



DAIHATSU DIESEL MFG. CO., LTD.

1-30, Oyodo Naka1-chome, Kita-ku, Osaka, 531-0076

Japan

TEL: +81-6-6454-2393 FAX: +81-6-6454-2682

PRESS RELEASE



July 19, 2017

Announcement: First order for our Next-Generation support solution for Auxiliary engines

OSAKA – Daihatsu Diesel MFG. Co., Ltd. (President: Shigeki Kinoshita) today announces receipt of the first order of our next-generation support solution for our auxiliary engines, CMAXS LC-A ^(NOTE1), from Mitsui O.S.K. Lines Ltd. (MOL; President & CEO: Junichiro Ikeda, Headquarters: Tokyo) for their two new-building vessels. The development of this cloud-based engine condition monitoring (ECM) and diagnostic solution was based around the concepts of safer operation of vessels and reductions in life-cycle costs.

The CMAXS provides a common platform for the centralized monitoring and management of NK-CMAXS alliance member's ^(NOTE2) main engines, auxiliary engines and auxiliary devices. This new service is offered thanks to the support of ClassNK Consulting Services Co., Ltd. (CEO & President: Daikichi Nomura, Headquarters: Tokyo), who act as distributors with a management of the service platform.

The CMAXS LC-A's key support functions stem from its ability to perform engine condition diagnosis based on data obtained from various sensors, and provide preventive maintenance alerts to correct incipient failures before they develop. This contributes to the avoidance of downtime (profit loss) from possible engine failure.

To supplement and assist the customer's on-board maintenance, a trouble-shooting function has also been installed, which displays the part that is most likely the cause of a fault and then links organically with our maintenance manuals, service parts lists and the service information screen.

Furthermore, in the CMAXS Web Service ^(NOTE3), a dedicated website for centrally managing the CMAXS-contracted vessels is made available. Automatic sharing of engine data and so forth takes place via ship-to-land communication, providing fleet overviews and targeted vessel monitoring of engines and auxiliary devices from any location. This is a next-generation integrated ECM and maintenance support solution using the latest technology.

Going forth, our company will continue to increase our range of products and customer support services that are integrated through IoT technology, and upgrade and expand upon our line-up of environmentally focused products (such as our SCR after-treatment system for



DAIHATSU DIESEL MFG. CO., LTD.

1-30, Oyodo Naka1-chome, Kita-ku, Osaka, 531-0076
Japan
TEL: +81-6-6454-2393 FAX: +81-6-6454-2682

our Diesel engines).

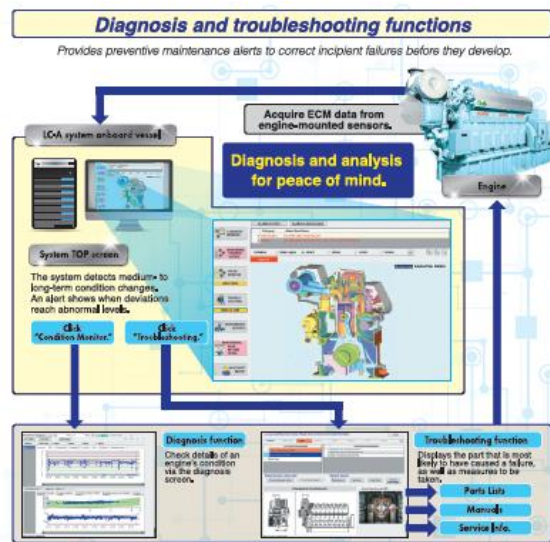
We will continue offering further solutions that are connected by their environmental friendliness, improved customer usability, increased safety, and reductions in total life-cycle costs.

Our “CMAXS LC-A” system and service was presented at the BARI SHIP exhibition (25th May to 27th May) and the NOR SHIPPING exhibition (30th May to 2nd June 2017) and is now officially available for purchase.

(NOTE1) CMAXS LC-A is a common platform that integrates condition diagnosis and self-maintenance support for customers regardless of the engine type or maker (maker must be an alliance member).

(NOTE2) CMAXS LC-A /e-GICSX alliance members: Class NK Consulting Service., Ltd., Diesel United Ltd., MES TECHNOSERVICE Co., Ltd., MAKITA Corporation, Hitachi Zosen Corporation, Naniwa Pump Mfg. Co., Ltd., and DAIHATSU DIESEL MFG. CO., LTD. (as of the date of publication)

(NOTE3) The home page of CMAXS Web Service provides fleet overviews and targeted vessel monitoring. By accessing via the internet, the contracted customers can ascertain a vessel's condition anytime, and activate any measures necessary via the onshore “Ship Data Center”. A target vessel's data can be retrieved at any time thanks to safe cloud storage.



~ Onboard vessel's operating image of CMAXS LC-A ~

For further information, please contact:

Marketing & Promotion Department, Daihatsu Diesel Mfg. Co., Ltd
Yasuyuki Inada

TEL: +81-6464-2394 FAX: +81-6464-2682 Email: yasuyuki.inada@dhtd.co.jp