determine whether or not to ventilate a cargo hold loaded with a steel cargo, the dew point of the outside air should be compared to the dew point of the air within the hold. Owners should insure that their vessels are provided with a hygrometer (an instrument consisting of both a wet and dry bulb thermometer that is utilized to determine dew point/relative humidity).

Furthermore, inexpensive portable wet/dry bulb thermometers should be placed in each cargo hold in order to determine the dew point of the air in the cargo hold. A sling psychrometer can also be utilized to measure dew point in the cargo holds.

The basic dew point rules relating to ventilation are as follows:

If the dew point of the air inside the cargo hold is lower than the dew point of the outside air, ventilation should NOT be carried out.

If the dew point of the air inside the cargo hold is higher than the dew point of the outside air, ventilation should be carried out.

Consideration should be given to the surface temperature of the cargo, particularly when cargo is loaded in a cold climate and designated for discharge in a warm climate. Although it is often difficult to accurately determine the surface temperature of steel cargoes during the voyage without the use of expensive thermocouples, it should be noted that the temperature of steel cargoes would increase slowly during a given voyage. In cases where steel cargoes are loaded in cold climates (such as Baltic Sea and Russian/Ukrainian ports) and designated for delivery in warmer climates (such as the U.S. Gulf of Mexico or South America), there will be little to no need for ventilation and steps should be taken to insure that the warm outside air is not introduced into the hold. If this warmer air is introduced into the hold, condensation will form on the surface of the relatively colder steel cargoes.

As a general rule, cargoes loaded in a cold climate and being transported to a warmer climate should NOT be ventilated. Conversely, cargoes loaded in a warm climate and being transported to a colder climate should be ventilated.

It is essential that vessel's carrying steel cargoes maintain a clear and concise record of the temperature, dew point, humidity and prevailing weather conditions be maintained in the form of a ventilation log. A proper bilge sounding log should also be maintained in order to document any increase in bilge levels due to condensation formation. Without the benefit of such records, defending Owner's interests against claims of condensation related rust damage claims is difficult.

Vessel Owners that intend to employ their vessels in the steel cargo trade should be aware of the potential for these costly condensation damage related claims and insure that their Masters and officers take the proper steps to prevent condensation formation during the voyage.

Best regards,

Technical Maritime Associates, Inc.

A handwritten signature in black ink, appearing to read "Brian S. Jones", written in a cursive style.

Brian S. Jones