

TECHNICAL CIRCULAR No. 310 of 8th December 2015

To:	All Surveyors/Auditors
Applicable to flag:	All Flags
Subject:	BWM- Final Approval –NK-ECS-HYCHLOR
Reference:	BWM Convention

BWM - Final Approval Granted-NK -ECS-HYCHLOR

NK-CI BlueBallast System

Submitted by the Republic of Korea (MEPC 68/2 – Fig 3), this system treats seawater, brackish water and fresh water without using filtration. A storage device is used to dissolve the Active Substance (sodium dichloroisocyanurate) with water to create hypochlorous acid, hypochlorite ion and isocyanuric acid. This is injected into the ballast water to be treated using an injection pump, injector and pipeline static mixer. Its concentration is maintained at not more than 15 mg/L as Cl2 during treatment.

Prior to discharge (Fig 3), the treated water is automatically neutralized with sodium thiosulfate so that total residual oxidant (TRO) concentration is not more than of 0.2 mg/L as Cl2.

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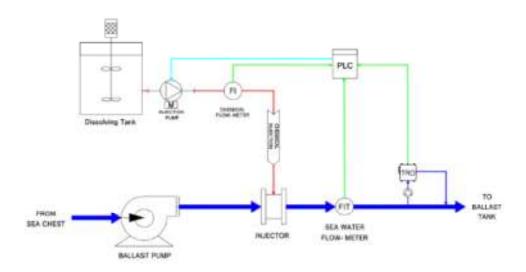


Fig 3 – NK-Cl BlueBallast Deballasting Process

ECS-HYCHLOR System

Submitted by the Republic of Korea (MEPC 68/2/1 – Fig 4), this system employs a backwash filter unit mounted directly in the main ballast pipeline to eliminate the organisms and suspended matter larger than 40 µm. Autoback- flushing occurs when the difference between inlet and outlet pressure of the filter exceeds 0.5 bar.

After filtration, an Active Substance (sodium hypochlorite generated by an electrochlorination unit), is injected into the ballast water at a concentration of not more than 15 mg/L as CI2 during treatment.

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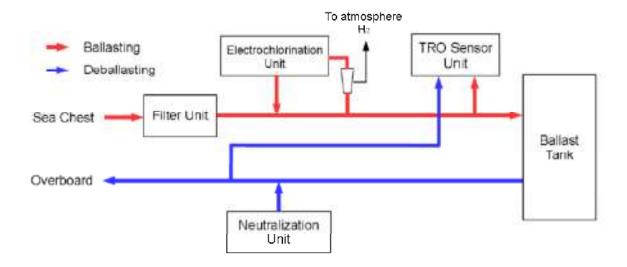


Fig 4 – ECS-HYCHLOR Schematic

Prior to discharge, treated water is neutralized with sodium thiosulfate so that the concentration is not more than of 0.2 mg/L as Cl2.

REFERENCES:

- BWM Convention

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