K LINE
KAWASAKI KISEN KAISHA, LTD.

N E W S   L E T T E R

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Kawasaki Kisen Kaisha, Ltd.

Field Trial Utilizing IoT Devise of Lashing Materials Control
for High & Heavy Cargo in Car Carrier Business

Kawasaki Kisen Kaisha, Ltd. ("K" LINE) and AVIELAN Co. Ltd. (AVIELAN) have conducted a field trial to visualize the location of lashing boxes for proper inventory management of lashing materials. Internet of Things (IoT) devises were utilized to collect locational information of lashing boxes, where lashing materials for securing high & heavy cargo on roll trailers in pure car carrier (PCC) are stored.

"K" LINE has been providing worldwide transportation service for high & heavy cargo by using roll trailer on car carrier. A roll trailer needs more than dozens lashing materials to secure the cargo. "K" LINE has been facing challenges to collect all of the lashing materials, as well as lashing boxes which we equipped for collecting materials. To solve these problems, we worked on visualization of the location information of the lashing box as the first step.

AVIELAN manufactures and sells lashing materials and develops EC solution business. Taking advantage those experiences, AVIELAN has developed IoT solution for logistics.

"K" LINE and AVIELAN have conducted a field trial on the vessel between Japan and Australia for two months since this September. We attached IoT devices with position measurement functions to the lashing boxes and successfully visualized the target on the dashboard with accuracy. We confirmed that the IoT device has enough durability against vibration and heat in special condition during voyage. As a result, we came to be able to visualize the locational information of the lashing boxes and detect the different movement against our plan.

In the future, "K" LINE has a plan to proceed not only visualizing boxes status but also integrating management and optimization for boxes, lashing materials, and roll trailers.

"K" LINE aims to improve high & heavy cargo operation in car carrier business and transportation quality by introducing digital technology and develops new frameworks to respond swiftly to customer needs.

<Image of System>