

## JTSB Safety Recommendation to Crane manufacturers

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June 24, 2011

Cargo ship "RICKMERS JAKARTA"

Barge "SHINEI-MARU No. 18"

Accident with workers injuries and a fatality

Occurred at No.3 pier of Yamashita Wharf in Section 1 of Yokohama Quarter, Keihin Port  
on September 1, 2008

The Japan Transport Safety Board, based on the result of the accident investigation, recommend as follows to Crane manufacturers in order to prevent the recurrence of similar casualties.

It is considered somewhat likely that this accident was caused in the following sequence. While Crane No.3 of RICKMERS JAKARTA was hoisting the Cargo, the rim of Main Sheave C at the extremity of the jib fractured, causing the Main Wire's precipitous drop into the gap caused by fracture. This caused a break in the Main Wire, and also, finally, the fall of the Cargo, Main Hook Block, and grommet onto SHIN EI-MARU No.18.

This accident occurred in spite of the fact that Crane No.3 passed a load test three weeks earlier, and later investigation revealed the occurrence of brittle fracture on the fractured surface of Main Sheave C and various sized cracks were observed on Main Sheave E's surface. In the face of these findings, Crane manufacturers should, when they produce a rim that requires strong bending and shaping processes as a part of a weld construction sheave, perform proper control of manufacturing processes, including the selection of materials.